

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 1.

12 December 1942- 14 May 1944.

C.E. 82-269.

Red ticks¹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles² round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept

Editor's notes:

Sheets (not pages) of loose-leaf quarto are numbered, with many pages missing. Pages that begin or end in mid-sentence are shown as such. To maintain consistency of pagination with the original, page numbers are inserted manually and ‘{reverse side}’ indicates material on the under side, which often, but not invariably, relates to the following sheet (i.e. would be on the left page in an open book).

The original layout and typography are followed as closely as electronic systems allow though to enable both sides to appear on a single page, blank spaces may be reduced and the margins are omitted. Drawings are scanned and inserted as near to the original size and position as pagination allows. Repagination to accommodate large maps etc. and other corrections are explained in {}. Specimen numbers (many, but not all, originally in right margins headed ‘C.E.’ on top side and left margin on reverse side) are placed as near to their subject as possible, as A and 00, or A and 00 as they appeared in the original.

Species names appear in italics, other underlining remains and **bold** replaces C.E.’s red marks. Handwritten additions and corrections are not distinguished from typing. Scored out material is omitted entirely. Abbreviations are shown in full where the meaning is clear. Incomplete or ungrammatical sentences and inconsistent use of upper/lower case, number format, inverted commas etc. are unaltered and only blatant spelling errors are corrected.

¹ Shown as **bold** in edited version.

² Edited to A or 00

12 DECEMBER 1942. SEACOURT STREAM, BERKS.

Saw (with Pat Venables) a kingfisher on Seacourt Stream, just below the farm with old disused mill that lies a little way up that stream from Wytham Village. At this farm the farmer is a hurdle maker. They are made of pollard willow, which lasts quite well, getting green with lichen/alga. He buys the pollard willow rights from neighbouring farmers, but apart from the periodical cutting there is no other management. This farm has on its (? Stonesfield) slate barn roofs, gorgeous green cushions of moss, now with developing fruits. The clumps are up to six inches across.

{reverse side}

17 APRIL 1943.

17 APRIL 1943. WYTHAM WOODS.

These woods have just become the University's property. Today I went up to the south side of Wytham Great Wood, passing beyond the gamekeeper's cottage into large and fairly uniform stretches of **sycamore** coppice or regeneration from seed, with scattered large sycamores, ash trees and a few oaks. A little spindle and haw and much elder in the underwood. The almost universal dominant in the layer is **dog's mercury** growing in vast sheets. *Mercurialis perennis* is said by Tansley to dominate heavier and more basic oak (*robur*) wood societies; also the drier ashwoods of Derbyshire -- ground ivy, as in Wytham being also abundant. Bluebells form only local patches

{reverse side}

17 APRIL, 1943

86 *Hermaeophaga mercurialis* Fabr. C.E. det.

After 24 hours the beetles had produced intensive perforations, worse than most seen in the field. Specimens of the leaves kept. C.E 90.

(There are none on the minute patch of mercury in C.C.C. garden, Oxford).

Dr Clapham says *Mercurialis* comes where soil is alkaline, also confirms my diagnosis that Wytham Great Wood as oak-ash, but says soils up there are a bit complex. R.B.Freeman says herb Paris comes among *Mercurialis* up there.

17 APRIL 1943 *** WYTHAM WOODS.

in these sycamore woods. But the most likely association to fit this place is Tansley's "Calcareous oakwood facies: -- ash-oak wood" (p. 288). The soil here is calcareous marl of the Coral Rag. (The typical ash-oak has *Mercurialis perennis*, with *Fragaria vesca*, *Brachypodium sylvaticum*, *Circaea lutetiana*. On the other hand, there are patches of bluebell and bracken that fit the drier oakwood -- but perhaps there are gravel patches).

The mercury almost everywhere was perforated with small holes by some insect, [86] and two samples of these plants were pressed. At the first search I only found tiny yellowish ? collembola on the undersides of the leaves, but these did not look powerful enough to have made the holes. But higher up the hill I noticed really large numbers (sometimes several on a plant) of small dark blue flea-beetles, which [87] hopped or tumbled easily off the mercury.

They were conspicuous once one had noticed them, sitting mostly on the leaves or axils. Some were in copulation. [88]

I kept some undamaged leaves and left some beetles in for a day to see if they produced the holes. (90)

The damage was not quite evenly spread and one could find patches with none. Nevertheless it seemed extremely widespread over the area of ¼ mile or more that I observed the mercury closely. One got a strong impression that it was greatest in the shade of trees.

The sycamore leaves were only just emerged and apparently free of insect life except a few settling flies. [82]

On the trunks casual observation showed a fat coccid-shaped larva ¼ in. long walking up, and a small elongate springtail. n.k.

{reverse side}

17 APRIL 1943.

85. *Tubifera (Eristalis) pertinax* (Scopoli). L.W.Grensted det. 1946

17 APRIL 1943 *** WYTHAM WOODS.

In the clear hot sun-shafted space of air among the tall sycamore coppice with its mercury carpet, there were here and there hovering **bee-flies**, usually at 6 -- 8 ft. 85
One was taken. A good many bumblebees were visiting **bluebell** flowers. I took a **Bombylius major** visiting flowers of ground ivy (*Nepeta glechoma*) in the glade. 84

The **sycamores** show traces of terrific **rabbit** ring-bark damage, which has either killed, or left great scars -- all old. Only one rabbit seen. The clearances of rabbits (whose former abundance may explain the frequency of elder in Wytham, and general poverty of interesting scrub) may allow **spindle** to multiply. In the open "glade" of the trackway were a **brimstone**, a small **tortoiseshell** and a **peacock** butterfly, also a **large white** in the wood.

The number of queen **Bombus** hunting for holes on the banks of the trackway just below the keeper's house, was noticeable.

There is a large **hornbeam** by the main woodland track above the keeper's cottage, now in full catkin. No mosquitoes were seen today.

{No title or information on this side}

{reverse side marked 'opp. p.76'}

15 MAY 1943.

94 *Gomphus vulgatissimus* L. 1 ♂, recently emerged. 70% alcohol C.E.det.

95 *Agrion splendens* (Harris) 1 ♀. 70% alcohol

15 MAY 1943. GODSTOW, OXON. & BERKS.

I walked to Wolvercote and a few hundred yards up the river path above the "Trout", to just opposite where Pixey Mead begins. Here there is a low-lying rushy pasture, trodden by cattle and flanked on the north by a hawthorn hedge in which willows are growing to future climax suitable to the flood-plain wet alluvial soil. There is a narrow fringe of *Scirpus* reedswamp, and marsh, on the gravelly river bank. There were no dragonflies at the river margins, where a cool north wind blew; but several species flew or settled in the sheltered field below the hedge. There was one small dark demoiselle with its abdomen blue at the tail, not caught. One or two **Gomphus** hawking about. 94

The ♂ seems to have less yellow splashed on the abdomen. Several ♂ **Agrion splendens** and with them some ♀♀: of which I took one, (because they cannot be identified on the wing, from *A. virgo* ♀). 95

{reverse side}

15 MAY 1943.

96 3 ♀. 1 ♂ **Ephemera danica** Müll. (pale body; ♂ smaller, + claspers)

3 ♀. 3 ♂ **E. vulgata** L. (darker, more marked body; ♂ smaller, + claspers).

70% alcohol. Not certain if duns or imagos.

97 *Lepidium draba* L. C.E. det. W.J.L. Sladen confirm 1953.

A swan nesting by the big railway pool at Wolvercote. A pair swimming at the Trout.

15 MAY 1943**** GODSTOW, OXON. & BERKS.

The *Agrion* were hawking up to 50 yards or more from the river.

A good many, though not vast numbers, of large mayflies were out, a few dancing and dipping, but most hanging on to the hawthorn hedge. There were large light-coloured ones, and a smaller darker ones, with dark wing patternings. Kept the sample. 96

Some alder-flies about too (*Sialis [lutaria]*).

In sallow bushes -- big clumps up to 8 feet, across the river, a cock reed bunting.

In the river, both here and in the eastern loop, very large shoals of many fish, all sizes. At the eastern loop bridge, just above the ford which is the children's bathing place, the clear waters swarm with fish, among which were largish chubb and one or two trout.

On a consolidated rubbish tip at the Trout Inn, a great patch of hoary-cress in white flower, smelling faintly of honey. Dunn (1905) says it lives in dry sterile ground in S.E. Europe and western Asia e.g. Caspian deserts. It came into Great Britain about early 19th-century and has established on non-competition bare ground (rubbish dumps and transport premises or margins). It has extraordinary minute short down, although the plant looks smooth to the naked eye. 97

{reverse side}

13 DECEMBER 1943.

13 DECEMBER 1943. WYTHAM WOODS.

Walked through the woods on a cold frosty morning, with a committee of the University, to which the estate now belongs. A tawny owl flew away from a place where a dead hare was hanging on a tree, 11 a.m. This was in "Burket's Plantation".

The perforations of beetle (= *Hermaeophaga mercurialis*) damage still everywhere conspicuous on the **dog's mercury**.

{reverse side}

11 APRIL 1944.

11 APRIL 1944. WYTHAM WOODS.

Walked from 12 -- 4 on the south top, from Botley Lodge as far as My Lady's Seat. It was very hot sun, and cloud, and a cool wind on the west top, elsewhere calm and hot, and the ground almost dry.

One begins to get an ecological feel! The frame-work is limestone-marly-sandy cappings of Coral Rag and Calcareous Grit, tilted slightly to east, over the basis of (also somewhat calcareous) Oxford Clay. There are two tops, with a narrow isthmus of the capping almost nipped by the clay of Radbrook Common (which was a bracken-scrub-savannah, now being burned-partly uprooted-ploughed) and of Wytham Park (grazed pasture fenced from the woodland above). Very broadly speaking, the Clay is farmed (but not for instance in Marley Wood Plantation, and part of the north lower slopes of the Great Wood), and the capping is woodland (but there are field enclaves, as 169). The fence between 169 and 168 is roughly the line of junction, and a slight escarpment under grass marks it. Here, as at other points around the junction (e.g. in 114 and 101) springs break out or at any rate wet the soil and on the fields are marked by *Juncus* marshes. They seem mostly on the east, whither the capping tilts; but Tilbury Farm hugs the western line of junction, and below the line are also Hillend and Woodend Farm (the latter name suggestive of this natural land classification).

Discussed *Juncus* associations with A.R. Clapham, who points out that the numerous air ducts in the tissues of rushes enable them to supply oxygen to their roots, even if the soil water is deficient in them. Most species probably can take nitrogen in the ammonia stage i.e. can live in reducing soils, but I could not quite follow the chemical argument here. The seasonal length of immersion and the salts present are important in determining which species occurs.

At the top of the first track up from Botley Lodge is a large patch of Plateau Gravel, showing many quartzite brown rounded stones in the field, of which I kept one fine ellipsoidal "paper weight".

{reverse side}

11 APRIL 1944.

Apis mellifica L. queen

11 APRIL 1944. **** WYTHAM WOODS.

Both the Clay and the Grit-Rag have mostly a mixed oak-ash wood, with underscrub of various species; -- except for elder, not very much of it. The overwhelmingly dominant field layer is *Mercurialis perennis*, sheets of it, now in fresh (yellowish) -- a green leaf and flower -- a lavish mantle of vegetation to which most other species are quite subordinate or local. Only one insect, a bee, was seen visiting the flowers in the sun: its legs were loaded with yellow pollen. n.k.

The blue flea-beetle *Hermaeophaga mercurialis* was seen at all points, but leaf perforation was still very slight; no paired beetles were seen. A few specimens of a yellow and black striped flea-beetle were also seen on the mercury. Where do the larvae of *H. m.* live? On the roots?

The other local or less abundant herbs under the trees are *Adoxa moschatellana* (in flower -- some large pure societies under beech by The Singing Way), *Ficaria verna* (in flower), *Arum maculatum*, (there are two varieties, separate plants but mixed clumps: (1) plain green leaf, more upstanding, and (2) purple blotched flatter-lying leaf), *Nepeta hederacea* (in flower), also many patches of violets (species not determined), and two of the patches a white variety. Bluebells I only saw on the Plateau Gravel at the head of Marley Wood. They and primroses were not to be seen along the heavier calcareous top.

At the top ride the oak-ash-mixed wood is replaced by probably planted beech, which partly shades and litters out all plants below. This conforms clearly with Tansley's analysis of the climax beechwood on calcareous loam, oak-ash on ditto, and mercury plays a big part in both these (as well as in heavier, non-acid oak woods), as in Bagley.

{reverse side}

11 APRIL 1944.

11 APRIL 1944. **** WYTHAM WOODS

Under rotting logs in beech-oak-ash etc. wood I found six kinds of snail:

261

- (1) *Arianta* (formerly *Helicigona*) *arbustorum* (L.), a large brown-marked solid "Helix". (not kept)
- (2) *Marpessa laminata* (Montagu), a large "Clausilia". (not kept)
- (3) *Clausilia rugosa* Draparnaud (small)
- (4) *Goniodiscus rotundatus* (Müller) (*Pyramidula* in Taylor)
- (5) *Trichia striolata* (C. Pfeiffer) (not kept)
- (6) *Oxychilus alliarius* (J.S. Miller) (*Hyalinia* in Taylor)

Also a huge hawk-moth brown pupa the thickness of my little finger, probably from poplar. Kept to emerge.

Hatched hawk-moth, but failed to expand. Not kept.

These woods are in shocking decay, much of it through violent rabbit barking over recent years. Rabbit earths are numerous, some fresh. Several rabbits seen in 114 and the open park below it. Smell of fox at several points. I have never seen a woodland so smashed by the short-sighted policy of selling rabbiting rights (which mean rabbit perpetuation) in a country possessing insufficient pressure of natural rabbit control.

The vast quantities of rotting logs, branches and trunks of trees, even fence posts, must support a noble fauna of its own, and make the place a paradise for woodpeckers (several of which I have heard): the slow laugh of the green: the spotted don't laugh.

{reverse side}

11 APRIL 1944.

11 APRIL 1944. **** WYTHAM WOODS

Brimstone butterflies (*Gonapteryx rhamni*) flying in the wood and along the track under the trees. On the open grass in 114 and on the open hot track from Botley Lodge to the top, peacocks (*Nymphalis io*), but these seem to avoid the wood itself. I saw a comma (*Polygonia c-album*) sunning itself on an ash tree (twigs) at 20 ft. up: this was the woodland edge at the top of 169, where it joins the fields.

In tall ash saplings, and oaks in 174/169 were 2 long-tailed tits, a blue tit and a marsh tit; the latter confirmed (*fide* H.N. Southern) by its sharp call notes: the willow tit has a mild note, and is very often more silent. The best visual field difference is (in sunshine) the glossy black head of the adult marsh tit. These tits were foraging on the twigs at 20 -- 30 ft.

On the hot grass-patched track up from Botley Lodge, which runs in its lower 2/3 between narrow strips of smashed copse (very open, or cut, but with some woodland ground-plants -- *Nepeta hederacea*, the ground-ivy very abundant in flower) there were a number of small brown-thorax *Andrenas* (not *armata* = *fulva*) circling and settling momentarily on bare fallen tree branches; also some swift-moving small (? ♂) *Bombylius major* L. settling on the path, visiting *Nepeta* flowers (not much), or hovering an inch or two from the ground. They were mostly too fast to catch, but the jagged wing-marks are easily seen as they settle. 263

{reverse side}

11 APRIL 1944.

11 APRIL 1944. **** WYTHAM WOODS

Venables tells me that toads are croaking loudly in the swamp just west of where the Seacourt Stream leaves the Thames, but he has not yet verified by seeing them. (But he finds only a few frogs there, and no toads.)

{reverse side}

21 APRIL 1944.

25 APRIL 1944. WYTHAM WOODS.

Christine Fox says grass snakes have been seen by her for several years past, in the centre of Marley Wood, where there are many swampy patches (presumably where the water seeps out from the Plateau Gravel patch onto the Oxford Clay, and below this).

R. THAMES.

L.S.V. Venables says that on 7.4.44 the Thames Conservancy put a million young **eels** from the Severn into the Thames between Lechlade and Abingdon. Half this number were put in during spring 1943. This was done at the suggestion of the Ministry of Fisheries.

27 APRIL 1944. GODSTOW & WYTHAM.

On a calm radiant evening went to Godstow and rode up the river path above The Trout. The flat flat-plain of grass was sprinkled with cowslips flowering, on the east side of the Thames. On the west side a field was being harrowed and the **mole-hills** spread.

L.S.V.V saw the first blindworm he is seen in Wytham (all through 1940-43). It was on south west slope of the heath on top of the hill. On 30 April he found two, man-killed ("high") in clearing by the keepers' little hut above Marley Lodge.

{reverse side}

27 APRIL 1944

266 *Galerucella nymphaeae* (L.) var. *sagittariae* (Gyllenhal) ♀ ♂ in copulation.
P.J. Osborne det. 1956.

21 eggs. On leaf fragment. (n.k.)

267 *Hydrometra stagnorum* L. C.E. det. 1944.

27 APRIL 1944.**** GODSTOW & WYTHAM.

On this grassy plain, with *Juncus* depressions here and there, a heron stood preening, some lapwings, a redshank, and a skylark flew, and two reed buntings visited the young-sprouting *Sparganium* river-marsh. No water-voles in sight. No dragon-flies or mayflies.

The ***Rumex hydrolapathum*** is growing up in the shallow river marginal marsh (water round the stems), young leaves less than a foot high. ***Galerucella*** were very abundant on the leaves, some in copulation, or associated in pairs, but only very slight leaf damage as yet. One batch of the yellow eggs already. Did not search other plants. 266 A

In the shallow river marsh (i. e. shallow water in the river margin, with *Sparganium*, *Rumex*, etc.) a *Hydrometra* on the water surface. 267A

Afterwards we visited Wytham Woods by the gamekeeper's lodge, wandering in the lower oak-sycamore-hornbeam-mercury region, in which blackbirds and a green woodpecker were calling. Rabbits are to be seen in all the flanking fields, with buries in the wood. ***Hermaeophaga*** damage is noticeable by the main shady track up by the gamekeeper's lodge, but becomes absent where the wood is open in glades and the mercury somewhat yellow-green.

Under rotting logs in the sycamore-oak-ash-mercury wood I collected snails (there were slugs, but I did not take any);

{reverse side}

27 APRIL 1944

Goniodiscus has quite an ancient look under the lens, as the curved transverse ridges give the whorls an ammonite fossil character.

See note on *C. rolpheii* by L.W.Grensted (1944), *J. Conch.* 22: 113

27 APRIL 1944. WYTHAM.

<i>Arianta arbustorum</i> (L.)	C.E. det. 1944.	265
<i>Goniodiscus rotundatus</i> (Müller) (not kept)	C.E. det. 1944.	
<i>Marpessa laminata</i> (Montagu) (not kept)	C.E. det. 1944.	
<i>Trichia striolata</i> (C. Pfeiffer) (shells only)	C.E. det. 1944. (not kept)	
1 <i>Clausilia rolfhii</i> Leach in Turton	C.E. det. 1944.	265

Clausilia rolfhii is 12 x 13 mm. and has well-marked ridges, though otherwise rather like a smaller *Marpessa*, except for having a stouter bulging shape. The only other like it is *Laciniaria biplicata*, which has very high white ridges and is less bulged and 17 mm. *Rolfhii* is widespread but local in hedges and copses on calcareous soil.

Ellis mentions Hinksey and Newbury as two Berkshire localities. It is a West European form. Grensted in Oxon. V.C.H. says, after mentioning that S.S. Pearce found it (circa 1880) at South Hinksey, "almost certainly now extinct in the Oxford district."! (He examined and confirmed my specimen, May 1944, and has published the record in *Journal of Conchology*).

Two other smallish shells (only) not kept for identification.

Bluebells and **primroses** are in flower in this part of the wood, but patches of them are comparatively scarce, as also bracken, in the universal ground mantle of dog's mercury. The ash and black poplar are not in leaf, nor the oak, but hornbeam and sycamore are half or two-thirds in leaf. Nearly all the sycamores are all young trees, and intense growth of younger plants can be seen in open patches among the few older oaks and ash trees. Some of the latter are very fine trees.

The area of collecting today was all on Calcareous-Grit, which begins near the Keeper's Lodge. Just below the latter, water springs and runs down the lane.

{reverse side}

14 MAY 1944.

14 MAY 1944. WYTHAM WOODS.

H.N. Southern took *Pomatias elegans* (O.F. Müller) on ground under vegetation, in Broad Oak, Wytham Woods -- and oak wood on the slopes towards Eynsham. 269

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 2.

7 July 1944- 14 October 1945.

C.E. 290-530.

Red ticks³ mean ready to be indexed. Crossed red ticks mean indexed.

Circles⁴ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

{Pages 1-13 are missing.}

³ Shown as **bold** in edited version.

⁴ Edited to A or 00

7 JULY 1944. WYTHAM WOODS.

Walked on the far hill with H.N. Southern and D. Veale, to show the latter “wildlife sights”. He strongly agreed that the north lower slopes of savannah wood should be reserved for nature and its beauty. This is the part of the Oxford Clay, which has scattered, mostly young oaks, young sycamore, masses of willows,

{reverse side}

7 JULY 1944.

292. ♂ *Hilara* nr. *quadrifaria* Strobl. K.G.V. Smith det. 1959
 (“This section of the genus badly needs revision.”).

7 JULY 1944 ***** WYTHAM WOODS.

and a dense undergrowth of brambles (now in flower) and bracken, covering rather thin dog's mercury etc. in places. At one spot, near which we saw the hobby (*Falco subbuteo*) leave its (an old crow's) nest some 40-50 ft. up an oak, is a stand of aspens, spreading round with young seedlings. This area extends over Ten Acre Copse, Hither Clay Hill, and Further Clay Hill sections. The reserve could also extend up to the main contour drive that runs above the two mixed conifer-deciduous plantations in one of which the heronry is this year. Higher up, where the calcareous sands appear, the badgers have made a long desultory series of earths, some of which seem to be inhabited recently by rabbits and dug into by man.

In the heronry (western) plantation, mixed spruce-larch 30-40 ft. high, I took a horse-fly, attacking us. *Tabanus bromius* L. ♀ 290

In a spring-marsh (S 30) on the Clay zone of the north slope (full of brooklime, *Veronica beccabunga*, in flower, on sandy-mud) were numerous *Gammarus pulex* De Geer, 291
also a number of small *Hilara* over the surface. 292
Also a small Copepod (only one specimen kept). ♀ (copepodid stage V) *Cyclops fimbriatus* Fischer. D.H. Eccles det. 1957. 293

In the savannah bracken-grass area, on the clay with oak-sycamore, a young ♂ *Philodoptera cinerea* (L.) was climbing at a foot height on the bracken. At this stage it has a brilliant green abdomen. The sides and streak on thighs are chocolate, the rest fawn. The antennae and 294

{reverse side}

7 JULY 1944.

7 JULY 1944 WYTHAM WOODS****

legs are very long, body stumpy.

On pure dog's mercury under real wood canopy of oak-sycamore, not far from the badger earths (on the rock-sand escarpment), a ♀ ***Pholidoptera cinerea*** -- colours similar, (it being also small, but with the huge sickle-shaped ovipositor) walking on the mercury leaves. 295

In the oak-sycamore wood on clay, I saw ***Limax marginatus*** Müller under bark of a fallen branch. n.k.

On the bramble leaves of the grassy rides along the clay belt savannah, ***ringlet butterflies*** (*Aphantopus hyperanthus* (L.)) were settling; n.k.
and numerous meadow browns (***Maniola jurtina*** (L.)) on the grass and also flying over the ground vegetation and brambles generally. No ***white admirals*** seen. n.k.

Part of this path gets damp and has, still on the clay savannah, patches of ***Carex pendula***. 296

On the hill crest, in My Lady's Seat, there is a society, in the turf of this open retrogressive woodland, of *Brachypodium pinnatum*, on which were many grasshoppers, scrambling in the tussocks. 297
I took one ***Chorthippus bicolor*** Charp. ♀ (a little dull green on abdomen; a little reddish at end of abdomen). 298 n.k.

In a grassy ride in the beech-oak-etc.-wood not far from here, a ***Pomatias elegans*** (Müller) was walking at noon on the wet grass! 299
Not far from here a single bee orchid (***Orchis apifera***) was flowering on the path. n.k.
In the clay-belt savannah is a patch of ***Paris quadrifolia***, n.k.

{reverse side}

7 JULY 1944.

7 JULY 1944 **** WYTHAM WOODS.

growing mixed with *Mercurialis* under bracken in the open.

{reverse side}

29 JULY 1944.

304. *Phosphuga atrata* L.

305. *Porotrichum alopecurum* Mitt. E.W. Jones det. 1948

306B. *Nemastoma lugubre*. Müller. ♀. The Nemastomatidae, a family of the Order Opiliones, have their eyes set back to back facing sideways (as other Opiliones) but at the front of the body. There are two British species (the other one, *Crysomelas*, is a little smaller and dark brown or yellow, with two rows of light spots on the abdomen). The chelices of ♀ shown in Fig. 51, are just like these. *Lugubre* has palpi as long as the body, also characteristic legs and colour pattern. (Savory). It is "very common." Confirmed by V. Todd, 1946.

29 JULY 1944. WYTHAM WOODS.

In a grassy, *Pastinaca*, bramble clearing by the old cart sheds, Common Piece: ringlets (*Aphantopus hyperanthus*) and (gatekeepers) small meadow browns (*Maniola tithonus*) and large meadow browns (*M. jurtina*) fluttering on and among the ground vegetation and brambles.

Walking on the path in the mixed deciduous wood was a black "*Silpha*", with three prominent ribs on each elytron, and a rounded front to the thorax. 304
On it was a large long-legged mite, pale brown, rushing about on the lower surface without falling off. Immensely fast runner up vertical glass tube. Kept in Viets solution. 304A

In some, loose thin moss that covers the stick-strewn leaf-littered forest floor, were several minute animals, collected casually from a few inches of the moss: 305

[B]. Small squarish black Opilionid, with two long white "eyes" on body, and three concentric white lines on the hind abdomen (the latter turn out to be merely cracks between hind segments). Length circa 4 mm (body).

[D]. Small Trichoniscid woodlice.

Trichoniscus pusillus Brandt R.B. Freeman det.

{reverse side}

29 JULY 1944.

29 JULY 1944.*** WYTHAM WOODS.

Under rotting logs were many snails:

Marpessa laminata n. k.

Goniodiscus rotundatus n. k.

Clausilia rugosa n. k.

Also *Oxychilus cellarius*, *O. alliarius* L.W.Grensted det. n. k.

and *Arianta arbustorum*. Not kept

Also the large square-thorax shining Carabid, *Abax ater* Vill. (= *striolata*).

307

{reverse side}

26 AUGUST 1944.

26 AUGUST 1944. GODSTOW

Biked to Godstow on a warm sunny afternoon. On the nunnery (mortared limestone, lichen covered) wall a zebra hunting spider 5 ft. up. (Oxon.) 309

The grass (cut hay) between the nunnery and the river Thames has a few grasshoppers (Oxon.); but the flood-plain cattle pasture higher up has none, even in the grazed patches of *Juncus* (? *inflexus*). In these patches were some small young frogs; and moles occur generally. (Berks.)

{reverse side}

26 AUGUST 1944.

26 AUGUST 1944 *** GODSTOW

The marginal marsh vegetation of the river -- bur-reed etc., is fairly heavily grazed by cattle.

Aquatic flying life seems rather scarce and subdued at this season -- no mayflies, dragon-flies etc.

Anglers are abundant on the banks, fishing with floats that the muddy river makes adaptive. One has just caught a roach.

In the river (at the Trout, but main river branch) a large ***Viviparus viviparus*** (= *Paludina*) was floating at the surface, with operculum shut. 310

{reverse side}

27 AUGUST 1944.

27 AUGUST 1944. GODSTOW, (in Oxon., para. 1; Berks., para. 2).

There were numbers of blackish small caddies flies sitting on the *Sparganium erectum* at the edge or dancing over the water in small swarms at sheltered spots. It seemed to be the same type as C. E. 235 seen last year on the R. Lambourn. n.k.

Kestrel was hunting over flood-pastures by the river, that have moles and frogs but no small rodents.

{reverse side}

19 SEPTEMBER 1944

19 SEPTEMBER 1944. WYTHAM WOODS.

Walked with H.N. Southern for four hours in the Great Wood, from Wytham village up through to Rough Common, and back by the lower slopes (Plantation 2) to Wytham again. Our main object was to map the habitat range of Orthoptera. The main habitats for these on this part of the hill are:

(1) Arboreal layers of mixed oak-ash-sycamore wood.

No beating or searching yet in Wytham. From Bagley surveys we may expect to find *Meconema*, perhaps also (from today's find in C.E. 335), *Leptophyes*.

(2) Low scrub, herb and ground layer of ditto.

So far only *Pholidoptera cinerea* noted here, on bracken, mercury and bramble, seen a good many times today (also cf. 7.7.44). A few stray out into rides or clearings, but probably quite accidentally. None have been seen today more than a few feet from the woodland edge. No specimens taken.

{reverse side}

19 SEPTEMBER 1944.

331A W.J.L.Sladen confirm 1953.

*Tansley notes that this grass is invading chalk pasture more since sheep grazing was reduced, and that it can stand moderate rabbit pressure.

19 SEPTEMBER 1944. WYTHAM WOODS****

(3) Scrub-bracken ± bramble savannah. Not searched.

(4) Rides and glades in the woodland. Three main associations noted:

(a) Short, 2 in. -- 9 in., fine grass, low thistle, short *Hypericum*. ***Chorthippus parallelus*** ♂ ♀ adults, very abundant. No ***C. bicolor*** etc. 331

(b) Damper, ***Juncus inflexus***, short *Hypericum*. No grasshoppers at all, a marked absence of ***C. parallelus*** abundant in adjoining (a). The rushes are about two feet high. 331A

(c) On the higher levels, shallow Coral Rag soil, the woodland is similar, but the rides have patches of ***Helianthemum chamaecistus*** dead, with invasive (rabbit-grazed, very short) *Brachypodium*. This habitat has over 80% ***Chorthippus bicolor***, only a few ***C. parallelus***. 332

(5) Pure *Brachypodium* grassland, 1-2 ft., on Coral Rag of Rough Common, a large area at the top of the hill. Here almost entirely ***Chorthippus parallelus***, only a stray ***bicolor***. 333 n.k.

(6) Some parts at the edge of (5) were intermediate with 4(c), being shorter *Brachypodium*, with very short bareish patches, or with rock rose etc. Here there were rather more ***C. bicolor***, but still not more than 25%. The rest were ***parallelus***. 334

Here and on (4a), the ♂ *parallelus* likes to sit on the partly bare or very low rock-rose etc. of the large *Acanthomyops* hillocks! So it looks as if the choice lies with the ♀! Both sexes are quite good at hanging onto long grass. It seems possible that the different tolerances of these two species are that *parallelus* needs more cover to scramble in (being wingless) and also different soil conditions for egg-laying.

{reverse side}

19 SEPTEMBER 1944.

336 ♀ ***Meta segmentata*** Clerck E. Duffey det. 1951.

337 ***Chrysopa carnea*** Phillips.

19 SEPTEMBER 1944 *** WYTHAM WOODS.

- (7) On bramble patch in a ride was one ♀ *Leptophyes punctatissima* (Bosc.) -- a brilliant green, very stout insect, like a turgid *Meconema*, covered with very small dark dots, and with the hell of an ovipositor sickle. This is said by Burr to come on trees and scrub: its normal habitat remains to be determined. [335]

No *Omocestus viridulus* seen today: but Southern has often seen them here. N.B. They are one of the earliest grasshoppers.

While walking through a patch of 4(a) I knocked down a large *Tipula* into a web between plants and the spider darted at it and they fell into a grapple. In a few seconds the **spider** rushed in and fixed its jaws in the side of the thorax and in a few minutes the fly (several times larger than the spider) was dead and partly sucked. [336]

There is a huge **blackberry** crop this year on the edges of rides and glades. Commas (dark form of *Polygonia c-album*) were settling on the shrubs and one seen sucking a decaying blackberry, as were numerous common **wasps**. One comma was sunning on a tree leaf at 12 feet.

One speckled wood (*Pararge aegeria*) on edge of a more shaded ride in (1 -- 2). **Small tortoiseshells** (*Aglais urticae*) seen several times in rides. **Meadow browns** have vanished.

One small green lacewing beaten from hazel in (1), and several others seen. [337]

Several small dragonflies, almost certainly *Sympetrum striolatum* ♀ ♂ (one grey-brown, the other dull orange-red) were flying and settling on the rather barer-looking vegetation of 4(c) or sailing up over the trees. Impossible to net. Also a larger ? *Aeshna* in another ride.

Walking on the turf of 4(c) was a shining inch-long black wingless beetle larva *Carabus violaceus* L. F. van Emden det. 1950. [338]

{reverse side}

19 SEPTEMBER 1944.

340 2 *Acanthomyops flavus* F. queen (= *Lasius*)

341 *Helicella itala* (L.)

342. (There is one other British glow-worm, *Phosphaenus hemipterus*, much smaller, confined to Hants./Sussex).

343 2 *Formica fusca* L. queen

344. *Gentiana* (*Gentianella*) *amarella* L. W.J.L. Sladen det. 1953.

19 SEPTEMBER 1944 *** WYTHAM WOODS.

The pure *Brachypodium pinnatum* of Rough Common has a fair number of old vole (*Microtus agrestis*) runways in the deep (18 in.) grass tussocks, and old grass cuttings. No fresh or old dung. In the runs were some *Cepaea nemoralis*. 339

Mounds of active *Acanthomyops* (yellow) have the grass tips showing at the top, and much fresh earth. O.W. Richards det. 1952. 340

On the barer parts of this near the Chalet (as 6) I saw an old shell of *Helicella itala*, 341
and by it an immature ♀ glowworm, *Lampyris noctiluca* (L.). 342

When I kept it in the dark at home it glowed modestly inside a glass tube. (Kept in alcohol). Monica Shorten this month saw half-a-dozen glowing near here at dusk.

Song-thrush uses as a *Cepaea (nemoralis)* anvil some flat stones used to support the base of a telephone pole in a pathway through the wood. Under the stone small black ants were resting. 343

Gentiana amarella is abundant in a ride on more or less 4(c). (It is recorded for Wytham by Druce, who makes it clear that the plants round Oxford do not belong to the variety or species *germanica*). It is mostly <4 in. and is an autumn-flowering species. 344

I saw no rabbits, but fresh buries are scattered in the woods, especially in the sandy strata. But their pressure must be far less than it was.

In larch-spruce Plantation No. 2, we saw at 3.30 p.m. rather overcast and darker in the wood, an *Apodemus sylvaticus* emerge from a hole.

Seeds of the hornbeam on the road up from "Keeper's House" are being ravaged by grey squirrel (seen). Specimens of the split seeds kept. 345

In many parts of the wood middens of hazel-nuts, taken unripe by grey squirrels could be seen.

{reverse side}

19 SEPTEMBER 1944.

347 ♀ *Bombus lucorum* (L.) O.W. Richards det.

19 SEPTEMBER 1944 *** WYTHAM WOODS.

Under loose bark of a coppiced sycamore bole (in sycamore wood) killed by rabbit barking and lying on the ground in (2) were numerous snails and slugs: 346

Cepaea nemoralis

Cochlicopa lubrica (one)

Trichia striolata not kept

Marpessa laminata

Clausilia rugosa

Goniodiscus rotundatus

Oxychilus alliarius (strong garlic smell when alive)

Ena obscura (one). New record for me.

Limax marginatus

n.k.

L. maximus young

n.k.

Under another, old, log, a queen *Bombus* (*lucorum* or *terrestris*) had gone to hibernate -- a well-known habit apparently. 347

Arianta arbustorum. Also a moth pupa. (Kept to breed out. Failed): and a *Phosphuga atrata*.

A grass-snake in mixed wood (2) in tangle of privet under sycamore, near Rough Common top-hill.

A toad in ride at edge of Plantation No.2, between larch-spruce and mixed wood (2).

The spring on north slope (S 30) visited 7.7.44 (C. E. 291 -- 3) had no *Hilara* now. Netting the inch and square foot or so of muddy water gave: 349

Gammarus pulex. 2 small.

Fly larvae. Two small larvae. Attenuated last segment & tiny head. Larva of

Ptychoptera (*Liriope*)

Psidium 4 small

Beetle larva 1 small

14 OCTOBER 1944. WYTHAM etc.

Explored the lower north-east side of the north hill of Wytham, from the village entrance as far as the sharp turn to the “wilderness”.

Under the bark of fallen dead black poplars on the lane up to the “Gamekeeper's Cottage” were:

350

Various snails: *Marpessa laminata*

Clausilia rugosa

Goniodiscus rotundatus

Oxychilus alliarius (dark, bright brown, strong garlic)

Retinella nitidula (L.W.Grensted det.)

A stout brown **bristly spider** in a white web-nest.

351

A group of a dozen brown fly pupae, circa ½ in., rounded ends. (Kept to breed out. Failed.)

{reverse side of blank page opposite}

14 OCTOBER 1944.

351 ♀ *Amaurobius atropos* Walck. W.S. Bristowe provide det. (females hard to determine. Get some males.)

14 OCTOBER 1944 *** WYTHAM WOODS.

Under an old mossy log in the mixed ash-oak-sycamore wood beyond the cottage: 1 *Cychrus rostratus* L., black narrow-long head-thorax Carabid beetle. 353

Moss is a prominent constituent of the ground vegetation in these woods, both on the dry slopes above and these wetter slopes below. It has a ragged, loose, untidy, patched layer, scattered amongst the dog's mercury. There are a good many very decayed stumps of cut trees, and one I turned over had a mossy nest of a small mammal, containing mites and a very small flea.

There are some very large coppiced hazel-trees, very old, which I shook for lacewings: one *Chrysopa* flew off. The leaves had the same roundish blister white leaf-mines as I observed at Fifield (see C. E. 323).

The lower fringe of wood here has some good oaks and ashes, and occasional large sycamore and hornbeam, many young sycamores, and scattered holly, hazel, dogwood, privet, maple etc. Bracken, 5 ft. high or more, fills the open glades.

About 150 yards short of the sharp-angled turn to the "Wilderness" (= Reserve), near a spruce plantation about the track, is quite a large marsh (Marsh 1), with squashy earth and water patches (there had been heavy rain), running in a shallow valley for some distance down between the woods. It may be caused by springs at the junction of Calcareous Grit and Oxford clay. The plants are quite peculiar, and the dominants are a large *Carex*, hemp agrimony (*Eupatorium cannabinum*) 5 ft. high in seed; with scarcer comfrey, figwort and a rambling green-leaved *Rubus*. The ground is either thick damp dead leaves of *Carex*, or a layer several inches deep in places of mosses and liverworts.

In the moss and liverworts:

Collembola etc. n.k.

Snails: 1 *Azeca goodalli* (Fér.) (This is a local rarity).

1 *Cepaea nemoralis* (fresh shell, spire eaten by ? small mammal) 354

1 *Trichia hispida* L.adult

Some very young snails indetermined (*fide* L.W.Grensted).

{reverse side}

6 NOVEMBER 1944.

I saw no *Clausilia*, *Marpessa*, *Goniodiscus*, *Oxychilus*, live *Cepaea*, today under logs or stones. Do they now die off or hibernate in the ground?

359 1 ♀ *Labulla thoracica* (Wider) E. Duffey det.1962

1 immature ♂ *Amyphaena accentuata* (Walckenaer) E. Duffey det.1962

6 NOVEMBER 1944. WYTHAM WOODS.

Walked on the north hill, in the woods north and east of the Chalet: all mixed sycamore-oak-ash, with *Mercurialis* or moss on ground, in the shady parts; and tall bracken (still in brown withered stands) in the more open glades.

There were fresh footprints of badger at two of the earths in the sandy zone below the Coral Rag escarpment.

Near here also, two fallow deer bounded away, and showing their dark coats, white

rumps, and short-horned heads, neat tracks, and pointed dung



Southern has met with their tracks round here all this year.

355

Under huge slabs of bark from a fallen oak, (the bark having fallen on the mossy ground) was a runway of some small mammal, with empty, eaten open, shells of 2

Trichia striolata

356

and one young *Cepaea* species

n.k.

Also one uninjured dead shell of *Cepaea nemoralis*,

357 not kept,

1 ditto young *Trichia striolata*. n.k. Also shell of *Pomatias elegans* (n.k.)

Under bark, on fallen oak tree, ♀ *Amaurobius*: it gave quite a hard nip on my finger.

A. atropos (Walckenaer) E. Duffey det. 1962.

358

Under loose bark of standing dead sycamore, at at 3 ft. to spiders ♂, ♀, very globular brown "skeleton" -- marked on lighter brown, ditto barred legs with conspicuous spines, very agile when alarmed.

359

Also some grey, thin, fly larvae, with prominent gold-brown stiff hairs, living in wood debris + frass. One kept in alcohol, rest to breed out.

(Failed).

The **spindle** is abundant and loaded with pink fruit not yet splitting. **Blackberries** are shrivelled. Many **acorns** on the ground. Wonderful leaf yellows on sycamores, maples, beeches; brambles still in green leaf, with some in violent crimson.

{reverse side}

14 FEBRUARY 1945.

14 FEBRUARY 1945 *** WYTHAM WOODS

Went with H.N. Southern, who looked for owl pellets; while I studied springs in the Park.

S1 is a marshy spring noted on 11.4.44.

S3 is entirely bricked into a tank.

T4 is a tanked-in spring piped into a stone trough about 6 x 1½ x 1 ft. deep. A fast flow. Outflow down marshy pasture grass, heavily trampled by horses. The trough is accessible, but the tank lies in a triangle of grass protected from stock with long grass that might have voles. The trough contained thick growths of various filamentous algae covered with a dense pure culture of one diatom*. There was one plant of *Apium* on the shallow bottom silt. No dead leaves as the trough is away from trees in open pasture. 362

*This is very common *Synedra ulna* (Nitzsch.) Ehr. R.W. Butcher det. 1945. No special ecological indicator!

{reverse side}

14 FEBRUARY 1945.

14 FEBRUARY 1945 *** WYTHAM WOODS.

T4....

363

(A) A few *Gammarus pulex*, breeding.

(B) A fair number of *Limnaea truncatula*

(C) One or two *Polycelis cornuta* Brownish. (n.k.)

The algae had no sign of microscopic animal life.

T 5 is a stone trough circa 3 ft. x 15 in. x 4 in. deep in the middle of open pasture, under an old hawthorn, whose leaves almost filled the bottom. There was green alga on the sides. Fast flow of water out of a pipe. Accessible to stock. 364

A few *Limnaea truncatula*. No *Gammarus* or stoneflies.

T 6 is an iron trough, circa 5½ x 1½ x 1 ft. deep, fed by a mossy pipe with a good flow, and with a good deal of dead leaves and sticks, and a silt bottom. 365

The trough is against a low wall, under a patch of tall elders etc. at the head of the pasture slope: there is a stone-paved ramp for the stock to use. The surroundings are therefore shady and muddy.

[A]. *Gammarus pulex* abundant, quite large, some in copulation

B *Pisidium* abundant in the silt.

C. *Chironomus*, red larvae, several.

[D] 1 ? web caddis larva *Polycentropus* species

E. Small thin red worms. Fixed in 'Simulium' picric.

[F]. Small reddish *Cyclops*. 1 adult ♂, 2 ♀ copepodid V *Cyclops agilis*

Koch, Sars. D.H. Eccles det. 1957.

Ostracod: 1 ♀ *Cypria ophthalmica* (Jurine) D.H. Eccles det. 1957.

No stoneflies.

{reverse side}

14 FEBRUARY 1945.

14 FEBRUARY 1945 *** WYTHAM WOODS.

Wormstall "Duck" Pond (hereafter to be called "Wormstall Pond") lies in the centre of the valley. The small stream is not connected on the surface with any of the springs or troughs, though it may have been in the past. And some (e.g. S 2) may have underground connection. It starts high above the pond, but, even after this winter's heavy rains, apparently not so high up the valley as marked on the O.S. 6 in. map. It has *Gammarus pulex* in (n.k.), but is so badly stock-trampled that no flowers to speak of can grow. A double fence would quickly remedy this. Just above the pond the stream dives underground, to well up strongly again in the marshy pond. It runs to earth at the pond outlet and reappears as Stream 1 B, running by a ha-ha wall and shaded by hedge hawthorn. The protection of arable and the wall allows some aquatic plants like *Apium* and a *Juncus* marshy margin. There are *Gammarus pulex* here also (n.k.).

The Pond has its protective fence broken down, so that the coarse *Carex* and *Typha* and *Epilobium* have largely been grazed down by cattle. The dam is also breached. Both of these features could easily be remedied and a delightful shallow marshy pool created. There are a lot of willows and sallows. No doubt it is many years since it was a pond, and has grown up by a succession into a marshy swamp.

General notes. A beautiful flock of goldfinches feeding all afternoon in the sun on seeds left on the weedy pasture in the Park. There is a lot of decaying timber and fallen logs everywhere in the park. Most of the trees are elms or oaks.

{reverse side of blank page opposite}

15 APRIL 1945

386 A. 1 ♀ ***Bombus hortorum*** (L.) (Length circa 19-20 mm.) C. Elton det.
B. 1 ♀ ***B. agrorum*** (Fab.) O.W. Richard det. 1945

387 ***Byturus ochraceus*** (Scrida) P.J. Osborne det. 1958.

388 Swanton (1912) calls it Hymenopteran ***Diastrophus rubi*** Hartig, also for bramble. As it is not given, in the books, for cultivated raspberry, it may be an obligate woodland species.

1 ♀ ***Chrysopa ciliata*** Wesm.

{reverse side of blank page opposite}

15 APRIL 1945

386 A. 1 ♀ ***Bombus hortorum*** (L.) (Length circa 19-20 mm.) C. Elton det.
B. 1 ♀ ***B. agrorum*** (Fab.) O.W. Richard det. 1945

387 ***Byturus ochraceus*** (Scrida) P.J. Osborne det. 1958.

388 Swanton (1912) calls it Hymenopteran ***Diastrophus rubi*** Hartig, also for bramble. As it is not given, in the books, for cultivated raspberry, it may be an obligate woodland species.

1 ♀ ***Chrysopa ciliata*** Wesmael.

15 APRIL 1945. GODSTOW, OXON. & BERKS.

Oxon.: A fresh *Sialis lutaria* (L.) by the Thames side, flying.

384

Oxon.: When I shook the grassy bank overhanging about a foot above the river margin, several *Hydrometra stagnorum* L. tumbled out. They had been sheltering under the grass turf and tufts.

385

Berks.: A brimstone butterfly (*Gonepteryx rhamni*) flying over pasture field by river, visiting **dandelion** flowers. No mayflies or dragonflies seen, but great swarms of small gnats, in one case being preyed on (?) by a large robber fly with long wings and legs.

22 APRIL 1945. BOTLEY.

Visited H. & M. Thomson's caravan at Tilbury Farm. Large patches of *Lamium album* were in flower in the hedge sides of the arable field (on marl with limestone fragments in it) and being visited by queen *Bombi*, of which I took two, both long-tongued forms.

386A

386B

In Higgins Copse, just above here, and between the Oxford-Eynsham Road and Wytham Woods, *Hermaeophaga mercurialis* was beginning to perforate the dog's mercury.

387

Some small brown downy beetles were frolicking in **dandelion flowers** in the more open patches of the copse.

388

In similar places the **wild raspberries** had old galls on the stems, shaped like very large monkey-nut shells perforated with small holes. Took one green lacewing on maple leaves in the copse.

389

{reverse side}

28 APRIL 1945.

390 2 ♀ *Bombus lapidarius* (L.)

28 APRIL 1945. WYTHAM WOODS.

With A.D. Middleton walked round most of the outer fringe of the woods, from the Wytham side round to Radbrook Common, to see the extent of **rabbit** infestation. Apart from a general thin population of apparently surface living animals, of which traces were commonest at the wood margins, the only aggregations of buries were in the sandy zone of the "Calcareous Grit and Sands". Some of these had been gassed -- not very efficiently. There was a **fox** smell near two lots of buries.

In many open glades or patches of regressive woodland, there is a lot of spindle and dogwood springing up, some of the spindle from old rabbit-barked stumps.

Radbrook Common, formerly a sort of bracken heath on regressive woodland, has mostly been ploughed for poor cereal crops. There is a narrow sandy slope between the isthmus road and the arable, covered with open scrub, bracken, **bluebells** and ground ivy. Visiting **bluebell** flowers were 2 large queen **Bombus** black with red tails, their corbiculae loaded up with yellow pollen.

390

{reverse side}

27 APRIL 1945.

390A ♂ Brown argus (*Aricia agestis*). E.B. Ford det. says it is local (cf. Cothill) and lives on rock-rose and storksbill (both occur on Wytham coral rag top and sand).

393 1 ♀ **Bombus lapidarius** (L.) (no pollen in corbiculae).

27 APRIL 1945. WYTHAM WOODS.

Bombylius major was also visiting flowers of ground ivy here. n.k.
Of two butterflies caught, one was a "blue"; 390A
while the other appeared to be a *Maniola tithonus* and was released; the latter would be quite out of season and requires confirmation.

Under a coral rag boulder, near the edge of arable, but on the regressive slope, was a *Carabus nemoralis* Müll.; 391
also an *Abax ater* (n.k.). At the same zone there was also some dung of fallow deer (*Dama dama*), not very fresh, with pointed shape. 392

In the sycamore-oak(-ash) wood between Wytham and the Chalet, a ♀ *Bombus*, 393
black with red tail, was hunting for holes, (and ignoring bluebell flowers) in the dense dog's mercury. This was on Great Ash Hill.

In the more open glades of Common Piece, where the oak-sycamore-ash has much beech and hornbeam, a ♀ *Libellula depressa* L. was cruising and settling, 394
its broken yellowish colour making it seem like a colossal hornet. This species is said to fly at distances from water. It would settle on bramble in the sun, or swerve 10-30 feet up to settle for a moment on beech leaves, when chased.

I also saw a speckled wood (*Pararge aegeria*) near here, in the mixed woodland ride; and several *Arianta arbustorum* adults under a log. n.k.

Bird life seems rather scarce, or very quiet. The coppiced sycamore with dog's mercury is inimical to it.

* * *

Spring blossom and flowers this year are several weeks ahead of normal, and it has been dry for several weeks.

{reverse side}

3 MAY 1945.

3 MAY 1945. MARLEY WOOD, WYTHAM WOODS.

(There was a freak snowstorm over England on 30 April that covered Oxford trees with inches of wet sticky snow. Two inches or more lay for 12-24 hours. Lilacs were badly smashed; also other flowering trees; and some branches of oaks e.g. in Wytham).

David Lack showed me **robin** nests and "territories" that he has been watching for a few weeks. The nests are in the woods or wood margin, and always have some overhang of ground, vegetation etc. that forms a roof. He says egg collectors successfully put out tins as nest boxes. Watched birds feeding and making visits to nest. It seems the robin preys on ground invertebrates of various species, flying down to prey from a branch (rather like a kingfisher!). Its zone of activity is mostly 0 -- 10 or 20 feet.

He also indicated to me songs of **whitethroat** (*Sylvia communis*), **willow wren** (*Phylloscopus trochilus*), **blackcap** (*Sylvia atricapilla*), **garden warbler** (*S. borin*), -- and **grasshopper warbler** (*Locustella naevia*). The habitats varied from open grassy scrub to wood. On tall trees were great spotted (***Dryobates major***) and lesser spotted woodpeckers (***D. minor***); while green (***Picus viridis***) was heard.

I realized what patience and expenditure of hours intensive bird population watching imposes, analogous to the overhang preparing specimens and naming them that faces the invertebrate ecologist at home.

I did a brief survey of the spring (T. 15) and spring marsh (Marsh 5 with "Stream 2") that lies above the drive, north of Marley Cottage. There is a piped spring into a trough formed of half a wooden barrel. Below, a quite extensive seepage causes a marsh, lying

{reverse side}

3 MAY 1945.

395 *Hypnum cuspidatum* L. Abnormal submerged form.
E. W. Jones det.1948.

398 Moss. *Brachythecium rivulare* B. & S.
E. W. Jones det.1948.

3 MAY 1945 *** WYTHAM WOODS.

between arms of deciduous wood. It has †*Iris pseudocorus*, *Epilobium hirsutum*, †*Equisetum* (large species), †*Carex ? pendula*, a large valerian, but apparently not hemp agrimony. Lower down were *Juncus* beds also. The plants marked † were extensively rabbit grazed, especially *Iris*, rabbit dung being abundant, though iris roots at any rate are very acid.

The “trough” (T 15) contained a partly floating leggy moss, 395
and some dead leaves and mud. There were a good many *Limnaea truncatula*,
many of the larger ones having a rather long narrow turreted shell. These may
possibly be the western and eastern forms mentioned in Ellis (p. 100), of which the
large eastern one may be a historically later arrival. 396

Also very small debris-case caddis larva.  396A

The Marsh 5 ground mosses (rich in patches) and dead vegetation litter abounded in
animals, especially snails. 398

A large numbers of *Arianta arbustorum* were parading on the surface, 397A
also found under litter, together with *Cepaea nemoralis*. 397B

Other snails were:

- 1 *Azeca goodalli*
- 5 *Clausilia rolfhii* (completely alive!)
- 6 *Goniodiscus rotundatus*
- 7 *Trichia striolata*
- 7 *Trichia hispida*
- 1 young *Oxychilus* species (n.k.)
- 1 *Arion hortensis*
- 3 *Limnaea truncatula* (in wet mossy bits)

397
C
D
E
F
G

H
J

{reverse side}

3 MAY 1945.

- 397K 3 *Isotomurus palustris* (Müller) C.A. Elbourn det. 1971
1 *Isotoma olivacea* Tullberg C.A. Elbourn det. 1971
1 *Lepidocyrtus curvicolis* Bourlet C.A. Elbourn det. 1971

397S. *Leistus terminatus* (Hellwig). C.E. det. 1950, confirmed 1960

397T *Oxypoda procerula* Mannerheim P.M. Hammond det. 1969.

397X 1 queen *Myrmica ruginodis* Nylander.

399 2 queens *Lasius flavus* (Fab.) O.W. Richards det. 1952

400 2 queens *Myrmica ruginodis* Nylander. A.J. Pontin det. 1954

3 MAY 1945 ***** WYTHAM WOODS.

In the same marsh/litter also

397

Collembola (in moss)

K

Mites (in moss)

L

Woodlice (in moss) M. 2 *Philoscia muscorum*

M-P

1 large ? Tipulid larva

Q

5 small black ? fly larvae (in moss)

R

2 brown **smallish Carabid beetle**

S

2 very small staphylinids (U lost)

T

3 very small black "pin-head" beetles: *Acrotrichis atomaria* (Degeer)

L.W. Grensted det. 1947

V

1 other small beetle: *Enicmus transversus* (Olivier).

J. Balfour-Browne det. 1950

W

1 small ant

X

Under an oak log's upper loose bark in a grassy area near the edge of Marley Wood Plantation was a nest of small **yellow ants**, containing large and small size larvae (fewer large), and very few large cocoons, and a good many workers.

399

In a similar situation in a log close by was a small community of small dark **brown ants**.

400

Where Stream 2 (deriving from T {trough} 15 and spring marshes below it) crosses below the Park drive, it lies in grazed pasture and is unprotected and therefore muddy (with a few imported stones) on clay and with no plants. Under the stones were *Gammarus pulex* and a straight large cylindrical grit-case caddis.

401

{reverse side}

8 MAY 1945.

402. *Nasturtium* ? *officinale* R. Br. Seen by W.J.L. Sladen 1953

403 A 2 *Phaedon cochleariae* (Fab.) P.J. Osborne det. 1956.

B 1 *Phyllotreta nemorum* (L.) P.J. Osborne det. 1956

C 1 *Phyllotreta nodicornis* (Marsham) P.J. Osborne det. 1956

D 1 *Phyllotreta atra* (Fab.) P.J. Osborne det. 1956

8 MAY 1945. WYTHAM WOODS (V.E. DAY!)

With Mary Laurie, surveyed Streams 2, 3, 5, 5A, in the Marleywood area. These all originate below a sharp shelf in the contours, presumably of Oolite, and run down in the Oxford Clay to join the Seacourt Stream.

Stream 5A. This starts as a marsh (Marsh 6) in a horse-grazed pasture, turns to a tiny stream in marsh, and goes to a closed tank which has patches of "*Radicula nasturtium*" growing in mats in its overflow, and in a trough below: 402
the latter is T 17.

On the stunted but flowering water-cress were four species of herbivorous beetles: 403

- A. Blue-green, 1/8-1/4 in., many, some in copulation.
- B. Yellow and dark striped smaller flea-beetle, some in copulation. Abundant
- C. Same sized, bronze flea-beetle. Few.
- D. Smaller still dark (? black) flea-beetle. Few.

In the stream, under wet water-cress mat were: 404

- A. 1 *Helophorus* (large) on silty mud: *H. aquaticus* L. C.E.det.
- B. 1 ditto (small) *Helophorus brevipalpis* Bedel. P.J. Osborne det.1956
- C. 2 Beetle larvae
- D. *Gammarus pulex*, abundant paired.
- E. Fly larvae
- F. *Polycelis cornuta*, very abundant not kept
- G. *Limnaea truncatula*. Few.
- H. *Pisidium* (very small. Lost)

Water temperature in the water-cress/water, 12.5 °C.

No stoneflies.

{reverse side}

8 MAY 1945.

407 *Rhamphomyia nigripes* (Fab.) L.W. Grensted det. 1946.

8 MAY 1945 *** WYTHAM WOODS.

In the grass-buttercup clay pasture in the same field as Stream 5, *Coenonympha pamphilus* was seen flying. One visited *Euphrasia* flowers.

Stream 5 is similar, lying in the same pasture field, but the stream is more of a trickle through its marsh, and has no trough or tank. The marsh contained *Carex acutiformis* conf. E.F. Warburg 1959
and *Valeriana dioica* in flower W.J.L. Sladen confirmed 1953.

405.
406

These grazed marshes are very different from those inside the woodland, which are protected from stock and have high rank herbage. The pasture spring marshes have mainly *Juncus* and grasses, and small things like brooklime and watercress.

Streams 5 and 5A cross the drive, join by a drainage ditch and flow down through dense wood. They are not marked on the 6 inch map except by "Rises" and stream below the Park drive.

Stream 3 is marked on the map, but the head spring is only a marsh, from which a new deep drainage ditch runs. Lower down is a new stone trough (T 16) with muddy bottom. Close over the surface some **flies** (one caught) were weaving fast. There is little stream above the trough.

407

The head marsh showed very rich fauna by seeping rushes and horsetails, especially Tipulids.

Trough 15 at the head of stream marsh leading to stream 2. Water temperature 11.5 °C.

{reverse side}

8 MAY 1945.

408A. *Stenus rogersi* Kr. C.E. det.

8 MAY 1945 *** WYTHAM WOODS.

In the marsh just below T {trough} 15, in (ground layer) damp moss I found: 408

= MARSH 5

- A. 1 *Stenus*, black with yellow femora.
- B. A large staphylinid *Lathrobium brunnipes* (Fab.). P.J. Osborne det. 1956
- C. 1 *Clausilia rolfhii* (n.k.)
- D. 1 *Oxychilus cellarius*
- E. 1 *Limnaea truncatula* (n.k.)
- F. 1 medium-sized toad (*Bufo vulgaris*) in a hole just under the moss mat.

In the mixed deciduous (oak-ash-sycamore) of Marleywood Plantation, snails were abroad in the damp heat of today (among dog's mercury etc.)

1 *Oxychilus cellarius* (n.k.)

In a grassy etc. ride in ditto mixed Marley Wood, a speckled wood (*Pararge aegeria*). Also seen was a peacock (*Vanessa io*), and in a marsh a small copper (*Lycaena phlaeas*). n.k. This marsh has a little *Phragmites*: it lies just north of T 15.

= MARSH 4

There are a good many rabbit buries in this whole area, especially near the Park.

END OF JUNE.

H.N. Southern says he saw white admirals (*Limenitis camilla*) on the north side of Wytham Woods. Has details.

{reverse side}

5 JULY 1945.

Failed. Leaf kept in cellophane.

421B Succeeded in breeding out a tiny fly. Leaf kept in cellophane.
Phytomyza ranunculi (Schrank) var. *allipes* Meigen
“this is the second generation, emerging in summer”-- comment and det. by
L.W.Grensted, 1953.

† Rough Common

425 5-spotted burnet (*Zygaena filipendulae* L.) also skipper.

5 JULY 1945. WYTHAM WOODS.

On lane up to "Keeper's cottage", Wytham Woods, the large **black poplars** had a few leaf mines. Italian Black Poplars = *Populus x canadensis* var. *serotina*. Only one ? moth mined leave seen: silvery track on upper side.

Two leaves had fly mines under the leaf; four on one, and one on the other.

421 B

In the mixed ash-oak-sycamore wood, a *Cepaea nemoralis* (L) 4.5 feet up on a spindle-tree.

Open grassy or partly grassy areas (mostly with *Brachypodium pinnatum*) had many meadow browns (*Maniola jurtina*), and quite a lot of marbled whites (*Satyrus galathea*). 422

The latter occasionally visited bramble flowers; not viper's bugloss; but seemed to stay long on flowers of *Carduus nutans*. Except for one seen in a clearing lower down, all marbled whites were up on the limestone top cap.† No **ringlets** seen up here. One large fritillary, not determined.

Also one ♂ *Platycnemis pennipes* Pall., (colours not yet matured) flying over *Brachypodium*.

423

Viper's bugloss (*Echium vulgare*) very abundant and gorgeous with blue spires on dry old Coral Rag quarries, and on cart-tracks over top grass areas. Being visited by *Bombus* and other bees, a *Pieris brassicae*, and several **spotted burnets**, of which 2 ♀ and 1 ♂ taken on same flower spike. n.k.

{reverse side}

5 JULY 1945.

426B. *Serica brunnea* (L.) ♂. (Fowler says sandy places; often flying; sometimes on or about poplars or decaying birch; often in spiders' webs; all factors fulfilled here! Local but widely distributed. Flies to light.)

427 ♀ *Chrysops caecutiens* L.

429 *Leptoterna ferrugata* (Fallén)

430 ♀ *Tabanus bromius* L.

But cf. 12.8.45 = *Digraphis* *Phalaris arundinacea*

5 JULY 1945**** WYTHAM WOODS.

A green globular-bodied, slender-legged spider had a **beetle** prey (set dry) in a morsel of webbing at the tip of *Brachypodium* leaf, under shade of oak. 426AB

Progress through the oak-bracket-bramble “savannah” was difficult owing to the paths being grown over. Saw a *Leptura maculata* Poda settle on **bramble** flowers. A *Chrysops* attacked me near here. Its eyes were brilliant orange red, with dark triangular marks. 427

Went down to the strip of river meadow below the “Wilderness”, where a thick sweet drift of scent from meadow-sweet and **yellow bedstraw** (*Galium verum*) filled the close hot air, and one could see miles of river flat with only two absorbed anglers in sight.

At the river margin, where a steep bank is topped with *Epilobium hirsutum* etc. were many *Platynemis pennipes* of which I collected 3 ♂♂: near water surface and by bank veg. 428

Also saw several *Ischnura elegans*.

On the river meadow there is a good deal of “depauperate *Phragmites*”, on which was a gay orange and yellow bug (only one seen). 429

Also, a Tabanid settled near me. Eyes with single bar of dark: \ / 430

By the river bank I took a ♂ *Agrion splendens* (Harris) & near it a ♀ of the same species. 431

Ringlets (*Aphantopus hyperanthus*) were scarce inside the woods, but very abundant on the wood margin and river meadow. One white admiral (*Limenitis camilla*) in the oak-bramble-bracken of the northwest area.

{reverse side}

7 JULY 1945.

Saw three *Aeshna grandis* flying at different points in the outskirts of the deciduous woods, not very near the river.

- C. E. 432A-C 3 *Donacia simplex* Fab. (B. & C. n.k.)
 D. *Rhagonycha fulva* (Scopoli) (The very abundant one that comes on umbellifers)
 E. *Anisosticta 19-punctata* L. ♀ ♂ † lightish brown; belly green.
 G 2 ♀ *Casinaria orbitalis* (Gravenhorst). J.L.Perkins det. 1960.
 H. ♀ *Leptocerus* (probably *cinereus* Curtis, but not certainly determined) L.W. Grensted det. 1948.
 J. Hatched into young spiders. Kept whole in alcohol.
- C.E. 433A 2 *Donacia semicuprea* Panzer. (1 k.)
- 435 † *Anodonta anatina* (L.)

7 JULY 1945. GODSTOW, OXON. (Yes)

Went in a boat on the Thames between Godstow and King's Weir. There was a stiff west breeze which kept flying insects down, except a few *Platycnemis pennipes* (some in copulation flying) and ♂ *Agrion splendens*.

The most massive reed-swamp and or marsh marginal vegetation is of *Glyceria aquatica*, now in flower, whose leaves might be confused with those of *Sparganium erectum*. The latter, *Digraphis*, *Phragmites* and *Scirpus lacustris* are the other components, but *Digraphis* is more in landward marsh. *Typha* is absent.

On a patch of tall *Sparganium erectum* I noted *Donacia*, a **soldier beetle** of very bright orange with black elytra tips,

a small ladybird-like **spotted beetle** (one pair in copulation, one solo n.k.),

two kinds of Hymenoptera of which the smaller one was collected (jerkily haunting leaves), and a **caddis-fly** † (alcohol).

There were larger dirty grey cocoons on the upper parts of leaves;

and a foot or two above the water, some empty whitish granular cocoon cases (n.k.)

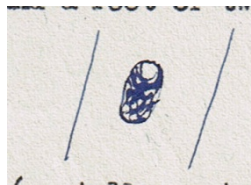
432 A-D

E

G

H

J



On a patch of *Glyceria maxima* (*aquatica*) (very tall, up to 4 ft. above water), the same grey cocoons. (n.k.). Also *Donacia*.

433

Two *Haematopota* attacked, by marsh, and on water (one kept) ♀ *H. pluvialis* (L.) C. Elton det. 1953.

434

Floating was a fresh *Anodonta* from the bottom, perhaps stirred by the boat.

435

A heron in the river meadow. *Asellus* on the muddy roots of a *Scirpus lacustris* pulled up.

{reverse side of blank page 134}

10 AUGUST 1945.

481A *Spongilla lacustris* (see letter from M.Burton 5.3.1945). The gemmules have acanthoxea not amphidiscs. According to Burton only *fluviatilis* branches, but possibly growing willow roots makes *lacustris* do so.

B. *Micronecta ? minutissima* (L.) Sent to Walton for naming. (Lost)

C. *Haliphus* sp. K. det.P.J. Osborne 1956 (not to species)

D. *Hydrarachna* sp. nymph ? *thoni* Piersig or *biscutata* Sig Thor.

E.M.O. Laurie det.1947. Both local species not yet known as adults.

(According to Turk's checklist, 1953 *thoni* = *biscutata*)

E. *Sida crystallina* (O.F. Müller) (2 k.)

10 AUGUST 1945. GODSTOW, OXON.

Went on the river in a punt, between Godstow and King's Weir, in the afternoon. Windy and sun.

A sandpiper was flying around, many swallows and one house martin.

There are small scattered willows (on Oxon. side) along the otherwise their banks, and nearly all have sunken branches or roots with fine finger-like green partly branching growths of freshwater sponge, on which were a good number of larval lacewings, sitting like poised *Philoscia*: they are *Sisyra* probably *fuscata* (Fab.), which is the only one known to be common in Ox. rivers. And a large red *Chironomus* larva mostly buried in sponge.

481A

481B

481C

In floating water-plants (fragments from the benthos drifted into the edge of *Phragmites* marginal swamp) such as *Ceratophyllum* and *Myriophyllum* were:

482

- 3 A small brilliant red-eyed "*Sigara*" n.k.
- 2 A tiny very fast darting, weed clinging **water-bugs**
- 5 Haliplid beetles, active swimmers
- 1 Scarlet **water mite** (preserved viets. solution)
- 3 Active, weed settling, large **water fleas**

B
C
D
E

{reverse side}

10 AUGUST 1945.

- 483 1 parasite emerged. The other two failed, but one had become nearly adult and is seen to have biting jaws.

Here was also *Cirsium eriophorum* and *C. acaulos*

10 AUGUST 1945 ***** G ODESTOW, OXON.

Again noticed how *Phragmites*, here marginal to the Thames, has many aphids on it.

Several *Aeshna grandis* flashed past, and there were a few *Agrion splendens*, *Ischnura elegans* and some other small demoiselles. One never sees any *Libellula*, *Sympetrum* or 'other' *Aeshnas* along this river reedy margin.

On bur-reed leaf and twice on dead bur-reed leaves, a few inches above water level I collected cocoons of white granular oval type containing beetle or bug pupae; kept to breed out. 483

12 AUGUST. WYTHAM WOODS.

Walked to the Chalet, from Wytham, and down to the River Thames, and back the same way. The **spindle** berries are unripe, some bushes having a little pink. Much new **spindle** springing everywhere. On the limestone corally patches on the way up the **viper's bugloss** flowers were mostly over, also the **Centaury**. Many fine clumps of Ploughman's Spikenard (*Inula conyza*) in flower. The dark reddish stems, and the deep olive green leaves and the dark yellow tight flowers are peculiar and lovely in unison.

A good many mole workings about the oak-ash-sycamore woods.

{reverse side}

12 AUGUST 1945

Mixed deciduous wood has a little *Campanula trachelium* (in flower)

484B ♀ *Lasius niger* (L.) A.J. Pontin det. 1954.

12 AUGUST 1945**** WYTHAM WOODS.

On the *Brachypodium pinnatum* grassland at the top was a large youth camp at the Chalet side. On grass by the road *Chorthippus parallelus* and *bicolor* abundant.

On this area under shade of marginal trees is a large society of bushgrass or wood small-reed (*Calamagrostis epigeios*) in full flower of 2 ft. purple panicles on strong brittle stems.

The sycamore woods resound with the shrill hum of hover-flies in the air, and *Chrysopa* were also shaken from the branches.

On bramble scrub was *Pholidoptera cinerea* ♀, ♂.

Down by the River Thames I noticed a species of *Bidens*. The “reed” mentioned on 5.7.45 was all or mostly *Digraphis arundinacea*, now in flower.

I collected 2 delicate green flies, and a dark winged ant on marginal vegetation on the riverbank. 484A
Saw *Aeshna grandis*. B

On the way back, I saw a grass snake (*Natrix natrix*) in the grass-thistly clearing.

Under an old log close to this place (close to “The Deer Pond”) by grass ride, was a large crested newt (*Triturus palustris*) with brilliant orange variegated belly, black back, and no crest on back.

The hornbeam (cf. C.E. 345) is having its seeds stripped again (by grey squirrels). Took damaged samples. 485

Saw no skippers, *marbled whites*, white admirals or fritillaries. Some *Maniola jurtina*, *M. tithonus* on open limestone areas; and *Aphantopus hyperanthus* in woodland-bramble glade.

{reverse side}

14 AUGUST 1945.

487A *Caricia tigrina* (Fab.) Muscidae, Coenosiinae,
PREY: *Mystacides azurea* L. Leptoceridae.

B ditto. PREY: *Themira leachii* (Meigen) Sepsidae
L.W. Grensted det. 1946.

487C *Anisosticta 19-punctata* L.

14 AUGUST GODSTOW, BERKS.

Road from Godstow to a point (in Berks!) About 100 yards above King's Weir Lock. Sunny behind cloud. On the cattle-grazed *Sparganium erectum* at the river margin and adjoining flood-plain pasture (Wytham Estate land) I saw many insects, including various flies, small caddis, Tipulid flies, etc.

Two small 'house flies' with spotted abdomens, each with a prey (B) **smaller fly** (A) small **black caddis** of the narrow sort with black and white fine long antennae that dances. 487A & B

Speckled **ladybird**.

Also, some *Iris pseudocorus* leaves, in river marsh, had same leaf miner as C.E. 466. (One minute brilliant metallic green parasite emerged (Hymenoptera) Leaf specimens kept in cellophane. Rest failed.) n.k.

A flock of **lapwings** sitting on the cattle pasture near the river above Godstow (in Berks!)

{reverse side}

24 AUGUST 1945.

493A *Syrphidis ribesii* (L.) L.W. Grensted det. 1946.

493B 6 *Chrysopa carnea* Stephen.
1 *C. ventralis* Curtis.

493C 1 ♀ *Hemerobius humulinus* L. C.A.Elbourn det.1963.

493E *Euphyia* (*Camptogramma*) *bilineata* (L.). Meyrick says 'on grasses, *Rumex* etc.'

24 AUGUST 1945. WYTHAM WOODS.

Went to the north end. Met Prof. H.G. Champion and his forester (Probitts), just appointed. Saw Ministry of Supply gang beginning to take out **sycamore** on the way from the village to the Chalet. In Lords Common most of the flowers are over, except **ploughman's spikenard** and **Euphrasia**, and the very last **Viper's Bugloss**, and a pink weak labiate (**Calamintha**) with woolly spheres of flower heads, and some *Hypericum*. A great **blackberry** crop in some of the rides and margins.

Shook sycamores (by the cross path down below the Chalet, on the north side) and collected in net: 493

1 large **syrrhid fly**, black and yellow banded.

8 **green lacewings** (medium or small)

2 small brown lacewings

6 small yellow Homoptera, flying when shaken

1 brown **angular moth**

1 speckled winged Psocid

Loensia variegata (Latreille in Coquebert). B.M. Hobby det. 1947

{reverse side}

A
B
C
D
E
F

24 AUGUST 1945

495 2 ♂ **Amaurobius atropos** (Walckmaer) E. Duffey det. 1962

496 2 queen **Myrmica ruginodis** Nylander. A.J.Pontin confirm 1954

497A **Psithyrus rupestris** (Fab.) 1 ♂ O.W. Richards det. 1945.
P. vestalis (Geoffr. in Fourer) 3 ♂ O.W. Richards det. 1945.
Bombus hortorum (L.) ♂ (n.k.) O.W. Richards det. 1945.

24 AUGUST 1945 *** WYTHAM WOODS.

At the same place collected three of the flies that bother and settle on one (though it is damp and partly raining today).

2 larger: *Hydrotaea irritans* (Fallén) L.W. Grensted det. 1947

494A

1 smaller: *H. meteorica* (L.) L.W. Grensted det. 1947

B

Under rotting logs (there is much old rabbit damage that has killed sycamores) saw but did not collect.

Cepaea nemoralis (L.). Yellow with slight bands; also pinkish brown.

Marpessa laminata

Oxychilus cellarius

Collected two ♂ spiders (*Amaurobius*) that had silk-lined tunnels leading out of the ground, an inch apart, under a log.

495

On the way back, found the crested newt no longer under the log lying in a grassy glade in this "light" (broad open space through wood). But took two *Myrmica* from a nest under the log.

496

Near here took 5 ♂♂ bumble bees (of at least three species) that were hanging in the rain on the under sides of flower-heads (still with some flowers) of teasel (*Dipsacus fullonum*) in the same open glade.

497A (Yes)

On the open ground beyond the Chalet a **grey squirrel** ran away, apparently from an isolated **hazel-nut** bush.

The huge horsetails that are common on the road up from the village to the cottage, just where there is a spring flush, are *Equisetum telmateia* = *maximum*. Druce notes they are local on such spring flush zones.

{reverse side}

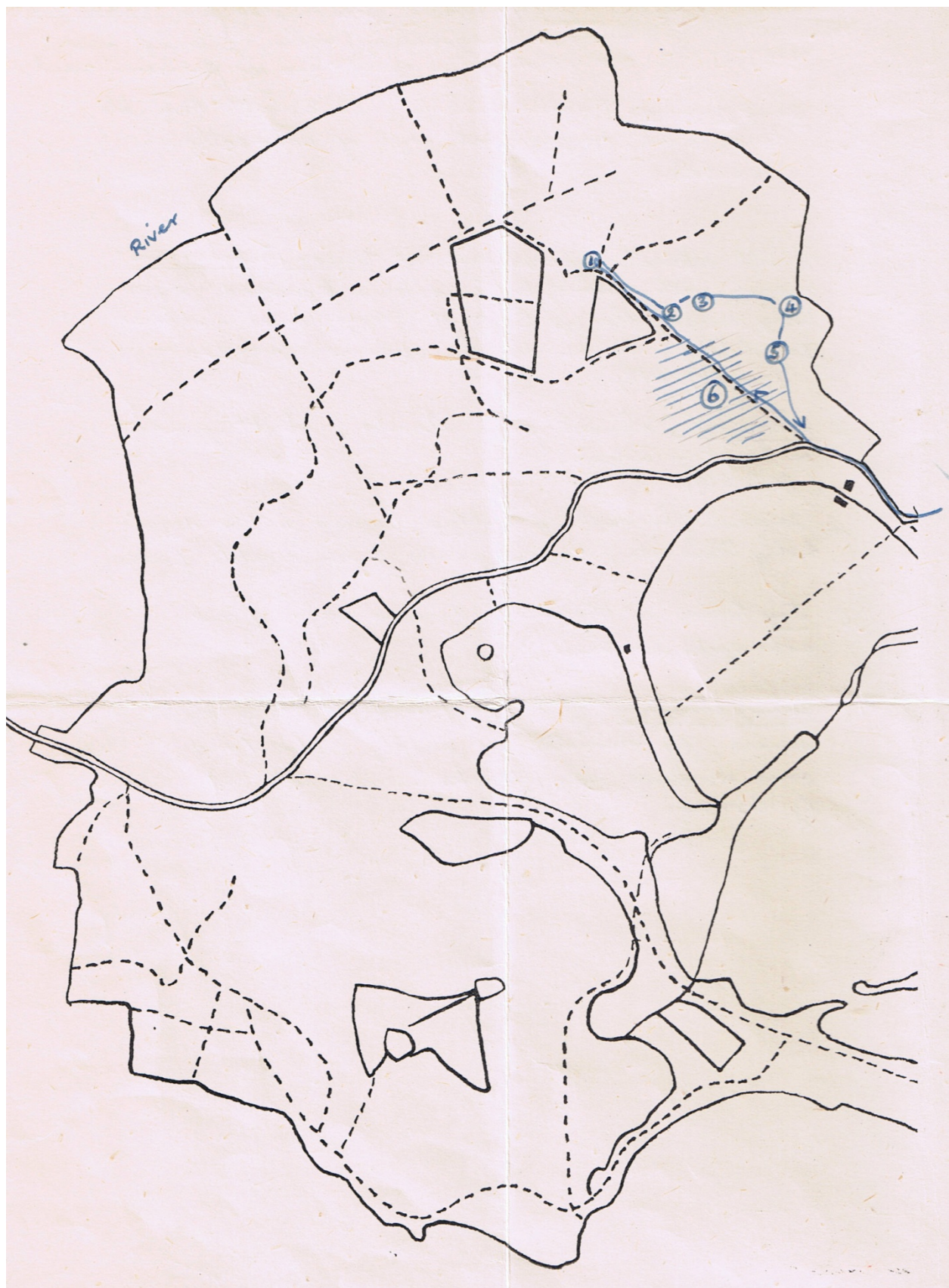
21 SEPTEMBER 1945.

C. ELTON 21.9.1945. 3.30-5.30 p.m. (Blue ink)

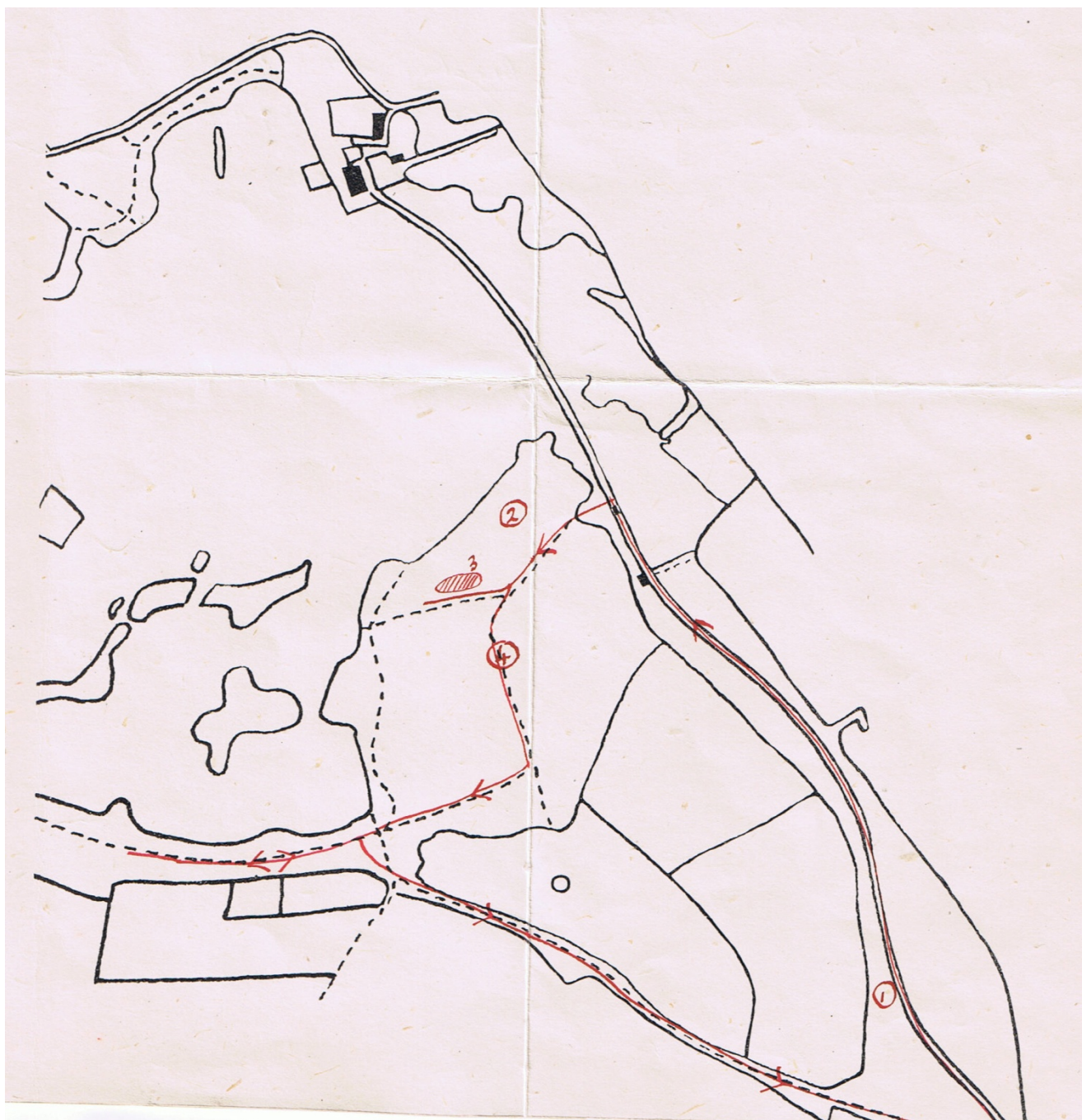
14.10.45 see over (red ink)

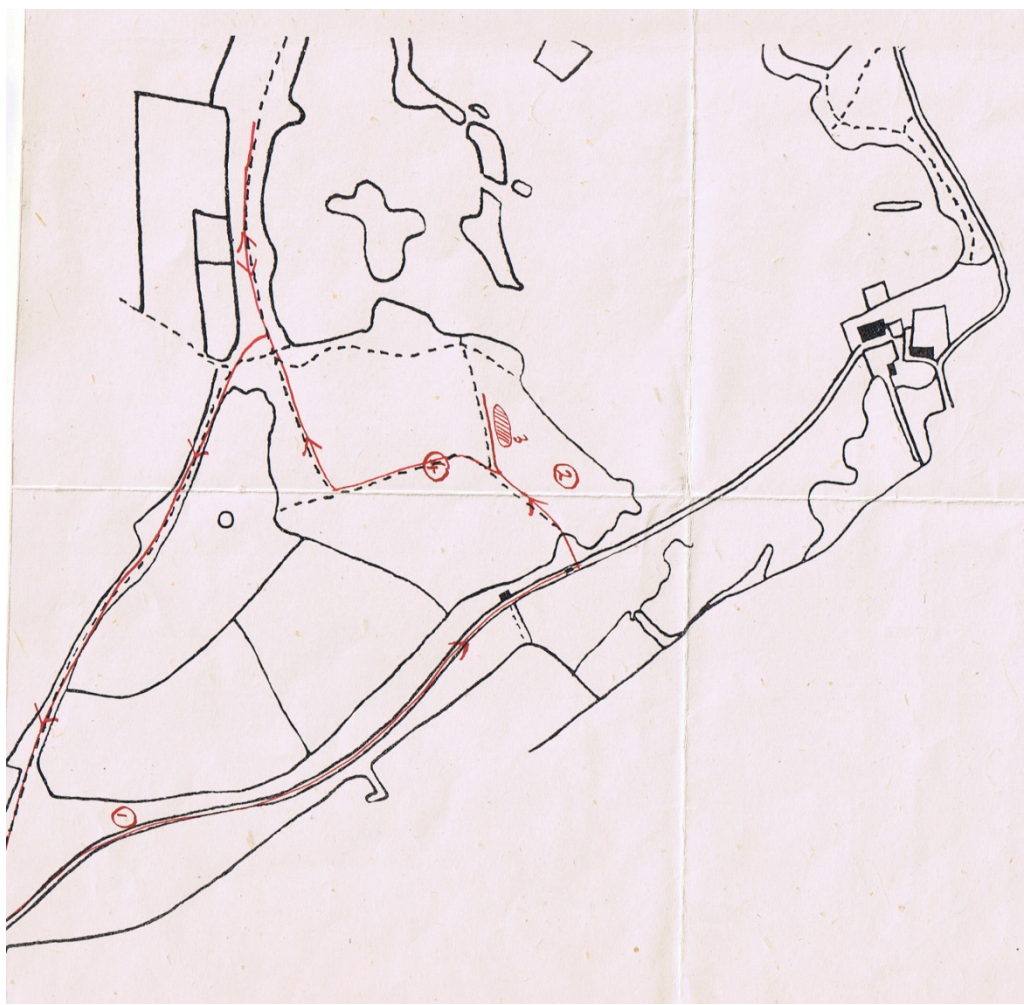
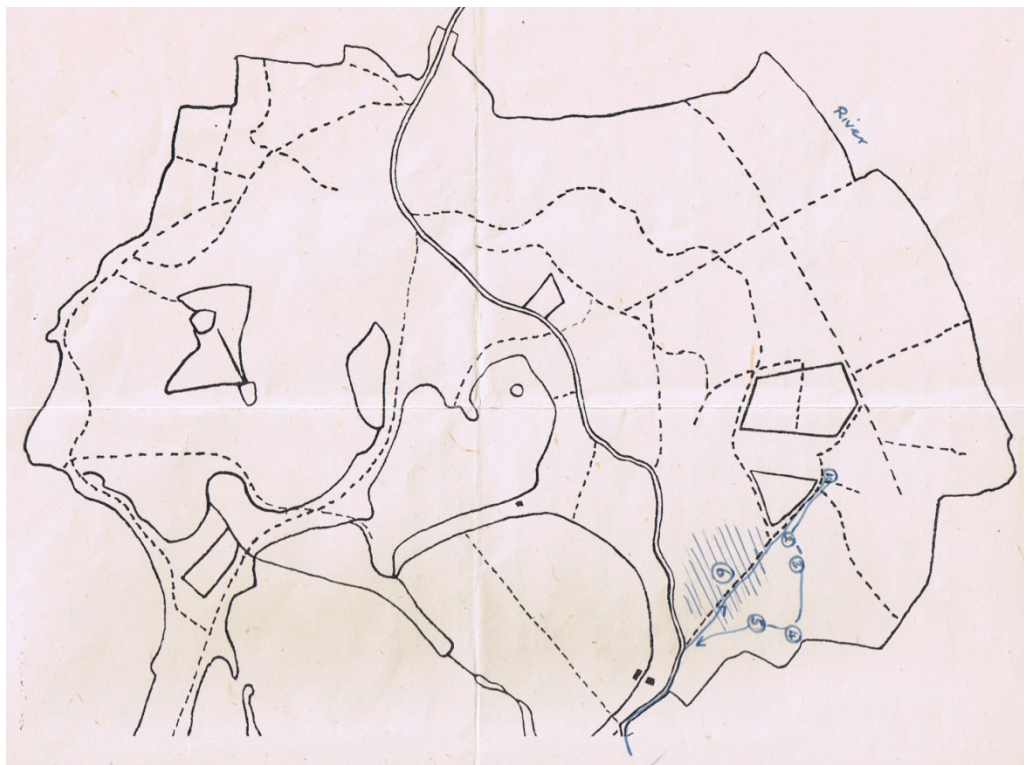
Warm, cloudy-sunny, calm, ground and air moist after much rain in previous week.

1. Damp ground, transitional to marsh, with bramble, large *Carex*, comfrey, at edge of oak-sallow. (C.E. 516).
2. Small separate upper unit of *Carex-Eupatorium* marsh, with moss-hepatic-debris ground layer. Very dense, flowers up to 5 ft. very dense mollusc population. Surrounded by sycamore woods. (C.E. 517, 518).
3. Sycamore almost pure stands, abutting marsh or bracken areas. (C.E. 519).
4. Several flourishing rabbit buries under dense holly trees etc., a few yards from arable fields.
5. Jay in heard thick deciduous wood (oak-ash-sycamore-hazel).
6. Heavy thinning of woods (mainly cutting sycamore, for Ministry of Supply, old (and some working new) tracks much cut up by lorries.



21.9.1945.





C. ELTON 14 October 1945. 2.30-5.15 p.m. (Red ink)

- (1) Marleywood Plantation, mixed deciduous. 1 magpie and a flock of chaffinches.
- (2) Jay in mixed deciduous wood; also green woodpecker.
- (3) Outlier of marsh (*Carex*, *Phragmites*, *Epilobium hirsutum*, *Iris foetidissima*, *Equisetum telmateia* etc.: *Eupatorium* and moss-liverwort ground zone not noted present; litter of dead vegetation . Some invertebrates collected. (C.E. 526A.B) .
- (4) Under sheet galvanised iron on open ride (by hut) one full-grown toad (in shallow hole). Ants' nest, extensive workings in sand. (C.E.527).
- (5) Open glade among large beeches etc . Under fallen logs various invertebrates. (C.E. 528, 529A, B).
- (6) *Chrysopa* beaten from sycamore. (C.E. 530)

21 SEPTEMBER 1945. WYTHAM WOODS.

Cycled with Joy and Mattie Thompson to the Woods (north-east part: see Blank Map for route and habitat details). There is much **sycamore** cutting by the Ministry of Supply men in the far part of Common Piece, leaving open wood cleared of all except selected trees, and with underbrush and toppings burned. Tracks rather badly cut up by lorries.

{reverse side}

21 SEPTEMBER 1945.

21 SEPTEMBER 1945. WYTHAM WOODS***

There is a damp patch at the turn past the triangular fir wood (which has *Pseudotsuga taxifolia* along one edge): Bramble, *Carex*, **comfrey** -- transitional between ordinary scrub of regressive oak-sallow open wood (which here borders it) and marshy bog.

Pholidoptera cinerea (L.), several on bramble, 1 k. 516 A
 A small nest of ***Myrmica ruginodis*** Nylander under a log A.J. Pontin det. 1954 B
 A medium, but short not very thick-bodied brownish **grey dragonfly**, ***Sympetrum striolatum*** (Charpentier), ♀ settled on vegetation. C

Searched briefly in an isolated unit of ***Eupatorium-Carex-Angelica sylvestris*** seepage marsh (part of Marsh 1), just below the path as it passes triangular fir wood. There is less moss and hepatic growth here than in the lower area examined on 14.10.44. On this ground layer under moss and in surface soil and litter: 517

Many ***Arianta arbustorum*** (L.) 2 k. A
 1 ***Cepaea nemoralis*** (L.) B
 1 ***Trichia hispida*** (L.) C
 7 ***Oxychilus cellarius*** (Müll.) D
 2 ***Azeca goodalli*** (Fér) (one old shell n.k., 1 live k.) E
 1 ***Cochlicopa lubrica*** (Müll.) F
 2 ***Clausilia rolfhii*** Leach G
 2 ***Retinella nitidula*** (Drap.) (One lost) H
 9 small shells J
 A large brown weevil ***Barynotus moerens*** F. (dog's mercury species) K
 A small one, brown speckled ***Scolopostethus thomsoni*** Reuter G.G.E. Scudder det. 1956 L

Sweeping the marsh vegetation showed many spiders and flies, but few Homoptera or beetles. Kept two small black and white spiders I had never seen before. 518

Immature ♂♀ ***Dictyna ? arundinacea*** L. E.Duffey det. 1951

{reverse side}

21 SEPTEMBER 1945.

519A 6 ***Chrysopa carnea*** Stephen (All green. 1 k.)

B. 1 ***Hemerobius micans*** ♀ Olivier

D. 1 ***Halyzia 16-guttata*** (L.) 1 larva C.E. det. 1947

519 E. ***Syrphus (Episyrphus) balteatus*** Degeer L.W. Grensted det. 1945 (2 kept)

21 SEPTEMBER 1945 ***** WYTHAM WOODS.

Beating sycamores near here gave:

519

6 **green lacewings** (small size)

1 **brown lacewing**

1 adult ♀ *Leptophyes punctatissima* Box

3 reddish-brown light yellow-spotted **ladybirds** (1 k.)

Aphids, flying hoppers, flies etc.

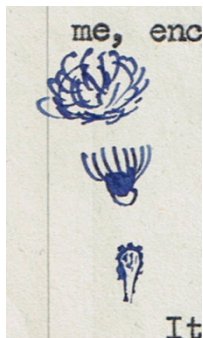
Caught 8 still-hovering **yellow black-banded Syrphids**, hovering about 5-6 ft. in sycamore shade.

A
B
C
D
E

Also in Common Piece heard a jay; and found several solid rabbit buries not far from the arable edge.

Collected three kinds of seeds adapted to animal carriage (all three attached to me, enchanter's night-shade on a large scale sometimes):

520



Burdock (*Arctium lappa*). Path side (also occurs in wood glades)

Agrimony (*Agrimonia eupatoria*). Path side

Enchanter's nightshade (*Circaea lutetiana*). Path side, and damp woodland areas.

A
B
C

It will be interesting to assemble a museum of

- (1) Animal-carried seeds.
- (2) Animal-digested berry-seeds etc.
- (3) Cross-pollination relationships.
- (4) Animal damage-influence on plant populations
- (5) Carnivorous plants.
- (6) Types (in broadest sense) of plant cover and plant food; plants as micro-habitats (cf. tree-holes, galls).
- (7) True physiological symbiosis (e.g. *Hydra*, *Spongilla*).

{Reverse side of p. 162 }

23 SEPTEMBER 1945.

No ground flowers in the wood: one mostly notices plants of dog's mercury, red campion, nettle, and thin grasses, with here and there clumps of *Deschampsia caespitosa*. Rabbit traces, also down an elder bank above Tilbury Farm.

522 5 ***Chrysopa carnea*** Stephens. 4 green (of which 1 k.), One (k.) with pink tinge on wings.
Included lab. collection by sorting a tin of moss, and a rather meagre addition by finally putting it in a Tullgren funnel 24 hrs -- produced almost only mites.

524 Mosses: ***Porotrichum alopecurum*** Mitt.
Eurhynchium praelongum Hobk. (= *E. Stokesii* B. & S.)
Mnium undulatum L. (E.W. Jones det. 1948)

524EZ 3 tiny Psychodid flies (524 EE) appeared out of 2 shells of *T. hispida* after a week in tube. See page 168.

23 SEPTEMBER 1945. HIGGIN'S COPSE, BOTLEY.

Visited the Thompsons' caravan: did an hour's collecting 4-5 p.m. in the oak-elm-(ash)-hazel-elder wood of Higgins Copse, which is somewhat isolated among farm fields, and belongs to Wytham estate (O.U.). (See 22.4.1945). Rather cool and rainy.

Caught an *Aeshna mixta* Latreille ♂ that was resting among bushes in the dense heart of this wood. Length circa 62 mm., basal wing veins of hind wing, colours, absence of certain black mark on the face, define it from *junceae*. This is such an odd place to find this rare species (only once recorded in each of Oxon. VCH and Berks. VCH., and confined to south-east); that it is practically certainly an immigrant (it is known to come into England from Europe). There have been heavy gales all over England and the back end of them at Oxford, during the last two days. 521

Shaking hazels produced 5 smaller-sized *Chrysopa*. 522

There is a rich scattered moss carpet on the pebbly clayey soil (field below seems to have much Plateau Gravel). From this collected a lot of snails and slugs, some woodlice; and 524

2 Thin light brown bugs	1 <i>Stenodema calcaratum</i> (Fallén)	A
	1 <i>S. laevigatum</i> (L.) det. G.G.E. Scudder 1956	
6 <i>Philoscia muscorum</i> Scopoli abundant		B
Small woodlice abundant		C
1 <i>Trichia striolata</i> (Pfeiffer)		D
7 <i>T. hispida</i> (L.)		E
1 <i>Oxychilus cellarius</i> (Müll.)		
1 <i>O. alliarius</i>		G
8 <i>Retinella nitidula</i> (Drap.)		H
1 <i>Cochlicopa lubrica</i> (Müll.)		J
		K

{reverse side}

23 SEPTEMBER 1945.

23 SEPTEMBER 1945.**** HIGGINS COPSE, BOTLEY.

(Moss litter)

524

Small snails	L
Several small slugs	n.k.
2 False scorpions	M
1 Small centipede	N
2 very small spiders	P
2 ? Enchytraeid worms	Q
<u>Several</u> Collembola, very small i.e. they were much scarcer than mites.	R

Mites of more than 6 kinds, some abundant.	S

4 small brown pupae. K. to breed out. Failed

{reverse side}

23 SEPTEMBER 1945.

23 SEPTEMBER 1945.**** HIGGINS COPSE, BOTLEY.

(Moss litter)

524

Beetles: 1 *Philonthus fuscipennis* (Mannerheim) C. Overgaard Nielsen det. 1951. AA

1 *Notiophilus biguttatus* F. ♀ C.E. det. M.J. Davies confirmed 1950. BB

1 small staphylinid CC

1 small staphylinid *Stenus bifoveolatus* Gyllenhal. C.E. det. 1950 DD

3 tiny flies "appeared" (after a week) out of 2 empty shells of *Trichia hispida* (524 E) EE

2 *Psychoda crassipennis* Tonnoir L.W. Grensted det. 1952 this one not kept.

1 *Psychoda* ? *crassipennis* of which one presented to Hope Department 1954.

14 OCTOBER 1945. WYTHAM.

Drove into the country. Entered Wytham by Botley Lodge and walked in Marley Wood and along the top beeches drive as far as the Boy Scouts' hut. (See map for 21 September page).

In Marleywood Plantation trees were a magpie and a flock of chaffinches. Jay and green woodpecker heard in mixed deciduous (sycamore etc.) wood.

A small outlier of woodland marsh (above the area of T 15) has mainly large *Carex* and *Epilobium hirsutum*, also some *Phragmites*, *Iris pseudocorus*, *Equisetum telmateia*, but no *Eupatorium* seen, and no moss-liverwort ground zone, only dead vegetation in which were a good many snails, including *Oxychilus cellarius*, *Arianta arbustorum* and *Cochlicopa lubrica* (n.k.). No *Clausilia rolfhii*. Collected two small carabid beetles 526A, B.

A. 1 *Bembidion liguttatum* (Fab.). C. Elton det. 1952

B.1 *Agonum thoreyi* Dejean. M.J. Davies det. 1954

{reverse side}

14 OCTOBER 1945.

14 OCTOBER 1945.**** WYTHAM.

Under some galvanised iron sheet in the broad ride just above T 15 was an extensive sandy nest of a small black ant, also a full-grown toad (***Bufo bufo***) in a shallow hole. Lost.

In an open glade at the edge of the tall beeches on the top ride were some fallen beech logs. Under bark lying loose was a swarm of gregarious larvae (over a hundred) of which some kept with vegetation debris, to breed through. (Died before pupation).

Under a log here were 2 ***Cychrus rostratus*** L. (1 k.)
together, also a long shining brown beetle larva.

529 A

n.k.

One ***Chrysopa carnea*** Steph. beaten from sycamore on the top ride.

530

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 3.

1 November 1945- 28 June 1946.

C.E. 531-621.

Red ticks⁵ mean ready to be indexed. Crossed red ticks mean indexed.

Circles⁶ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

⁵ Shown as **bold** in edited version.

⁶ Edited to A or 00

1 NOVEMBER 1945. WYTHAM WOODS. AFTERNOON.

Walked to the Chalet from Wytham end, with forestry student G.R. Fenton, and New Zealand student Miss Valerie Todd, both interested in litter fauna.

For route and casual notes see MAP.

Collected animals on the trunks of two parent large sycamores by the "Badger Terrace" i.e. on sand: in the usual oak-ash-dog's mercury-sycamore wood. These old trees have scaly bark, under which lurk various animals: 531

Porcellio scaber Latr. (9 k.)

A

Orchesella cincta (L.) C.A. Elbourn det. 1967

Spiders C-M (including some running on the open trunk, which were numerous)

C-M

C,E,F,G,J,L ***Drapetisca socialis*** Sund. 4 ♀♀ (C, G,J, L) Kept by E. Duffey det. 1951
(known as tree-trunk haunter)

H, K ***Labulla thoracica*** Wid. 2 ♂♂

H, K

M ***Agroeca ? inopina*** Camb. Immature ♂

M

D ***Lepthyphantes minutus*** Blackwell 1 ♀ E. Duffey det. 1952

2 Opilionids (on open trunk)

Oligolophus tridens Koch ♀ ♂. V. Todd det. 1946

N

one or two Syrphid larvae (V. Todd det. 1946)

n.k.

Many floppy white "cocoons" apparently pertaining to spiders.

n.k.

{reverse side}

1 NOVEMBER 1945.

{The large complex maps drawn on white fold-out sheet with handwritten explanatory notes inserted here.}

{Handwritten notes and maps from Page 1.}

1 NOVEMBER 1945. WYTHAM WOODS. Afternoon.

C. ELTON 3.30 -- 4.30 p.m. 1.11.45 (Red Ink and ringed)

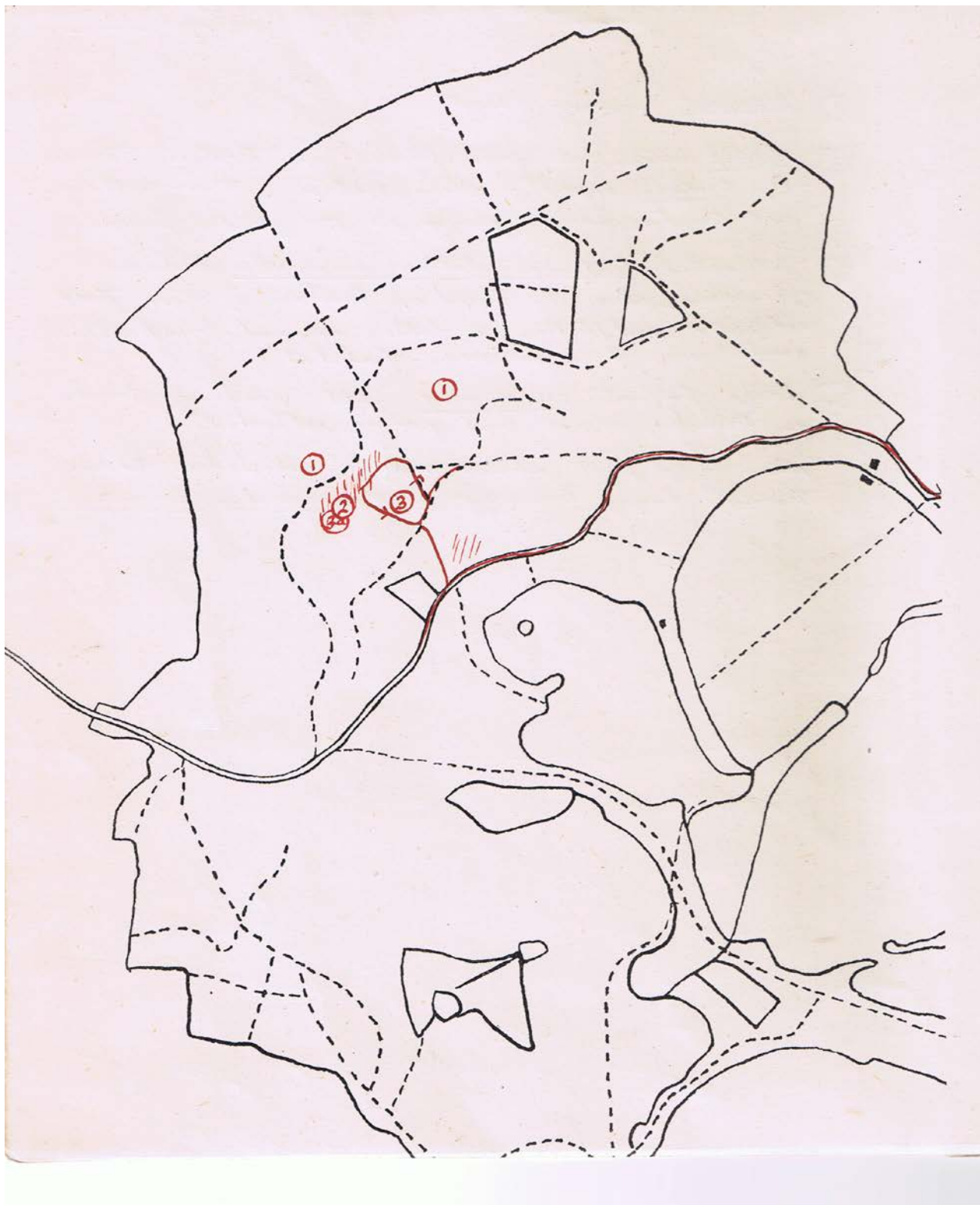
(1) Pheasant crowing heard.

(2) Rabbit traces at sand buries on "Badger Terrace". No badger signs on this section. Tree cutting and tractor noises going on 50 yards below.

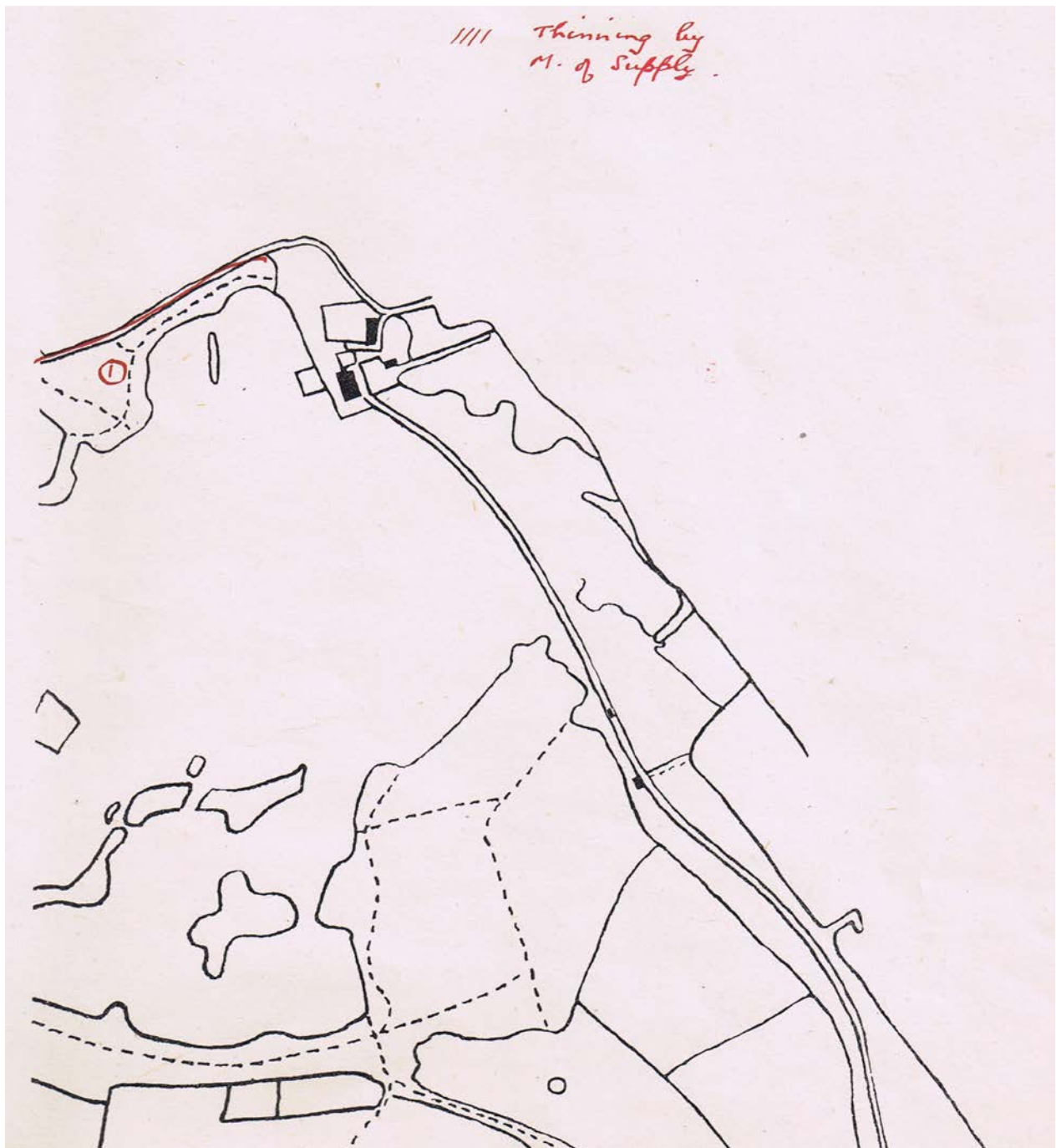
(3) Collected leaf-moss litter animals below sycamores, close to trunks. Fenton and Miss Todd collected soil/litter and litter animals respectively quite near here in same habitat.

(3a) Large parent sycamores with scaling bark on trunks, which had fauna, collected. Near here just above rabbit-inhabited "Badger Terraces" heavy browsing of *Mercurialis perennis*.

Map from page 1 L



Map from page 1 R



1 NOVEMBER 1945. WYTHAM WOODS****

Round the base of small sycamores in the edge of mixed deciduous wood, under rotten leaves and this year's rotting ones, moss and on the soil surface were 532

5 *Pomatias elegans* very large empty shells

3 *Retinella nitidula* (not kept)

Trichia striolata

n.k.

T. hispida

n.k.

Goniodiscus rotundatus

n.k.

Oxychilus cellarius

n.k.

Marpessa laminata

n.k.

Cepaea nemoralis

n.k.

Cepaea hortensis ?

n.k.

7 *Ena obscura* (not kept)

8 *Glomeris marginata* (Villers)

Checked for 'Edge' on cards.

1 *Armadillidium vulgare* Latreille

Philoscia muscorum abundant

n.k.

1 *Phosphuga atrata* L. under a pebble of limestone

Mercurialis above and near the "Badger Terrace" (part inhabited by rabbits) was heavily browsed by the leaves and side stems being nipped. Probably by **rabbits**.

Fenton collected a sample of the surface soil fauna with Tullgren funnel (see O.E.S.)

Harvestmen from litter (V. Todd det. 1946): in the hollow of a sycamore stump

Leiobunum rotundum (Latreille) 1 ♂

Platybunus triangularis (Herbst.). 1 immature

Oligolophus agrestis (Meade) 2 ♂, 1 ♀.

{reverse side}

1 FEBRUARY 1946.

1 FEBRUARY 1946. WYTHAM WOODS. 2-4. (G.M.T)

Entered by Botley Lodge and walked as far as My Lady's Seat, down through the Park, and back along the lower drive (see map).

Warmish blowy day with showers and sun.

On the grassy path on the way up from the Lodge the margins are rough thick grass, contrasting with the close cattle grazing beyond the fence. Under

{reverse side}

1 FEBRUARY 1946.

535 A *Bruchus (Laria) rufimana* Boh. A hibernating broad-bean pest.

B *Pterostichus vernalis* (Panzer) W. Murdoch 1963

C *Stomis pumicatus* (Panzer)

536 Emerged 23.3.46 as fairly large Tipulid of grey and fawn-brown colouring; 3 more by 27.3. Three specimens given to Hope Department, with 1 pupa case, and 2 pupa cases *in situ* in tunnelled touchwood. Another piece without pupae k. for O.E.S.
4 ♀ *Tipula flavolineata* Mg.

(Known to breed in logs. 1 specimen in Hope Department from Hell Coppice).

{The large complex maps drawn on white fold-out sheet with handwritten explanatory notes inserted here.}

{Handwritten notes and maps from page 3.}

C. ELTON. 1.2.46. 12.30 -- 4 p.m.

(Numbers in circles):

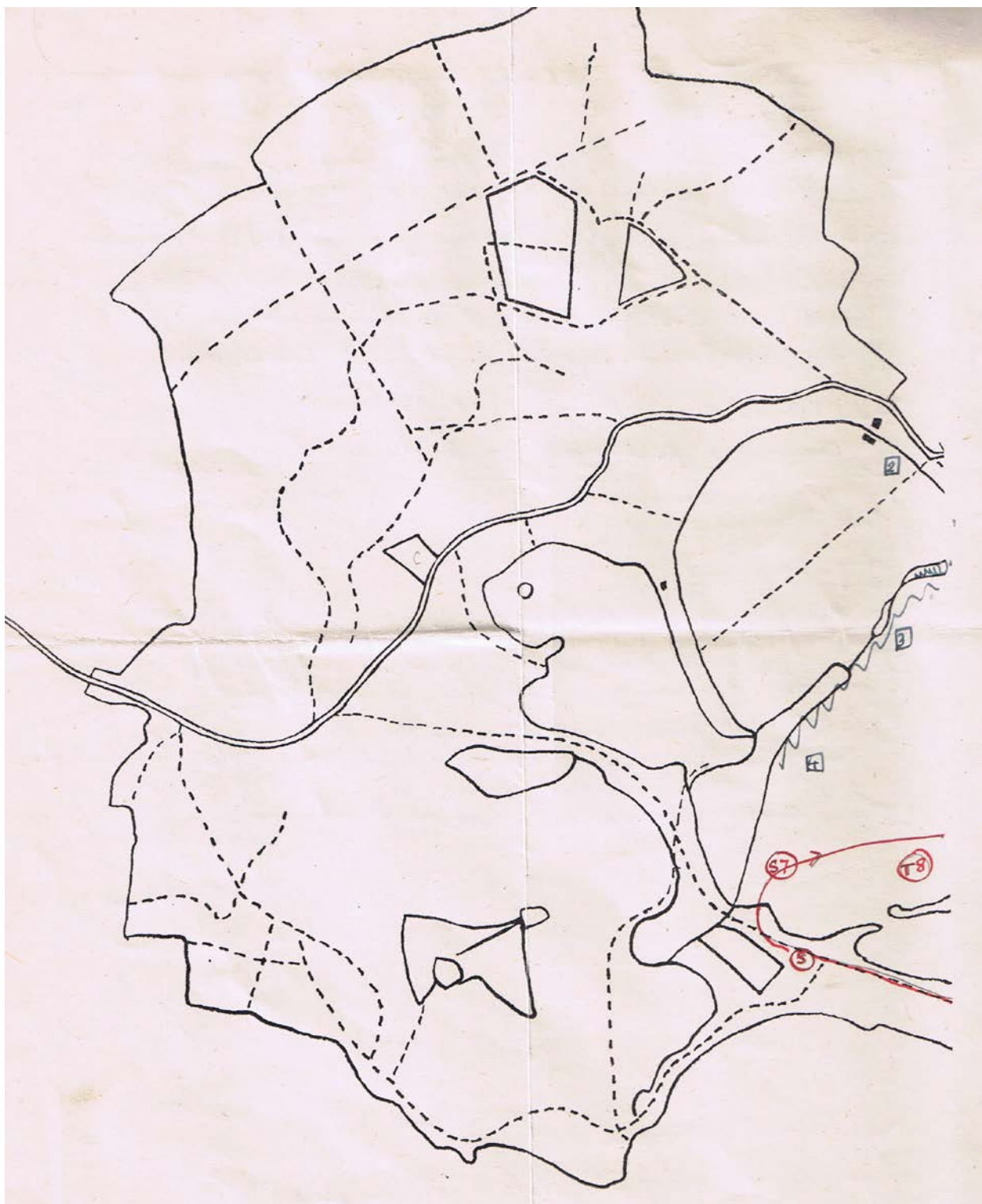
- (1). Rough grass by trackside, animals under Coral Rag stones on grass. C.E. 534.
- (2) Rotten remains of fence post, wire fence, with beetles in galleries. C.E.535.
- (3) Little unfenced copse of elder and conifer in arable.
- (4) Hazel-elder-oak etc. area in Marley Wood. Larvae in rotten hazel (C.E. 536.). Jew's-ear fungus on elders (C.E. 537).
- (5) Deer tracks, on top track through beech wood. S7, T8, S9, springs. (C.E. 538, 539).
- (6) Covey of 7 partridges, on pasture.

C.E.11.3.46. 2.30 -- 4.15 p.m.

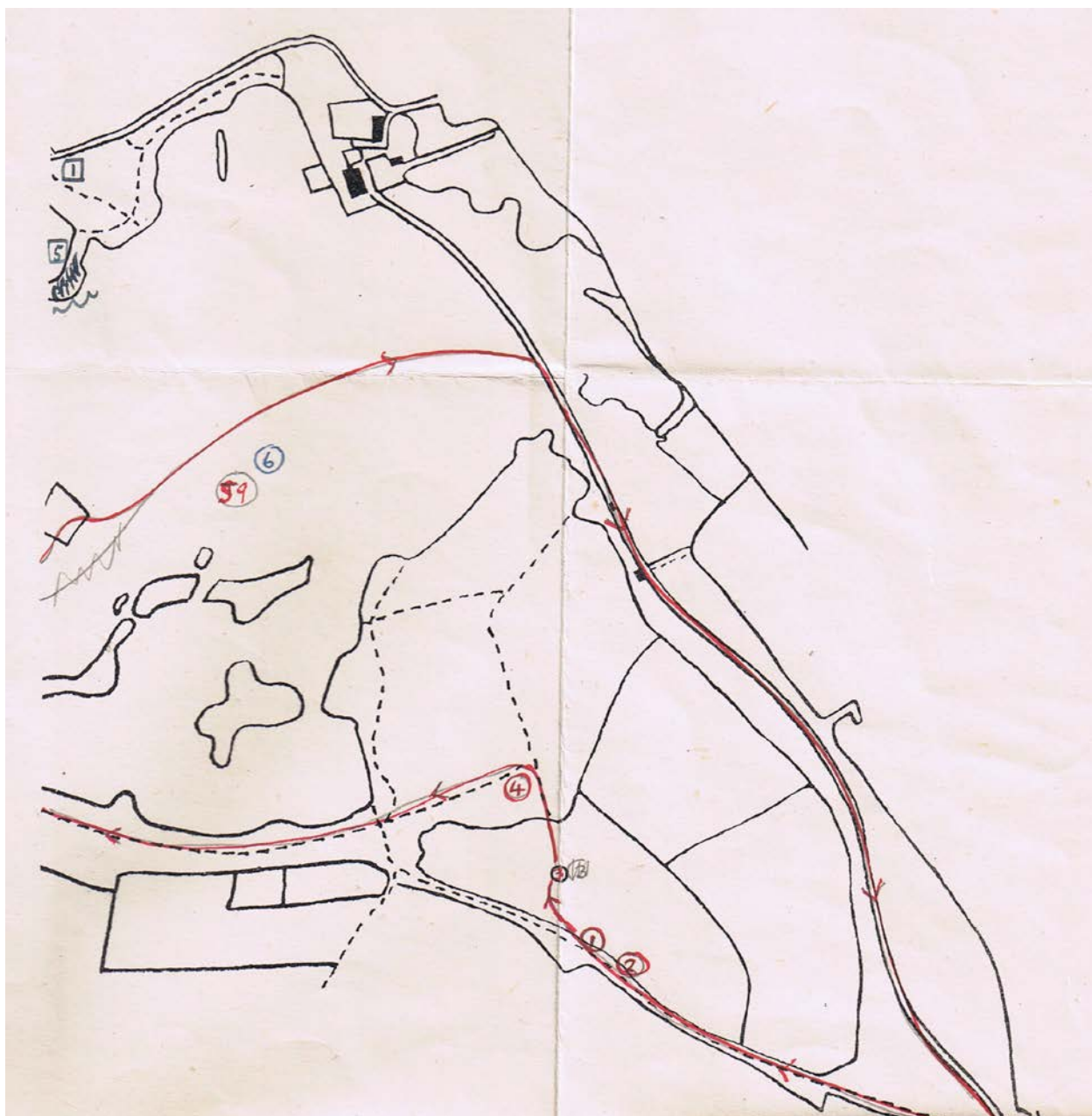
[Numbers in squares]:

- [1] Grey squirrel
- [2] Rabbit under haystack, edge of woodland and plough land.
- [3] Rabbit buries, both in Park pasture and in fringing woods. A score of rabbits seen in the Park.
- [4] Little owl flew from a clump of elders standing in Park pasture, down to a tree by stream. Low undulating flight rather near the ground.
- [5] Coral Rag escarpment runs in this wood.

{Map from page 3 L}



{Map from page 3 R}



1 FEBRUARY 1946. WYTHAM WOODS ***

{Under} some large pieces of Coral Rag lying on this grass were:

534

2 Green and brown Carabid beetles (also seen under similar stones in circular copse in the same field). (= *Anchomenus dorsalis* Pont)

Agonum dorsale (Pont.)

1 brilliant brown *Oxychilus helveticus* (Blum). Body grey with side stripes; tail conspicuous; dark mantle. No garlic smell.

2 other snails *Trichia hispida* (L.) Shells only.

Woodlice: 2 *Porcellio scaber* Latreille

1 young *Philoscia muscorum* Scopoli

2 *Armadillidium vulgare* Latreille

B
n.k.
D
E
F

In some old rotten wire-fence wood (same place)

A beetle inside a gallery

2 black Carabids, in an old gallery

535
A
B

Went into Marley Wood, where many old hazels were in catkin.

536

Inside a rotting coppice stem 2-3 in. in diameter were two huge white larvae, over 1 inch long, in galleries at the centre. Kept to breed out.

Many of the **elders** here are highly infested on their older and deader branches, with the pinkish brown Jew's ear fungus (*Hirneola auricula-judae*).

It does not come on other trees (cf. text-book also)

537 Not kept

No grey squirrels seen on this walk, but several rabbits. Also tracks of fallow deer on path, near Bowling Alley Plantation.

{reverse side}

1 FEBRUARY 1946.

1 FEBRUARY 1946. WYTHAM WOODS ***

In Marley Wood, some *Arianta arbustorum* under logs.

n.k.

Mapped three springs on the south slope of the Park.

S.7. Apparently there is an underground tank or pipe system. All is covered in by grass and stones, except for a few square feet of stones in an inch or two of water that wells up and runs into the ground again. The whole lies in open grazed pasture at the head of the Park valley, and close to the now dry head channel of the stream. Under the stones or among dead oak leaves on silty mud were: small *Gammarus pulex* 538 A

A small ? *Polycentropus* larva (under side, stone)

B

Sme huge fat Tipulid larvae

C

No stonefly nymphs or snails.

A patch of depauperate brooklime.

T.8. Further down, but above Wormstall Duck Pond , in open grazed pasture, a stone trough 3½ x 1¼ ft. x 6 in. deep, surrounded by cobbled area. Sand bottom. Water flows in at one end, out at the other. A few dead oak leaves; and much dark green filamentous alga on bottom and sides, in which a copepod was seen. 539

Larger *G. pulex*

A

Small black beetle larvae

B

“Worm” tubes on bottom

n.k.

No stonefly nymphs or snails.

{reverse side}

1 & 6 FEBRUARY 1946.

1 FEBRUARY 1946. WYTHAM WOODS ***

S 9. An open muddy pond, 10 x 15 ft. x 1-2 ft. deep, with small hawthorn tree, in the lower south cattle-grazed fields of the Park. Very trampled and muddy. No water plants or animals seen.

Wormstall Duck Pond still has its dam broken (I mended it a bit, to raise the level a few inches), and is fairly trampled and eaten down by stock -- especially the *Juncus* edges. But there is a large area of big *Carex* ungrazed, and several flowering spikes of *Typha latifolia*, and a good deal of dead *Epilobium hirsutum* flower stalks. The water flows strongly.

6 FEBRUARY. WYTHAM WOODS. 3.15 -- 4.30 p.m. (G.M.T.)

Visited Spring 2 (see separate book)

[540 541]

There is quite a large patch of *Brachypodium pinnatum* grassland (with mosaic patches of short rabbit-grazed turf) between the eastern beech belt and the untidy elder-thorn scrub that lies and around S. 2. In it is more than one rabbit bury; and traces of mole both on the open grass and among the tall scrub (which has a predominantly mossy, and dead-stick-and-leaf ground layer). (= "The Dell")

Some dead mullein stalks by a bury in the *Brachypodium pinnatum* area.

On the top of the fields near here is a brick and concrete water tank, with pipes laid on. But the watery unit is probably rain water. There is nothing but rather opaque water, sloping bottom, from 0-2+ ft., no water plants, much rubbishy debris chucked in. It has many Corixids, beetles etc. (see over).

542

= POND 3.

{reverse side}

6 FEBRUARY 1946.

543C *Badister sodalis* (Duftschmid). P. J. Osborne det.1955

6 FEBRUARY 1946. WYTHAM WOODS ***

2 *Notonecta maculata* Fab. (1 presented to Hope Department) 542 A

Corixas, several species. One Large 12 mm *C. punctata* Illig. (= *geoffroyi*) F

1 ♂ 1 ♀ *Corixa lateralis* Leach A. Macfadyen det. 1946 B

1 ♀ *Corixa nigrolineata* Fieber A. Macfadyen det. 1946 C

1 ♂ 1 ♀ *C. distincta* (Fieber) A. Macfadyen det. 1946 D

1 ♂ 1 ♀ *C. fossarum* Leach A. Macfadyen det. 1946. E

Water beetles:

2 *Gyrinus* (not on the surface, or not swimming here) 1 kept.
Gyrinus natator (L.) P. J. Osborne det. 1956. G

2 other species

1 *Agabus nebulosus* (Forster) H

1 *Laccophilus minutus* (L.) P.J. Osborne det. 1956 J

Small mayfly larvae K

Red Chironomid larvae L

Copepod. *Cyclops* M

1 *Chaoborus* larva dead N

Under Coral Rag stones on grass margin of arable (*Dactylis* etc., not *Brachypodium* near POND 3: 543

Three small **ground beetles**: *Panagaeus bipustulatus* (Fab.) Black + on tawny-ochre elytra. Apparently local. "Chalk and sandy places". A

Badister bipustulatus (Fab.) Black pincers on brown elytra. "Grass, marshy places", etc. B

C

Woodlice, pill: *Armadillidium* D

{reverse side}

11 MARCH 1946.

11 MARCH 1946. WYTHAM WOODS.

Went to S2 (see notes elsewhere), stopping on the way at T 4. Here the farmer has begun a new drain to clear the muddy approach to the trough. S2 [544] [546]

Latter quite full of *Apium*, some floating alga, and (on the walls) (a) a green filamentous alga similar to the floating one (b) a flocculant, slimy branched dark green alga like candelabras, with ring-like pattern on the fat filaments. (a) and (b) kept. 545

Also large *Gammarus pulex* (pairing and egg-carrying) and a small *Limnaea truncatula* n.k. -- no special search made for animals. Water temperature (running) 6.7 °C. A few notes on odd field animals mapped (q.v.).

{reverse side and separate page}

11 MARCH 1946.

545 The branched one is *Batrachospermum*, a “red alga”, and scarce according to J.L. Harper, University Botany Department who is identifying the algae:

Batrachospermum moniliforme Roth.

Mougeotia sp.

Ulothrix variabilis (1 filament only)

Diatoms: *Synedra ulna* (Nitzsch.) Ehrenb. Dominant e.g. a sample count gave 84
Synedra: 22 other diatoms.

Eunotia lunaria o

Rhopalodia gibberula (Ehrenb.) Müll. o

Cymbella helvetica o

Achnanthes sp. o

Stauroneis anceps rare

Surirella ovalis Bréb. var. rare

and a few others rare

J.L.H. det. 14.3.46

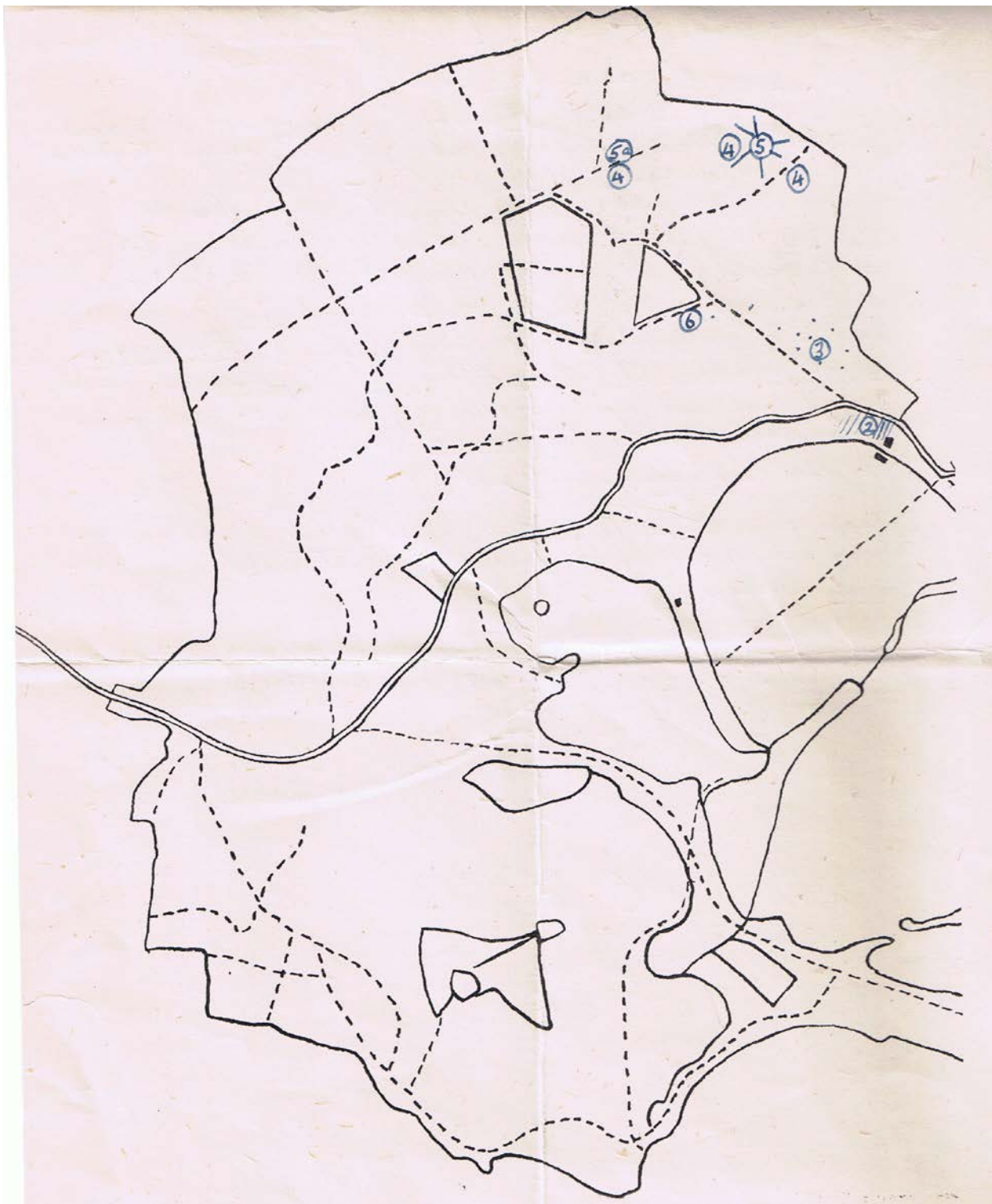
{Handwritten inserted notes and maps from Page 8}

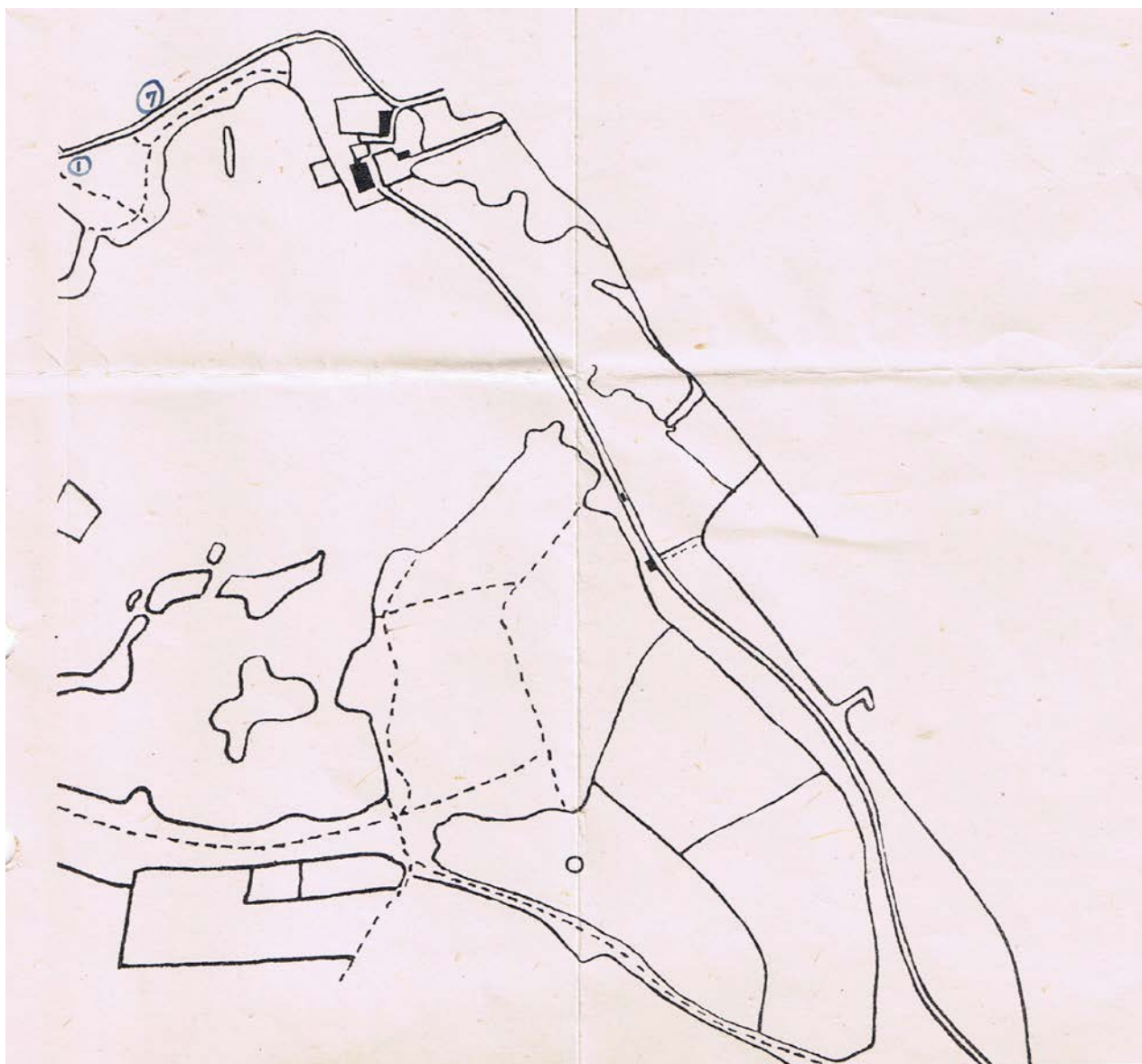
20 March 1946. C.Elton 3 -- 4:45 p.m. (Sun-time)

Little wind, little sun but warm. Ground has been drying.

- (1) 1 grey squirrel. Deciduous mixed.
- (2) Complete opening up by thinning and removal of sycamore, scrub, etc., leaving standard oak, ash, etc. Many bluebells here, and patches of *Arum*.
- (3) Current cutting of selected large trees -- oaks etc.
- (4) Sallows in full ♂ bloom, some tall scattered trees in thickish scrubby wood. No bees observed.
- (5) Jay and pheasant heard. Three woodpigeon feather patches of sparrow hawk kill (only feathers). Tree creeper, marsh or willow tit, long-tailed tit, chaffinch in mixed (mainly oak, ash, sycamore, and scrub) wood with open grass or bramble patches. Two squirrel dreys.
- (5A) Another woodpigeon feather kill.
- (6) Large sand buries (Calcareous Grit) with rabbit droppings and many active footprints perhaps not all rabbit.
- (7) Wren in hedge.

Blackbird singing in (3) at 4.30 p.m. (Sun-time).





20 MARCH 1946. WYTHAM WOODS. Afternoon

Explored the north part of Common Piece, and part of Thorny Croft. Some odd notes mapped (q.v.)

Found that the marsh just east of *Pseudotsuga* triangle is supplied by a clear spring issuing at its head. This is to be called S 32. As a tree had been felled partly across it, I did not examine the fauna.

A few yards further on a definite little stream issues, also just below the path, runs for about 25 yards and disappears again by a patch of willows. This is Stream 7 A. Above the path its old upper channel is seen in the Triangle, obviously quite dry for ages and full of fir needles. Below the willows a dry channel twists down until it runs parallel with the path between Common Piece and Thorny Croft. After a bit the water reappears to run for a certain distance rather irregularly, but does not ever form a permanent looking stream within the Wood. I did not trace its ultimate exit. This stretch is Stream 7 B.

At the foot of the path running steeply up to the tip of the Heronry Conifer Wood, a stream (also with some old upper dry channel) issues and forms Stream 8. It crosses the foot of the ridge and runs northward (not traced far †). Its bed is flanked by sturdy zones of large *Carex* that had been much grazed by ? rabbits.

(† but see 1 MAY)

{reverse side}

20 MARCH 1946.

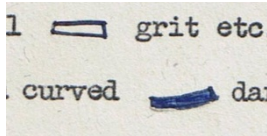
20 MARCH 1946. WYTHAM WOODS***

Stream 7 A. A mere trickle, an inch deep, but flowing quite fast, among dead leaves, over muddy limestone gritty silt, in places covering sulphurous mud. The oak leaves were little touched, but sycamore and sallow leaves were skeletonised. 547 Y

Gammarus pulex Degeer . Old and young, some paired. A

Nemoura nymphs, small, on leaves B

Small grit etc. case caddis larvae ? Two sizes, minute and small. C



D

Thin curved dark brown caddis cases, longer than C, but also some very small ones as well. DD

Torpedo beetle larvae *Helodes*. E

U-shaped fly larva that got above surface film in lab. The U and straight positions are alternative. Black tripartite tail appendages that look paired to the eye. ? *Dixa* small fly pupa under surface film, k. to breed out. G

1 ***Polycelis cornuta*** n.k.

Pisidium abundant alive and shells H

2 larger cylindrical caddis J

Chironomid larva and its silt case K

Chironomid larva swimming in dish of culture L

1 Thin fly larva of another kind M

{reverse side}

20 MARCH 1946. WYTHAM WOODS_****

20 MARCH 1946. WYTHAM WOODS ****

Stream 7 A.

547

1 Fly larva with ring of bristles on tail with which it hung onto water surface, in culture dish.
N

Fixed in "Simulium" mixture.

Another fly larva, with telescopic tail, long thin. Fixed in "Simulium". P

Another thin medium fly larva. Fixed ditto. Very small head and tripartite tail. Q

"Candona" 1 ♀ *Ilyodromus olivaceus* Brady & Norman. D.H. Eccles det. 1957 S

Land snail shells T

1 *Cochlicopa lubrica* (Müller)

1 *Azeca goodalli* (Férussac)

4 *Carychium minimum* (Müller)

2 *Limnaea truncatula* (Müller)

6 Flattish black fly larvae as in C.E. 540 F.

2 Smaller black larvae with bristly tubercles and two amazing combs of gold setae at back. V

Tiny larva that may have crawled out to pupate. Failed.

{reverse side}

20 MARCH 1946.

20 MARCH 1946. WYTHAM WOODS ****

Stream 7 A.

3 small white Copepods 547

3 ♀ *Cyclops fimbriatus* Fischer. D.H. Eccles det. 1957

X

Stream 7 B. This seeps gradually in the old dry channel in thick deciduous scrubby mixed wood, not far from the downward ride. Bottom fairly clean Calcareous Gritty sand and dead tree leaves.

At one place (near the source) only did I find any live animals: 548

6 large cylindrical caddis with calcareous grit cases walking on open bottom. A

2 smaller ditto. One had a calcareous grit (i.e. Jurassic shell fragments) case with several *Pisidium* shells, 1 *Carychium minimum* and one young Helicoid attached too. B

A few old valves of *Pisidium*.

C

1 shell of *Limnaea truncatula* (Müller)

D

This stream is evidently quite temporary and it rather peters out again below.

{reverse side}

20 MARCH 1946.

20 MARCH 1946. WYTHAM WOODS ****

Stream 8. Shallow but fast-sliding among dead tree leaves, over gritty calcareous sand.

One large cylindrical clack caddis in calcareous grit case walking on open bottom. 549 A

Nemoura nymphs on dead leaves B

Pisidium abundant in sandy silt C

1 tiny curved, sand mosaic,  caddis case D

1 land shell: *Carychium minimum* n.k.

30 APRIL 1946. WYTHAM WOODS

David Lack and a companion reported a large tortoiseshell butterfly (*Nymphalis polychloros*) in Marley Wood, which, if authentic is the first record of its return there. I think this record is of very doubtful authenticity. 3 p. 16

{reverse side}

14 APRIL 1946.

559 A *Haliphus* sp. 1 ♂, 1 ♀ P. J. Osborne det. (not to species, 1956)

14 APRIL 1946. GODSTOW, BERKS. 4 -- 6 p.m. (S.S.T.)

Today the river plain was bathed in serene warm sunshine. Went to Godstow and stayed about near the Trout in fields on Berks side. Collected some Haliplid beetles ♀ ♂ 559A and a snail under a floating piece of wood, (on which were also *Asellus* and mating *Gammarus* n.k.)

The dry grass on the silty bank overhanging the river had scores of *Hydrometra stagnorum* that fell onto the water surface when one shook the grass. n.k.

{reverse side}

14 APRIL 1946.

560 A N. Joy says this *Stenus* is common “chiefly on clay banks of rivers”!

561 *Dolerus haematodes* (Schränk). R.R. Askew det.1961.

14 APRIL 1946. GODSTOW, (BERKS, side) ***

At the base of grass overhanging Thames bank were:

560

Two grey large *Stenus pubescens* Stephens ♀ ♂

1 *Agonum (Anchomenus) ruficorne (albipes)* (Goeze)

Several tiny (? young) harvestmen (n.k.) *Leiobunum* species V. Todd det. 1946 .

A
B
C

Note that this habitat, though near water and subject to flooding, is now bone dry gravel-silt soil. It is about a foot above the river.

An iridescent large sawfly flying and settling on the flood-plain pasture.

561

A pair of swans had a nest by the bank on the Oxon. side. Peewits about on the river meadows. A reed bunting in low willows by the bank, on the Oxon. side.

Southern tells me that yellow wagtails nest on Pixey Mead.

WYTHAM WOODS.

D. Lack tells me woodlarks are nesting this year on Rough Common, Wytham. They are more common on grass heaths on the Chilterns.

{reverse side}

26 APRIL 1946.

26 APRIL 1946. WYTHAM WOODS. 1 -- 4 p.m. (Single S.T)

Visited S 2 (see separate book).

[573-578]

At the foot of the steep lane up from the cottage at Wytham village, there is an outflow of spring water after wet weather, (and also water running down the lane from above). This is quite temporary, and has no regular pool fauna. Yet today there were a dozen ***Gerris lacustris*** (L.) 2 ♂♂ k.) on the surface.

568

It is shaded. Not far from Seacourt Stream.

Many *Gyrinus* (n.k.) on the surface of Pond 3.

The grassland from Pond 3 up to the top and down as far as the scrub-wood in which S 2 lies, has a sprinkling of **cowslips** in flower. Also some *Erodium* in flower on rabbit-grazed patches of the *Brachypodium pinnatum* top slope; with non-flowering *Cynoglossum*, *Verbascum*. Many *Bombus* cruising here or

{reverse side}

26 APRIL 1946.

569 10 ♀♀ ***Simulium erythrocephalum*** (Degeer). K.G.V. Smith det.1958.

26 APRIL 1946. WYTHAM WOODS. ***

visiting *Nepeta glechoma* flowers. On the more shaded ride that runs down through the S 2 wood, there is masses of bugle (*Ajuga reptans*) in flower bud.

On the *Brachypodium* top *Simulium* was swarming round me, though not biting. I kept 10.
1.30 p.m. (Warm, damp, no hot sun).

569

In the Park pasture below S 2 I looked under old fence posts lying on the turf:

Many nests of yellow ant

n.k.

One had on it *Platyarthrus hoffmannseggii* Brandt.

n.k

One nest of a darker brown but similar ant

n.k

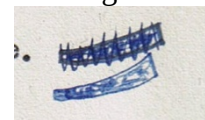
A ground beetle. 570. *Harpalus rufipes* (Degeer) R. Miller det. 1951.

570

Several adult *Arion ater* (black)

Simulium were down here too, but fewer.

Did a brief survey of the marsh S 1, for the first time. It is presumably a spring that has gone through a complete succession to closed marsh vegetation, because (a) it is outside the grazed park (b) it is not shaded by trees. It is now an area some 10 yd. across, with spongy black muddy-decaying litter occupied by dense *Epilobium hirsutum*, *Juncus* etc., and a few feet of very brown muddy water in the middle a few inches deep. This water has living *Pisidium* and



some old blackened cases of a ? Leptocerid caddis, but none alive.
grit

571A 571B

{reverse side}

26 APRIL 1946.

572H *Tetrix* (A.) *vittata* (Zett.) say Kloet & Hincks. B.P. Uvarov 1947.
But B.P.U. calls it *Acrydium vittatum* Z.

26 APRIL 1946. WYTHAM WOODS. ***

S 1.

On the litter among the marsh vegetation (damp to wet), I took:

572

1 *Elaphrus cupreus* Duftschmid

A

1 Large brown *Stenus* with faint yellow elytra spots on steel grey, legs partly yellow-brown. *S. bimaculatus* Gyllenhal. C.E. det. 1950

B

1 *Lesteva longelytrata* (Goeze) P.J. Osborne det. 1956

C

1 *Arianta arbustorum*

D

several young *Cepaea* species

1 adult *Cepaea nemoralis*

n.k. E

several *Trichia hispida*

n.k. F

1 *Clausilia rugosa*

n.k. G

1 *Acrydium*: small, squat, dark, short antennae, not a long pronotum. It was definitely under very wet *Juncus* etc.

H

Also many spiders, a small harvestmen like C.E. 560 C,
black millipedes, collembola, bugs, etc.

n.k.

[573-78 see spring 2 Book]

30 APRIL 1946. WYTHAM WOODS.

Made round of Marley Wood and the Park with H.N. Southern and partly David Lack. Heard a **blackcap** in Marley Wood, and a **wood warbler** among the top-ride beeches where the wood has been thinned (a characteristic high beechwood species on the Chilterns). **Green woodpeckers** abundant in fields south of Marley Wood and in the Park, evidently for ants. **Tawny owl**'s nest with eggs and a **great tit**'s in holes in the same dead tree on the top ride. [Tawny in open top of dead beech bole, edge of Singing Way, great tit in side. Quite certain of this memory (1968!)] **Little owl** in the park.

Twigs (tips) of oak flowers lying on path, ripped off by **grey squirrels**.

579A

Speckled wood in mixed deciduous glade, top road; **peacock** and **brimstone** at My Lady's Seat, former on open nettles, latter among scrub edge. Burrows saw **dark green fritillary** in Wytham last year.

{reverse side}

30 APRIL 1946.

579 *C. carnea* Stephens.

581 2 *Phyllobius pyri* (L.). P.J. Osborne det.1955. 1 kept.

B.A.P. negatives.

N. dubitans only 3 times before in Great Britain (Suffolk, Hants., I.O.W). To be classified as A (Woody)/A3

30 APRIL 1946. WYTHAM WOODS. ***

A ***Chrysopa*** adult under the sycamore leaf, top ride of Wytham Wood. The leaves very freshly but fully spread, with a few winged aphids.

579

Barynotus moerens (F.) Large brown weevil sitting on *Mercurialis* in mixed deciduous wood on top ride. Also observed in Marley Wood.

580

Greenish black weevil on nettle leaves upper side, in mixed deciduous wood near S 2.

581

S 1. Collected a few animals:

582

Pisidium from puddle

A

A -- T A small ***Stenus juno*** Fab. P.J. Osborne det. 1956

B

A -- T A small black ground-beetle ***Agonum viduum*** (Panzer) M.J. Davies det. 1954

C

A -- T Saw ***Elaphrus cupreus*** again. n.k.

Visited S 2 briefly. Southern photographed S1 and the general site of S 2. [S 2 notes separate]

[583]

Wormstall Duck Pond.

In the inlet stream above there were many ***Gammarus pulex*** among the dead oak leaves, and also some of the small beetle larvae (as 546 G.). No stone-flies seen. *Helodes*. n.k.

The pond (= swamp) has been now fenced from stock, and holds a few inches of water in the pools. A good many insects by sweeping *Carex* etc. swamp

584

2 ♀, 1 ♂ ***Nemoura variegata*** Olivier

A

1 ♀, ***N. dubitans*** Morton D.E. Kimminas det. 1949. See letter 2.3.49. Conf. by H.B.N. Hynes 1960 (see letter 13.6.60)

Liriopid or Tipulid fly

B

{reverse side}

30 APRIL 1946. & 1 MAY 1946.

To be classified as A -- T (Woody)/A3

1 MAY.

Holly blue fluttering and settling on hazel by ride in Thorny Croft.

Rabbit fencing round large sycamore-cleared area between a Common Piece and Little Ash Hill.

Sycamores in flower

(The stream course is mapped in on Monica Shorten's grid map for squirrel work 1947).

30 APRIL 1946. WYTHAM WOODS. ***

Wormstall Duck Pond marsh***

584

Leggy brown fly: Tipulidae, Limoniinae (L.W. Grensted det. 1947), *Limnophila* (*Phylidorea*) **ferruginea** (Meigen) C

Beautiful pink and brown moth, the Ruby Tiger (*Phragmatobia fuliginosa* (L.)), a herbage feeding species with varied habitat. R.B. Freeman det. D

One small sawfly *Eupria longicornis* (Thomson). R.R. Askew det. 1961 E

1 MAY 1946. WYTHAM WOODS. (2.45-4.30 p.m. S. Summer T.)

Went to the north-east corner Common Piece-Thorny Croft -Ten Acre Copse, with Miss V. Todd (collecting harvestmen, some of which were abundant on the lower parts of sycamore trunks).

Examined possible boundaries for a nature reserve. There should be a line south of the two marshes in Common Piece, and a reserve round all the way to Ten Acre Copse and from the main path down to the woodland edge.

Traced Stream 8 from its source down to the corner of the wood, where it joins a dry ditch and peters out there in grass. All the way in the wood it is on the surface, running fast over silt, a foot or two wide and a few inches deep: the best stream in the wood. It is flanked much of the way by dense *Carex*, and is in woodland or scrub shade. There were many flies, and a Psychodid "barn-owl fly" was seen but not caught. Sweeping *Carex* gave:

{reverse side}

1 MAY 1946.

585A 3 ♂♂ *Chironomus* (*Microtendipes*) **pedallus** (Degeer) K.G.V. Smith det. 1959

585 B 4 *Kateretes bipustulatus* (Paykull), fam. Nitidulidae. Fowler says marshy places, on *Spiraea*, *Epilobium*, *Carex*, etc. Local.

586 A 1 *Pericoma palustris* Meigen. L.W. Grensted det. 1946 Conf. K.G.V. Smith 1960.

B *Tipula vittata* Meigen 1 ♀ (Audcent says 'damp woods, April').
Rabbit on Marsh 2.

587C *Tipula vittata* Mg. 1 ♀

588 2 *Melanostoma scalare* (F.) L.W. Grensted det. 1946.

589 1 *Culicoides obsoletus* (Meigen) L.W. Grensted det. 1946.

1 MAY 1946. WYTHAM WOODS ****

Small delicate Chironomids (?), with thin light green bodies having the last five or so segments black, grey wings, light brown legs.

585A

Small brown land beetles very abundant
(No *Nemoura*).

B

The upper part of Stream 7 (A) also had no *Nemoura* out and about, but some Psychodid flies (1 k.), and a large Tipulid fly on the bank mud.

586 A B

The lower marsh (Marsh 2) in Common Piece is a jungle of sprouting *Epilobium hirsutum*, horse-tail, etc. and has a good deal of *Ajuga* in flower among the moss-hepatics. I found on the ground:

587

Arianta arbustorum (n.k.)

Clausilia rugosa n.k

Azeca goodalli (Férussac)

Abnormal *Trichia hispida* (L.) (shell) L.W. Grensted det. 1947.

Large *Tipula*

A
B
C

Spring S 32 had water but was stagnant.

Syrphid flies abundant hovering at 5 ft. in sycamore coppice (2 k.).

588

Also huge swarms of *Simulium* bothering one, not biting tho', (n.k.) and a few *Culicoides* attacking (2 k.) 4 p.m.

589

A pearl-bordered fritillary, very fresh, in ride in Thorny Croft *Argynnis euphrosyne* (L.).

590

{reverse side}

18 JUNE 1946.

611 *Necrophorus vespilio* (L.)

612 2 *Cyrnus trimaculatus* (Curtis) L.W. Grensted det. 1946.

613 B W.J.L. Sladen conf. 1953

614 *Empis livida* L. L.W. Grensted det. 1946.

615B 1 large fawn brown adult *Platybunus triangularis* Herbst.
2 small duller brown immature *Ledobunum rotundum* Latreille. Miss V. Todd det. 1946.

{ Added to bottom of page 41, labelled p. 40 }

18 JUNE 1946. WYTHAM WOODS

Visited Spring 2 (see notes elsewhere), and some near-by places, walking back by the broad 'light' that runs up a limestone ridge between woods, nearly up to Lord's Common. [605-610]

18 JUNE 1946. WYTHAM WOODS ****

On path up field to Pond 3, the dead mole off arable had burying beetle under it.
'Field 1.'

611

The limestone grassland just below and around and above Pond 3 has *Bromus erectus* in flower – flower heads very reddish. Also salad burnet (*Poterium sanguisorba*).

Pond 3 was full of developing *Notonecta* (? *maculata*). There were small golden brown adult caddis on the brick walls, and swift flight when disturbed (2 k.).

612

On nettles in the grassland (*Brachypodium*) above S 2 were skippers (1 k.).
Here the houndstongue (*Cynoglossum officinale*) is in flower -- up to 2 ft.

613A

613 B

Took an **Empid** fly on some *Juncus*-damp-grass on the scrub edge, not far from S2.

614

On the white poplar lichen-covered trunk by S 2, a beautiful large grey and white cryptic moth was settled.

615

There were some very slender Opilionids, and some curious light greenish mottled oblong wingless bugs, like very flat Cercopid, immature.

A & B

Cephalanthera damasonium (= *pallens*) occurs in the beech wood strip by Pond 3; I saw a score in flower on the almost bare beech humus over Coral Rag.

{reverse side}

28 JUNE 1946.

620B. W.J.L. Sladen conf. 1953.

620C. *Veronica officinalis* L. W.J.L. Sladen det. 1953.

620E. *Myosotis arvensis* (L.) Hill W.J.L. Sladen det. 1953.

28 JUNE 1946. WYTHAM WOODS (3-5 p.m. Single Summer T.)

Walked on the north hill on a warm sunny day with a stiff breeze and white cumulus clouds climbing against a blue sky. Spent the time on the Ridge between Lord's Common and the arable fields in which Pond 3 is. The shallow limestone soil, with rock close below, was covered with wide patches of luxuriant rock rose

(*Helianthemum chamaecistus*);

620A

the fragile yellow flowers stood the strong breeze, but soon fall when they are picked. There is also more wild thyme (*Thymus serpyllum*) here than elsewhere on the Hill. *Brachypodium pinnatum* is quite localised (at the field end of the Ridge) and stunted, nowhere really luxurious, though in it were a few immature grasshoppers, including one that looked like *Omocestus* and another like *Chorthippus*. Wild strawberries in fruit (mostly not quite ripe) also fairly common

(*Fragaria vesca*);

and less abundant is a small upright pale-blue small-flowered *Veronica*; milkwort (*Polygala* sp.);

very small 1.5-2.5 in. *Linum catharticum*; a well grown scorpion-grass (*Myosotis*) with stiff wiry stems;

a great deal of ploughman's spikenard (*Inula conyza*), in flower buds; a few houndstongue (*Cynoglossum officinale*) and viper's bugloss (*Echium vulgare*) in flower. The last was being visited by large skippers (*Ochlodes venata*) -- which is stated to live on *Brachypodium*! There is very little grass on this shallow ground, and I think it may be too poor for grasses. There is some **rabbit** erosion, and some of the anthills under thyme and rock rose have rabbit droppings accumulated, though not very new. Other flowers are *Lotus corniculatus* and *Poterium sanguisorba*.

B
C
F
E

{reverse side}

28 JUNE 1946.

621 4 + *Cepaea nemoralis* (L.)

28 JUNE 1946. WYTHAM WOODS ***

This long strip soon turns to bracken and bramble, and on one side a great elder thicket, behind by deciduous woods. The **elders** are numerous in the Woods, no doubt through the former differential effect of rabbit pressure. They are a gallery of foaming blossoms, especially wild this year, and scenting the air.

Many *Bombi* on the **thyme**.

Song thrushes had been smashing *Cepaeas* here and there on the open limestone reef weathering.

621

The big **horse-chestnut** at the field end of the reef has a tree-hole of slimy brown water in its fork. Kept some small rat-tailed fly larvae to breed out. (Failed).

The *Cephalanthera damasonium* in the beechwood are just going over.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 4.

7 May 1947-2 June 1948.

C.E. 695-846.

Red ticks⁷ mean ready to be indexed. Crossed red ticks mean indexed.

Circles⁸ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

⁷ Shown as **bold** in edited version.

⁸ Edited to A or 00

7 MAY 1947. WYTHAM WOODS.

The first smashing hot day in May, with cloudy sun and bursting green and a dampish gummy feeling in the woods. Went out at 11.30 a.m. -- 4 p.m., walking from Wytham Village end to the Reserve in Thorny Croft, and "Inter-plantation" (name coined by Southern) -- the area E. Jones added to the reserve*, because of its spring marsh and bracken. There was a feeling of ecological work, as Southern and Hartley were weighing young tawny owls and herons in the adjoining conifer woods, while Monica Shorten and Peter Larkin were locating squirrels on 10-acre Copse.

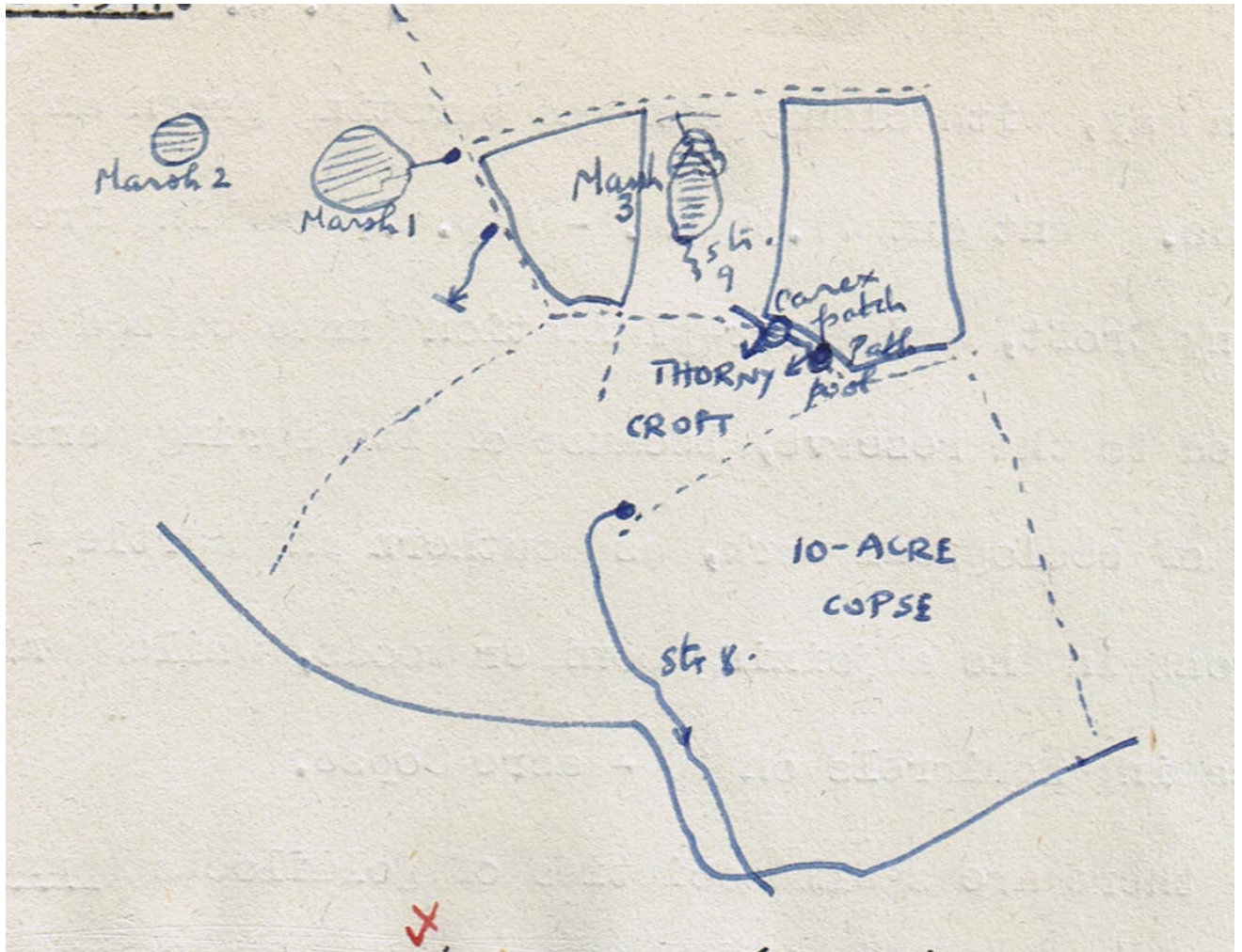
On the lane up to the Mount, there are small societies of goldilocks (***Ranunculus auricomus***). I beat a Hemerobiid with speckled wings and golden body, from sycamore, whose leaves are scarcely fully expanded and have no aphids yet. It is not familiar to me. Lost

Made a reconnaissance of some springs etc. in area of Thorny Croft and Interplantation. It seems to me that there must be innumerable small spring flushes around the hill, some of which are

{reverse side of title page}

(* Subsequently taken out and part of Futher Clay Hill added instead.)

{Reverse side of page 4}

7 MAY 1947.

696 E 15 adult, 2 young *Heterocypris incongruens* (Ramdohr) D.H. Eccles det.
 1957 1 young *Cyclops* (n.k.) D.H. Eccles det. 1957

696 G 2 *Helophorus dorsalis* (Marsham) P. J. Osborne det. 1956.

696 H This beetle to the naked eye in field was a bit like *Helophorus*, but totally different really = a Clavicorn, Heteroceridae, family with only 1 British genus *Heterocerus*. This was *H. marginatus* (Fab.). Both *H. marginatus* and *fenestratus* recorded from Oxon. and Berks. N. Joy says the genus occurs "in damp places, or at the sides of ponds, where they work in the mud". The beetle is black, with obscure yellow marks, and very bristly hairs.

7 MAY 1947. WYTHAM WOODS. ****

only seasonal, or maybe run after much rain. "Path Pool" below Heronry Wood (west) is 1 -- 4 in. of slightly flowing water, marshy patch of mud and grass on main path, that has small poles laid on it. It swarmed with small life. Water was in sun, but temperature taken under the shade of box was 14 °C. Some alga in water. 696

Limnaea truncatula (Müll.) abundant on bottom mud and even out of water on poles or edge. A

Larvae, small, on bottom B

No *Gammarus* or *Nemoura*

Small orange ostracod, v. actively cruising both on bottom and in water, abundant. E

Less abundant large green ostracod, mainly on bottom. (not determinable, n.k.) F

Small spotted *Helophorus*, female, struggling about at water surface among the floating grass leaves (2 k.) G

4 *Gerris* on surface (2 k.) *G. lacustris* (L.) 2 ♂♂ J

Small beetle, *Heterocercus* species H

A peacock (*Nymphalis io*) descending to wet mud on this path before flying off at fallow height (15 ft.).

"Interplantation" is a slope of oak-*Mercurialis*-bracken savannah lying sheltered between the two conifer plantations, and it has, about 60 yd. below the upper path spring seepages (no "limnocrene" spring heads like S2), which have enabled a fairly extensive *Carex-Epilobium*-horsetail (*Equisetum telmateia*) marsh to form, which has also many willows (fruiting specimens k.) 697

There is a good deal of *Paris quadrifolia* near this marsh, only just coming into flower.

{reverse side}

7 MAY 1947.

704 *Salix cinerea* in fruit, young leaves. E. W. Jones det. 1947. He says one can tell by turn-down ridge under leave-edge, and ribbed wood below (peeled) bark. Only other Wytham willow is *caprea*.

703A 1 ♂ 1 ♀ *N. erratica* Claassen

7 MAY 1947. WYTHAM WOODS. ****

"Interplantation" springs and streams.

= Marsh 3 and Stream 9.

The stream is very small, only an inch or two deep, and often disappears in a mess of mud and dead leaves. Shade temperature 9.5 °C just below seepage source (here were abundant pairing *Gammarus*, and *Nemoura* nymphs), and 20 yd. further down 11.8 °C. At latter point collection was made, though not very thorough: 698

Gammarus pulex

Beetle larva, torpedo shaped (*Helodes*)

Nemoura nymph.

Pisidium

1 Caddis larva, 6.5 mm. (case), Leptocerid,  sand-case

5 Caddis larvae 6.5 mm. (case), straight, quadrangular in section, mosaic of (leaf or bark?) dark brown bits. 

9 Caddis larvae (? 2 species) 2 -- 3.5 mm. grit-sand 

1 grass snake, small one, in *Carex*

Several adult ***Nemoura***

beaten off marsh willow,

not off *Carex* etc.

Also a Hemerobiid on willow (spoiled)

A

B

C

D

E

F

G

704

703A

{reverse side}

7 MAY 1947.

700A. ***Elasmotethus interstinctus*** (L.). (A fairly common species that lives mainly on birch and has maternal care of its young like the earwig.)

700B. ***Laria (Bruchus) rufimanus*** Boheman. (Broad bean pest cf. C.E. 535 A)

702 ***Culicoides obsoletus*** (Meigen) L.W. Grensted det. 1953.

7 MAY 1947. WYTHAM WOODS. ****

I sat long under an oak whose leaves still made no canopy, with a sheet of mercury around, in the marsh below. A hobby (*Falco subbuteo*) stopped for a few minutes in a large oak. A ♀ green-veined white (*Pieris napi*) and a brimstone (*Gonepteryx rhamni*) flying over savannah. (A female *Pieris brassicae* flew in sycamore-mercury wood above, along ride).

Large numbers of violets in flower among *Mercurialis* etc.

699

Chiffchaff (*Phylloscopus collybita*) singing in the savannah oaks.

Some orange "*Puccinia*" on mercury leaves.

Sweeping mercury gave only 1 *Hermaeophaga* (but also none inside woods above); kept it and a small brown and red Pentatomid bug, and a beetle.

700

A

B

One or two large *Eristalis* cruising and poising a few feet from the ground under oak, near marsh. (1 k.). *Tubifera pertinax* (Scopoli). L.W. Grensted det. 1947.

701

2 *Culicoides* bit me under the oak. (1 k.)

702

7 MAY 1947. WYTHAM WOODS. ****

In Thorny Croft I found a decayed corpse still recognisable as a robin -- gave it to David Lack as evidence of the winter mortality. It was in a conifer patch.

Saw a fox sneaking into a blackthorn patch below this.

Collected three very large Tipulids, 1 larva, 2 pupating, from mess of muddy dead leaves in spring 7 A. Kept to breed out. Died.

Saw a holly blue flying up lane near Wytham Village end (laurels) – (*Lycaenopsis argiolus*)

{reverse side}

7 MAY 1947.

21 MAY 1947. WYTHAM WOODS.

Went to Wytham with Mary Laurie, walking up by Froghole Cottage, to Songer's Copse, with Stream 10 and Pond 2. The Copse has twayblade orchid (*Listera ovata*) in bud, and interesting damp communities. The Pond was very low but about a year ago a new sluice-gate raised

{reverse side}

7 MAY 1947.

Classified as A-T/B1 & C1 (w)

21 MAY 1947. WYTHAM WOODS****

the level about 4 ft. and this extensive pond is now brim full. It lies focally below Radbrook Common (now assigned to plough and plantation, but with parts strewn blue with bluebells, or yellow with young dead nettle, or mixed), and is grandly backed with trees and scrub. The water is chock full of a long-oval leaved floating *Potamogeton*; and in the shallows, with ***Scirpus lacustris***, a large *Carex*, etc. The pond-weed was heavily mutilated by the *Megachile*-like cuttings of a grey moth-caterpillar which makes a covered oval case under the leaf. There were also extensive longitudinal mines by a fly larva. The two species were so abundant as to compete for space. A powdered gold small caddis adult was scooting about like a *Gerris* on the leaf and water surfaces. Chironomids and small mayflies. A *Gerris* was eating a small dead mayfly. The reeds had a **moorhen**.

Three small hawks (? hobbies) carried out a shrill controversy rather high in the sky.

We mapped some of the stream and marsh.

The head of Pond 1 has an extensive reedswamp-marsh; and above this is a marsh (Marsh 8) like that in Marley Wood -- ***Epilobium hirsutum***, giant horsetail (***Equisetum telmateia***), etc.

Among the rotting vegetation of this I collected:

709

- 1 ***Leistus terminatus*** (Hellwig) (bright brown, small Carabid) det.1960.
- 1 ***Agonum gracile*** (Gyllenhal) (same size, black Carabid) M.J. Davies det. 1954.
- 1 ***A. viduum*** (Panzer) (larger, black Carabid) M.J. Davies det. 1954.
- 1 ***Stenus bimaculatus*** Gyllenhal C.E. det. 1950
- 1 ***Lathrobium brunnipes*** (Fab.) P.J. Osborne det. 1956 (staph, same size)

A
B
C
D
E

{reverse side}

21 MAY 1947.

21 MAY 1947. WYTHAM WOODS****

Pond 1, Marsh 8****

1 ♀ <i>Nemoura cambric</i> Stephens. (This species is smaller and smokier than <i>erratica</i> , which has bright orangish ♀ abdomen.)	709	G
1 <i>Goniodiscus rotundatus</i>		n.k.
1 <i>Trichia hispida</i>		n.k.

I also saw *Phylloscia muscorum* and other woodlice, worms, myriapods, spiders, collembola, *Cepaea nemoralis*, *Arianta arbustorum*, *Clausilia rugosa* (but no *rolphii*, and *Agriolimax ? laevis*, and a small white Coccid.

Pond 2, above, is hardly pond at all, as the sluice bank has cut through. There is a dense watery swamp of *Equisetum limosum* in flower, and forbs. 710

Above Pond 2 the stream (Stream 10 A) is partly underground: it rises by some trees under the escarpment, but there is no open spring, only Marsh 7, of *Epilobium* etc. – very like the surroundings of S 1.

The stream between Ponds 1 and 2 has *Gammarus* in it.

The damp grassy-mossy ground in this Pond valley has locally *Valeriana dioica*.

{reverse side}

4 JUNE 1947.

715A ♂ *Chrysopa ciliata* Wesmael

715 B. Emerged 27 June as brown, ant-shaped, hymenopteran with marbled wings.

E.W. Jones confirmed det. 1947.

*Moss: *Amblystegium filicinum* (thin species, d.)

*Hepatic: *Pellia fabroniana*
Chiloscyphus ? pallescens
Ancusa pinguis

E.W. Jones confirmed det. 1947.

4 JUNE 1947. WYTHAM WOODS.

To Common Piece and Interplantation, 3-4.30 p.m. (= 1-2.30 G.M.T.) Warm out of the wind.

Took a *Chrysopa* on sycamore, under leaf, at Stream 7 A (mixed deciduous wood).

Noticed aphids abundant and one *Halysia 16-guttata* also.

715A

Took a parasite pupa by itself hanging under middle of a leaf.

n.k.

On the path below Interplantation I caught a holly blue (*Lycaenopsis argriolus* (L.))

battered. Also 2 ♀♀ *Tabanus micans* Mg. attacking my legs.

717

Went up to Marsh 3. The **bracken** is just coming up round here on this slope, and will be a big obstacle later. The marshy area is rather mixed and complex vegetation: it has *Epilobium hirsutum*, *Equisetum telmateia*, *Carex riparia* (just coming into flower – very stout and large, and flowers erect), a little *Eupatorium* and *Scrophularia nodosa*, a tall thistle, a little nettle, and an under layer of very thin sticky *Galium* with ? annual stems, and tiny white scarce (terminal ?) flowers. And invasions of woodland floor species like *Mercurialis*. Moss-liverwort at stream edge.

718A

n.k.

{reverse side}

4 JUNE 1947.

719D ♂ ♀ *Nemoura* (*Amphinemura*) *standfussi* Ris in copulation A-T/A 2-5(W)

2 ♂♂ ditto.

A-T/A 2-5(W)

C 1 ♂ 1 ♀ (not copulating) *N. erratica* Claassen.

A-T/A 2-5(W)

722A. *Helodes* la.

B. Tiny Leptocerid caddis case.

C. Small green chironomid larva.

D. Medium ? fly larva.

E Small beetle *Anacaena globulus* (Paykull) P.J. Osborne det. 1956

4 JUNE 1947. WYTHAM WOODS****

Sallows are a bit scrumpy and have a lot of dead branches. By beating them I found:

1 small black sawfly with yellow legs *Aneugmenus stramineipes* (Klug)

R.R. Askew det. 1961 (as *A. padi* (L.))

719A

6 *Nemoura*, two of which were in copulation – the animals running about actively, ♂ on back of ♀.

C

(The wings of *standfussi* make it look dark, though the ♂ abdomen is orangish and ♀ partly so. An elegant narrow creature).

D

On the marsh tall vegetation was a *Tipula maxima* Poda. ♀

720

A ♀ *Tabanus bisignatus* Jaenicke (K. & H. give 'Jaenike') attacked me in the dense marsh scrub.

721A

And also a ♀ *Haematopota pluvialis* (L.)

721B

Flying round here in the open savannah were one or two small demoiselle dragonflies, and a *Libellula* (powder blue). Visitors from the river?

On the way back heard a **garden warbler** singing in Common Piece.

Collected a jar of dead leaf debris and mud from Stream 9 about 20 yd. below source, shade temperature 14 °C. (Same place as C.E. 698, the temperature had risen 2.2° since 7 May, not much considering that the last week has been a record heat wave!)

722

{reverse side}

10 JUNE 1947.

Limnophilus auricula Curtis. L.W. Grensted det. 1947. Mosely mentions its habit of sheltering under leaves of trees, sometimes away from water.

10 JUNE 1947. WYTHAM WOODS.

Visited Wytham Woods 4-6.30 G.M.T. p.m. to choose a good sycamore patch for class work. I found a great scarcity of aphids except on one or two small clumps, also there were no ladybirds or lacewings. (But an old tree near the Museum, and the one in the garden of 98C Banbury Road are swarming with winged aphids.)

The drive road through Marleywood Plantation is bordered by a rich and lush and rather calcareous grassland which includes *Briza*, *Brachypodium* and *Dactylis*. It is presumably on Oxford Clay with wash-down overlay. There were large skippers (*Ochlodes venata*) flying over the grass or settling on low scrub. Also a number of ♀ (and ? one ♂) *Platycnemis pallipes* (Pallas), one ♂ *Agrion splendens* (Harris) and a *Libellula* cruising here over the grass. 723 + 1 ♀

Collected two very active caddis flies by beating young sycamores in a dark mixed deciduous wood, where stream 4 passes through it below the drive; 724A
also two small brown beetles, one of which might be *Helodes* 724B

= 1 *H. minuta* (L.) P.J. Osborne det. 1956. C

1 *Byturus ochraceus* (Seriba) P.J. Osborne det. 1956.

In the evening, went up to the limestone ridge by Lord's Common, 5.30-7.30 p.m. G.M.T. There was an east breeze which drove off the numerous *Simulium* that swarmed round one in the sheltered hollows. On the road

{reverse side}

10 JUNE 1947.

A Mirid ("Capsid"):

2 *Tinicephalus* (*Megalocoleus*) *hortulanus* (Meyer-Duer). Butler says usually on rock-rose, sometimes also on restharrow* and marjoram* (all c. calcicole species). Apparently is strictly southern. Oxon VCH gives only 'Wychwood Forest'. Berks VCH nil.

* Not seen on Wytham, and certainly not on the Ridge.

10 JUNE 1947. WYTHAM WOODS****

up to the Chalet saw that many **spindles** had been badly ring-barked by **rabbits** during the winter, though some of these had managed to achieve full flower before wilting. New shoots were however arising from the roots. Areas thinned of **sycamore** a year or two ago by the Ministry of Supply are thickly growing up with coppice of sycamore and elder, and ground vegetation.

On the Ridge, the chief sight was the acres of flowering yellow **rock-rose** on the shallow coral reef soil, and the great belts of flowering **elder** on the more fertile wood margins. With the rock-rose are competing societies of rather thin ***Brachypodium pinnatum*** just coming into flower. Other flowering species were: **milkwort**, small-flowered pale *Veronica*, **bird's foot trefoil**, one **viper's bugloss**, **salad burnet**, **cathartic flax**, **wild thyme**, small hop trefoil, forget-me-not, **wild strawberry** (partly in fruit), quaking and other small grass. In bud were **houndstongue** (which is only a foot high, but is taller and in flower on the wood margin lower down the hill), and mouse-ear hawkweed.

On the low matted rockrose were many small green **bugs** with a faint purple tinge at tail, downy, which run and make short flights a bit like a *Salda*. 725

There are many anthills. **Rabbit** action manifest.

Flying and settling, or feigning quiet when disturbed were at least two kinds of white Cambrid moth.

Only one *Tabanus* seen, resembling *bromius*.

{reverse side}

10 JUNE 1947.

727 A B. W.J.L. Sladen conf. 1953

10 JUNE 1947. WYTHAM WOODS****

Searched several **hawthorns** at the margin of the Ridge. They were *C. oxyacantha*, in green berry. On a cluster of berries were two small square very shining black Chrysomelids in copulation, of which I got one: *Cryptocephalus labiatus* (L.) 726A

The haw berries had a fair number infested, some dry and with exit holes of an insect, others still with white grubs in that looked like fly or beetle larvae. Kept to breed out. Two shiny black beetle larvae walked out and died. No other emergences. n.k.

Outside the Ridge is a large clover-cocksfoot field (Lower Seeds), just being cut for hay. One patch had been **rabbit** grazed so that the grass hardly flowered.

Just above tank Pond 3 the soil of this field is so rocky that it is more or less left alone, and the sparse grass is mingled with teasel, viper's bugloss etc. Collected field madder (*Sherardia arvensis*) in flower 727A and a crucifer (*Lepidium campestris* (L.) R. Br.) in flat fruit that makes a decoration to the almost leafless candelabra branches. B

The small powdered-gold scaled, swift-flitting **caddis** were again sitting on the inner brick walls of the tank Pond 3, which had some algal growth in the water. (*Cyrnus trimaculatus* (Curtis)). 728

W.F. Burrows, who is a local naturalist who shoots a lot in Wytham and knows butterflies very well, gave me some notes on Wytham Woods which apply to his experience in 1946 and/or 1947. Speckled woods (*Pararge aegeria*) very abundant in the woods. Some **white admirals** (*Limenitis camilla*) in the north-west part: Woodcroft Copse, and woods

{reverse side}

10 JUNE 1947.

10 JUNE 1947. WYTHAM WOODS****

below the Chalet. First brood holly blues (*Lycaenopsis argriolus*) will feed on dogwood (which is common) as well as holly (which is not). Duke of Burgundy fritillary (*Hamearis lucina*) occurs in Guy's Copse, near Pond 1. Dark green fritillary (*Argynnis aglaja*) is common. Also pearl-bordered (*A. euphrosyne*). Dingy skipper (*Erynnis tages*) occurs. Green hairstreak (*Callophrys rubi*) on the grassy open space in Guy's Copse, where its food dyers greenwood is common. Here is also where the Burgundy comes, probably on the cowslips and primroses. He has never seen the marsh fritillary in Wytham (it likes devil's bit scabious) but it lives in a damp field by Clearsale section of Waterperry Wood.

Snow, a zoology student, said he saw on 1 June very large numbers of dragonflies (*Gomphus vulgatissimus*) -- a group he apparently knows -- by the river all the way between Bablock Hythe and Eynsham, also up to several hundred yards away on the hedges. Burrows said he also had seen many of this species in Wytham Woods, and along its river meadows.

{reverse side}

22 JUNE 1947.

Evidently *D. semicuprea* (see C.E. 734)

731A. *Cantharis lateralis* L. ♂ ♀

731C. Apparently *Tetragnatha extensa* L., which Savory says is confined to vegetation overhanging water. It makes a web with a hole in the middle. The photos etc. in Nielsen's monograph confirm that the egg cocoons are *Tetragnatha* ones, (as *Eugnatha striata* has not been recorded in this district: the only other one like it). Confirmed 1948 as ♀ (from Wiehle, 1939).

732C *Rumex* ? *sanguineus* L. var. *viridis*. W.J.L. Sladen det. 1953

22 JUNE 1947. GODSTOW, OXON.

Went in a punt on the Thames between Godstow and half-way to King's Weir, on a cool but windless and rather cloudy afternoon (2-3.30 p.m. G.M.T.). Brown caddis were dancing and weaving in groups, like water bats, over the glassy water. (It was too turbid, however to see the sponges on the willow roots). A cock **reed-bunting** on a 6 ft. post on the margin; and a moorhen lurked in the *Scirpus*.

The ***Glyceria maxima*** (= *aquatica*) fringe is an important element on the Pixey Mead (i.e. Oxon.) side, where it is safe from the severe cattle grazing of the opposite meadows. One notices a lot of small eroded patches on the leaves, which showed conspicuously yellow white at a distance of some yards. These appear to be caused by the direct grazing of adult copper-coloured ***Donacia***, which were very abundant and mostly coupled, and often sitting at the edge of eroded patches.

We had a picnic at the "Ox-bow island" -- it is marked as an island on the 6 inch map 1911, but is now pretty well silted up. There is a group of willows and some quite rich ground vegetation, including ***Valeriana officinalis*** in flower. Cleggs very abundant.

The *G. maxima* here had a small grey and yellow **soldier-beetle** in copulation. [731A]
On it further down the riverbank were two yellow-bodied small sawflies with dark wings, in copulation. n.k. Also a brilliant apple-green pear-shaped spider with a dark mark down the ventral side and very long fore-and-aft legs, which may perhaps be the maker of the big spider egg cocoons on the leaves (cf. C.E. 432J). [731C]

The ***Rumex hydrolapatham*** in several places showed many egg-clutches of ***Galerucella nymphaeae*** (L.) var. *sagittariae* (Gyllenhal). P.J. Osborne det. 1956, a number of black larvae, and one or two beetles (1 k.); [732A]
and with this noticeable leaf damage and checking of the inflorescence. I also found a colony with eggs on the leaves on a land *Rumex* species at the Ox-bow, growing on the 'riparian' zone. P.J. Osborne det. 1956 (1 k., & dock) [732B,C]

{reverse side}

734 1♂, 1 ♀ kept.

29 JUNE 1947. GODSTOW, OXON.

Down to the Nunnery and Lock.

On a patch *Glyceria maxima* at the Thames margin, there were a good many *Donacia semicuprea* Panzer of which I kept 3 pairs and 2 individual beetles. 734

There is no doubt about the erosion of leaves being done by them, I saw one doing fresh damage in the tube.

Leaf damage A

What is important is that they leave the main longitudinal vascular bundles and eat the leaf tissue around them, with the result that the distal leaf stretch can (and does) still remain alive and green, even when it has collapsed and bent at the erosion point (usually where this has worked right across a leaf).

There were also larvae of tortoise beetles (*Cassida viridi* (L.)) like green woodlice with spined segments, and carrying cast black-skins at the tail, on (under and over) leaves of *Mentha* (kept to breed out) *aquatica* and *Lycopus europaeus*. 735

Pupated within several days, green effigies, legless, of adults. Three emerged.

{reverse side}

29 JUNE 1947. GODSTOW, OXON.

29 JUNE 1947. GODSTOW, OXON.

Two clumps of ***Rumex hydrolapatham*** by river edge: one had eggs and larvae of ***Galerucella***, (also caterpillar or sawfly larva); the leaves were badly checked.

= *G. nymphaeae* (L.), by inference

13 AUGUST 1947. WYTHAM WOODS.

Walked round from Wytham up road to Chalet, and back by Singing Way and Pond 3 fields, with the Australian C.S.I.R. man, Clunies Ross.

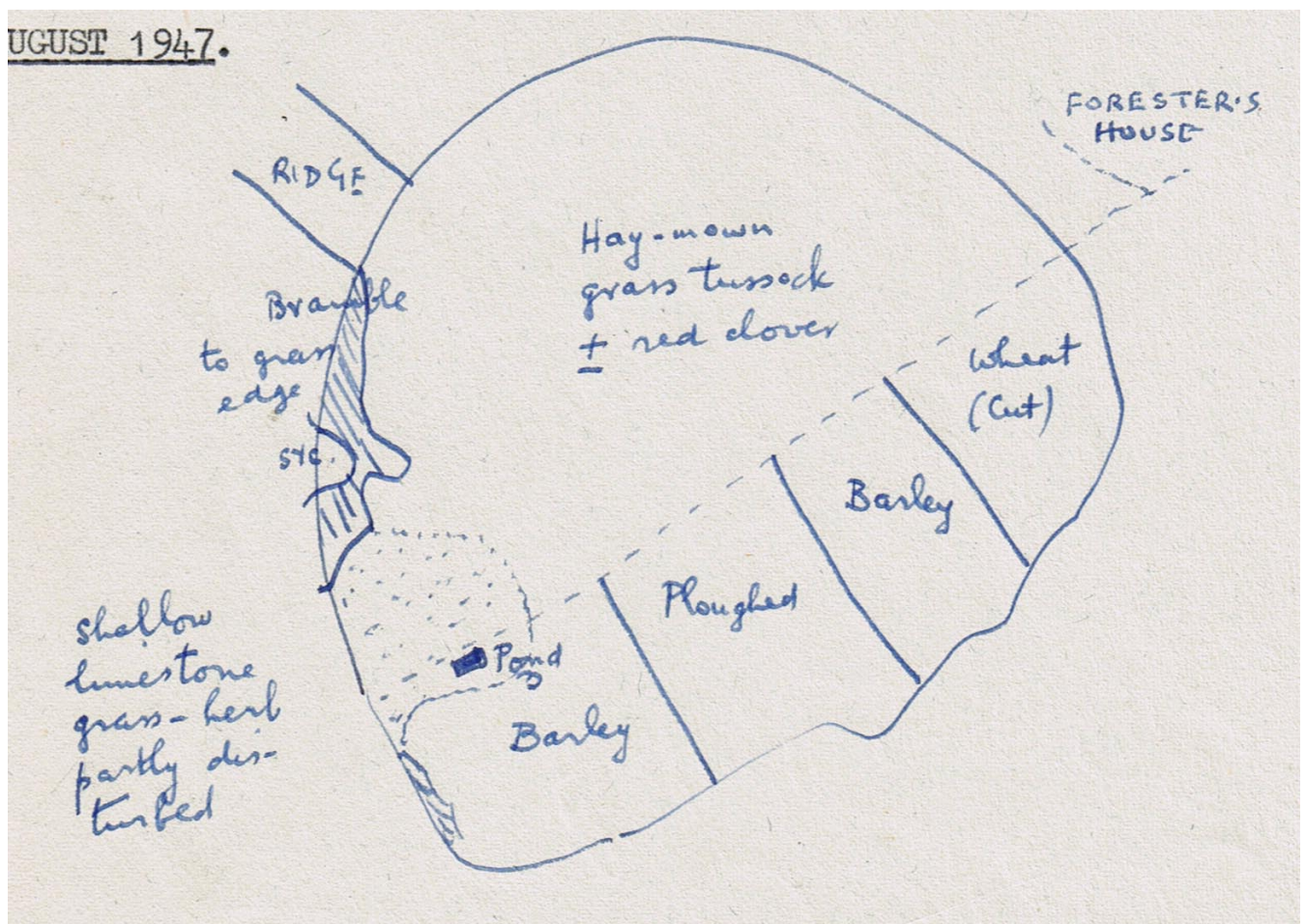
Butterflies seen along Rough Common: meadow brown (*Maniola jurtina*); near here in beech area along Singing Way: wall (*Pararge megera*); on the uncultivated shallow limestone field top by pond 3, among *Pastinaca* etc., a clouded yellow

{reverse side}

13 AUGUST 1947.

A covey of **partridges** on upper Radbrook Common, flying off Rough Common *Brachypodium* grassland.

13 AUGUST 1947.



13 AUGUST 1947. WYTHAM WOODS****

(*Colias croceus*).

The *Calamagrostis* patch on Rough Common had been traversed by a tractor, not very badly, but unnecessarily.

Fields by Pond 3 (Lower Seeds) have, on the north of the path, clover and grass on the hay-mow; barley above, wheat below, and plough between, on the south side. Wheat being cut today.

The farm country panorama seen from Rough Common was lit up with the tawny wheat fields, and floated in the grilling sun and faint haze like tulips at dusk: a vast patch of small patterns... Counterpoint to its dense peacefulness and ancient settlement was the Australian tale of wild, hot, arid wastes, and swamps tenanted by feral water buffaloes, and racing herds of kangaroos on the plains, vast droughts and famines for the sheep, and strange reproductive dislocations in millions of sheep caused by a new clover.

15 AUGUST 1947 WYTHAM WOODS.

Very hot sunny day, slight breeze on hilltop. 2.30-5.30 p.m. (G.M.T.)

Did circular walk from the Mount up through fields to Pond 3, north along field edge to the Ridge, along the Ridge, across through dense bracken to the great light north of Lords Common, and back by main track to the Mount.

The fields are shown across. {= reverse side previous page}

A covey of **partridges** on clovered hay-mow.

An adult *Apodemus sylvaticus* under a Coral Rag boulder on *Bromus erectus* grassland by Pond 3, 100 yd. from beech wood, 20 yd. from standing barley field (3 p.m. G.M.T.)

{reverse side}

15 AUGUST 1947.

752A 1 *Chrysopa flava* (Scopoli)

B 1 *C. carnea* Stephens

15 AUGUST 1947. WYTHAM WOODS****

The upper part of the hay/clover field is on shallow limestone soil and carries no crop, though it seems to have been partly ploughed in an optimistic way. Just now, as well as its lower herbage, it carries a jungle of *Pastinaca sativa*, 2-3 ft. in seed mainly, also scattered teasels (*Dipsacus fullonum*) in flower; and some ploughman's spikenard (*Inula conyza*), mostly nearer the tree shade.

Seen here were:

- 1 Clouded yellow (*Colias croceus*).
- 1 Tortoiseshell (*Aglais urticae*) on *Centaurea nigra* flower
- Several Walls (*Pararge megera*).
- Meadow Browns (*Maniola jurtina*).
- 1 small Heath (*Coenonympha pamphilus*)
- Chorthippus bicolor* (Charp.)
- C. parallelus* (Zett.)

Collected, from sweeping, a *Nabis*, medium, speckled dark brown and gold. *Nabis mirmicoides* Costa G.G.E. Scudder det. 1956.

751

A tongue of pure sycamore wood on the wood margin between Pond 3 and the Ridge, I shall call "Pond 3 sycamores". Thousands of aphids, many Syrphids, a few ladybirds, and plenty of *Chrysopa* of which I took to from leaves also ♂ and ♀ adults.

752

A

B

Meconema thalassinum Degeer

C

On brambles at wood margin/clover field was a *Pholidoptera cinerea* (L.) -- just by the entrance to the Ridge.

{reverse side}

15 AUGUST 1947.

754 ♂ *Polyommatus icarus* (von Rott.)

755A 1 *Chrysopa flava* (Scopoli)

15 AUGUST 1947. WYTHAM WOODS****

The Ridge. Rockrose flowers over. Everywhere, even in the open shallow parts, is a thick scattering of ploughman's spikenard (*Inula conyza*) (apparently wrongly noted as houndstongue in the spring surveys) in flower. The shallow area has them half the height of the marginal plants. On their flowers were:

1 small copper (<i>Lycaena phlaeas</i> (L.)) ♂	753
1 small heath (<i>Coenonympha pamphilus</i>)	n.k.
1 Blue	n.k.

Also observed flying were meadow browns (*Maniola jurtina*) and a gatekeeper (*M. tithonus*); and on the ground a *Chorthippus parallelus*.

Ringlet (*Aphantopus hyperanthus*) on bramble near wood margin, in shade.
Masses of *Epilobium angustifolium* (= *chamaenerion*) in seed along marginal parts, where bramble invades.

The Big Light. = Upper Ride.

Many sluggish *Bombus* on the teasel flowers; also a hornet (*Vespa crabro*) cruising near them. One battered silver-washed fritillary (*Argynnis paphia*), one peacock (*Vanessa io*), meadow brown (*Maniola jurtina*) visiting teasel flowers. Wall butterfly (*Pararge megera*) settling on grass ride; large whites cruising (*Pieris brassicae*). Collected a blue, on ground (grass). 754

Path home. (Little Ash Hill, oak-ash sycamore wood)

Beat a large *Chrysopa* from sycamore, and ♂ *Meconema thalassinum* from oak and from sycamore (♂) 755A B.C.

Earwigs, (*Forficula auricularia*) abundant on green-fruiting spindle (*Euonymus*).

{reverse side}

21 AUGUST 1947.

21 AUGUST 1947. WYTHAM WOODS.

Walked from Mount to Pond 3, Springs S 2 and S 7, the head of the Park and by track back past Chalet, 3-6 p.m. (G.M.T.)

1 clouded yellow (*Colias croceus*) in clover field below Pond 3.

In Pond 3 some *Notonecta maculata*, one of which was clasping a dead *Coccinella 7-punctata* on the surface. .

S 7 was a pool a foot or two across and an inch or two deep, running fresh.

Gammarus pulex 3 *Agabus bipustulatus* (L.) under a stone. 761 1 k.

Abax ater under a log in beech-mixed wood by the Singing Way.

Huge and luscious **blackberry** crop.

{reverse side}

14 SEPTEMBER 1947.

764 *Harpalus azureus* (Fab.) [Common on chalk; occurs at Wychwood also and one or two local places. Oxon. V.C.H.]

C.E. had a dozen *Trombicula autumnalis* bites, because he omitted to bath on return.

14 SEPTEMBER 1947. WYTHAM WOODS

Went to Pond 3 beech woods, and the grassland above S 2, (2.30 – 4 p.m. G.M.T.)

Halfway up the field leading from the Mount to Pond 3, found a young 1½ in. toad (***Bufo bufo***) under a coral rag lump on the grass path verge.

Noticed many small ant nests along the field border up this path.

Also on the upper, limestone part, the following plants, some still just in flower:

Ononis species (local large patches).

Cirsium acaulis

Scabiosa ? columbaria

Growing adpressed in rosettes on the path, a tiny *Erodium*.

In the beech belt above Pond 3 (“Brogden's Belt”), I collected a ***Notiophilus biguttatus*** (Fab.) ♂ in the leaf litter. M.J. Davies confirmed det. 1950.

762

Several ***Cephalanthera damasonium*** here with green seed pods. Collected a leaf of one plant with an old leaf-mine in it.

763

Under a Coral Rag lump in the fallow field above this beech belt, took a small metallic green Carabid.

764

Blackberries still give a large crop, but developing ones are small and will not grow to much more to ripeness.

{reverse side}

16 SEPTEMBER 1947.

16 SEPTEMBER 1947. WYTHAM WOODS

Walk on North Hill with D. Wragge Morley who is going to do an ecological survey of the ants (1-3.30 p.m. G.M.T.).

Under a Coral Rag stone on *Bromus erectus* -- *Dactylis* field margin grass, below Pond 3, saw two of the green and brown small Carabid beetles that occur on similar ground on South Hill (*Agonum dorsale* (Pont.)).

Three **magpies** in beech belt above Pond 3.

A brown argus (*Aricia agestis*) fluttering and settling on short grass near the gorse patch on the escarpment above Radbrook Common.

On the very shallow grass-covered old quarry slopes at Rough Common, found some live and some shells of *Helicella itala* (L.). 765

I have not yet found any other Helicellas there, though *Cepaea nemoralis* shells are frequent. I expect *itala* is a main food of glowworms.

A ♂ common blue here (*Polyommatus icarus*). The carline thistle (*Carlina vulgaris*) grows on Rough Common, and *Inula conyza* on the margins.

{reverse side}

23 SEPTEMBER 1947.

23 SEPTEMBER 1947. WYTHAM WOODS

Spent the day (10 a.m.-3 p.m. G.M.T.) in the Woods, with D. Wragge Morley (who is studying ants) and Dr. Anderson (of the Forestry School, who is mapping the nature reserves and getting their boundaries staked out on the ground by Probitts, the forester).

Nature Reserves.

Settled most of the boundaries. Rough Common to include a nice strip of birch and hazel on the north side, but run outside the wood of the South. The *Calamagrostis epigeios* patch to be preserved as a whole, with no path through it. Lord's Common to have some bits of wood at the corners. The Ridge to include an elder scrub zone at the edges. Pond 1 to include the marsh just above it, and some areas of grass below and wood around: but not as much grass as there is. Pond 2 also to have a polygonal area of marsh and bracken, and two large ashes up the stream. Noted Marsh 1 (with Stream 7A near) and Marsh 2, though apparently the latter lies on one of the new compartment "rides"; not quite agreed how to preserve these enclaves. On the North East reserve, chief questions raised (not settled by us) were (a) Do we need Interplantation, apart from Marsh 3? (b) Possible extraction rides to cut through Ten Acre Copse and Hither Clay Hill.

Approximate areas, calculated by Anderson:

Pond 1 area	5½
Pond 2 area	1½
Rough Common	17½
Lord's Common	4½
The Ridge	
N.E. Reserve + Interplantation	<u>64</u>
	93

{reverse side}

23 SEPTEMBER 1947.

23 SEPTEMBER 1947. WYTHAM WOODS ***

H. Probitts said:

- a) 5 deer (called them 'Japanese Water Deer'! = fallow deer) destroyed some 2-yr. **ash** plants on new plantation on bracken area by Pond 1. Thinks this is total herd.
- b) About 30 **grey squirrels** shot by him on one **walnut** tree near his house, but they had cleared every nut.
- c) Got a large **Cossus** moth (*Cossus cossus*?) bred out of a black poplar on the way up to his cottage.
- d) Venables' men only just check, do not exterminate the rabbits.
- e) **Glowworms** (*Lampyrus noctiluca*) do not come near his cottage, but he has seen them on ride by 5-acre Enclosure (the rabbit fenced area above Common Piece).

Going through the Heronry Wood (west conifer), we roused a virulent wasp nest, and I was very severely stung on each hand, nape of neck and on temple; Dr. Anderson in three and the forester in one place. The wasps were small ones, pursued us for 50 yds. The strings were excessively painful and caused swelling. Even after five hours one's face felt as if it had been bashed and one's thumb as if it had been sprained, with frequent shooting pains, but the swellings were down. It may have been a hanging nest (cf. *Vespula sylvestris*). Probitts has seen to such: one on a sycamore, 4 ft. up in Chalet woods, and one circa 2 ft. on an elder in his garden. (N.B. one found by Hazel Flatt at Wytham, O.E.S. 57)

{reverse side}

23 SEPTEMBER 1947.

23 SEPTEMBER 1947. WYTHAM WOODS

I collected a wasp that was drinking water under a tap in the Chalet Woods, but it was queen *Vespula germanica* (F.) or *vulgaris* (L.), 771
having most of the characteristics of the latter, but the first abdominal segment pattern of the former.

Down in some marshy *Juncus* -- mossy ground above Pond 1, I found a *Tettigoniella viridis* (L.). There is some hemp agrimony near Pond 2. Both Ponds are much dried up owing to the July-August drought. 772

On top of the low concrete top of a tank just south of the Chalet on the wood-field margin, a stoat (*Mustela erminea*) was dancing and rolling and playing by itself in the sun, at 2.30 or so; it did this for some time and finally pattered off into the bushes at the edge.

Near Lord's Common a lot of **sycamore** coppice about 8 ft. high is coming up after the Ministry cuttings two years ago. Leaves badly blotched with black rust. Few or no aphids. Large numbers of black ladybird pupae with 4 yellow spots close together, and a few yellow larvae, one getting ready to pupate. Some pupae kept to breed out and larvae and pupae also preserved in alcohol. Emerged in a few days as *Halysia 16-guttata* (L.). 1 adult kept. 773

{reverse side}

23 SEPTEMBER 1947.

23 SEPTEMBER 1947. WYTHAM WOODS

On the north end of the Ridge the ploughman's spikenard (***Inula conyza***) was a fluffy sea of seeding heads.

At the field end I found on the field edge an ***Atropa belladonna*** in fruit. Anderson says he has seen **henbane** (*Hyoscyamus*) on Radbrook Common field edge.

{reverse side}

5 NOVEMBER 1947.

5 NOVEMBER 1947. WYTHAM WOODS

Worked on the north hill, 11.30 -- 2 P.M. (G.M.T.) The elms were flaming pillars of yellow in the plain, and

“The noonday sun
Now shone upon the forest, one vast mass
Of mingling shade, whose brown magnificence
A narrow vale embosoms.”

One needs someone like Shelley to give true scale to the majesty of these woods on a glassy, sunny day with only a stirring of north wind, and a silence that enables one to hear the fall of the yellow leaves, and a delicate light that catches the smallest dancing fly or floating seed, or the darting activity of tits in the bushes.

{reverse side}

781 A. 2 *Aphthona euphorbiae* (Schrank) P. J. Osborne det. 1956.

781 B. *Calvia (Halyzia) 14-guttata* (L.). C.E. det. 1950.

783 B. *Acanthosoma haemorrhoidale* (L.) (Mainly comes on hawthorn)

783 C. *Catops fuliginosus* Erichson J. Balfour-Browne det. 1952.

5 NOVEMBER 1947. WYTHAM WOODS

I decide to get material to give the year's end-point for various communities that had been studied mostly at other seasons. Walk from the Mount round to the contour path below Interplantation, to Spring 30, up and back above the Heronry Woods and Interplantation.

Sycamores in mixed deciduous wood, Common Piece.

Leaves fall into the net when beaten, yellow, blotched with fungi. Numerous winged aphids and some parasitized bodies. Some small parasitic Hymenoptera. Hoverfly larvae (large) and one large fly. Flies of all sorts. No ladybirds, though. One *Chrysopa*. Spiders. Kept a ♀ ***Hemerobius micans*** Olivier. C.A. Elbourn det. 1965. 780

Oaks in mixed wood, Common Piece:

No aphids, but a few flying green ? Jassids. Many of a very small shiny black beetle that hops (also on oak in 10-Acre Copse).

781A

A small **ladybird**, looks new. (Mostly spiders).

B

Hornbeams, in mixed wood. Common Piece.

Not much. Leaves yellow. A brown Pentatomid bug. ***Troilus luridus*** (Fab.) (A carnivore).

782

Bracken, turned brittle brown, in mixed wood along the ride in Common Piece, had very many ***Coccinella 7-punctata***, also one of the large green and brown **Pentatomids** that Snow found on sycamore in Wytham the other day, and a small black *Choleva*. Other insects too. On field layer.

783A

B

C

{reverse side}

5 NOVEMBER 1947.

784A ***Metatropis rufescens*** (Herrich-Schaeffer).

Neididae (= Berytidae).

(Attached to enchanter's nightshade (*Circaea*). Local).

D ***Sitona hispidulus*** (Fab.). P. J. Osborne det. 1955.

E 1 ***Helophorus brevipalpis*** Bedel. P. J. Osborne det. 1956.

5 NOVEMBER 1947. WYTHAM WOODS***

Marsh 1, Common Piece:

Sweeping at 1 – 3 ft. in *Carex* (green), hemp agrimony (turning, all in seed), and nettles and occasional bracken, over liverwort-moss ground, I took, among many spiders etc. seen: 784

Thin bug, looks like spider or mosquito, has excessively thin legs, swollen and black at joints. A

Small active brown, pale, heteropteran bug *Lygus rugulipennis* Poppins [= *pubescens*] B

G.G.E. Scudder det. 1956

2 Pale brown *Nabis ferus* (L.) G.G.E. Scudder det. 1956 C

Brown weevil D

Small ? *Helophorus* (stream trickles through here) E

Fly. Mycetophilid, *Macrocera vittata* Meigen L.W. Grensted det. 1948. F

2 Yellow and green gaily speckled Typhlocybrids *Cicadella* (*Eupteryx*) *aurata* (L.). Its group is often on labiates, but this one found by sweeping. G

Among scattered oaks, and ground vegetation of *Calamagrostis epigeios* (quite a large area of it) bramble, bracken etc. around B.A.P. Post B 1 in the upper part of 10-acre Copse: 785

Small, very vigorous brown moth, flying, not disturbed. n. k.

Small bug, as 784B *Lygus rugulipennis* Poppins [= *pubescens*] G.G.E. Scudder det. 1956 B

{reverse side}

5 NOVEMBER 1947.

One or two cowpats from stray cattle near the pool; had abundant fly larvae, and some Parasitic Hymenoptera crawling in passages.

786C 2 Dolichopodids are ♀ *Campsicnemus curvipes* (Fallén).

Oxon. V.C.H. says “circa everywhere”!

The other is a Sphaerocerid *Spinotarsella humida* (Haliday) (Fallén) L.W. Grensted det. 1947 Oxon. V.C.H. says “fairly common on or near water” (as *Leptocera*) L.W. Grensted det. 1947

Richards (1930) on Sphaeroceridae gives notes on its habits and notes that I found it active at night on a small stream in Bottom Copse, Bagley Wood, 6-7.10.27; with an Empid *Clinocera stagnalis*. *Humida* he says is most common June-November, always at edge or on surface of water – often *Glyceria fluitans* waters. Larvae may scavenge?

786H 2 ♂, 12 ♀ & 1 copepodid III *Cyclops agilis* Koch, Sars. D. H. Eccles det. 1957
2 ♀ copepodid V *Cyclops fimbriatus* Fischer D. H. Eccles det. 1957

786 J *Spirogyra* group *conjugata* (not further details without culturing to produce zygospores). (Chytrids also on the filaments. J.L. Harper det. 1947.)
Unicellular fungi on filament of alga, with hyphal roots in it.

5 NOVEMBER 1947. WYTHAM WOODS***

Pool S 30, about 6 ft. long with squelchy margins of grass and leaf litter, fairly shaded:
Saucer dipping fairly many times. Green filamentous algae.

786

- 1 small ***Corixa nigrolineata*** Fieber ♂ A. Macfadyen det. 1947 A
- 1 ***Haliphus lineaticollis*** {? = *lineatocollis*} Marsham ♂ B
- 3 small flies, 2 ♀ Dolichopodids with green metallic bodies and long legs, 1 more compact and smaller, flying over or settling on surface and margin. Very abundant but hard to catch as they walk through the net mesh. C
- 1 large *Helodes* larva D
- Small ***Gammarus pulex***, frequent E
- Pisidium*** 2 species frequent F, G.
- No Liriopid rat-tail larvae found
- Small copepods, some with egg sacs. H
- GREEN FILAMENTOUS ALGA – (sparse, not in floating mat) J
- 1 small larva with hook at hind end, that collected mud on its body. K
- Small brown ostracods ***Iliocypris bradyi*** Sars D.H. Eccles det. 1957 L
- 1 Large green “Candona” ***Ilyodromus olivaceus*** Brady & Norman D.H. Eccles det. 1957 M
- 1 small bristly larva or pupa, getting above surface film. N
- 2 very small stumpy stonefly nymphs. P

{reverse side}

5 NOVEMBER 1947.18 DECEMBER 1947.

788B ***Orthellia caesarion*** (Meigen). L.W. Grensted det. 1948. “The first two dorsocentrals very small, but present.”

5 NOVEMBER 1947. WYTHAM WOODS***

Pseudotsuga taxifolia:

Beating on either Heronry Wood gave almost no fauna. But I took:

787

1 Small bug, as 784B *Lygus rugulipennis* Poppins (= *pubescens*) G.G.E. Scudder det. 1956

1 Large **Pentatomid**, as 783 B. *Acanthosoma haemorrhoidale* (L.)

A
B

Dr. A.D. Voûte, from the Dutch forest ecology lab. told me that Douglas Fir in Holland is almost devoid of fauna – but thinks native species will eventually begin to adapt to it. (cf. also my experience at Strontian in 1946).

18 DECEMBER 1947. WYTHAM WOODS. HIGGINS COPSE.

Visited Higgins Copse with Southern, 10 – 12 a.m. (G.M.T.) to see his mouse trap-line with marked mice, which covers the whole of this isolated wood in a grid. Both wood-mice and bank-voles were present in high density; I also saw two or three tawny owls roosting. The first owl was low-down, 15 ft., under a thick canopy of *Clematis* on a maple; two were seen not far away and later, in a holly tree, but one may have been the *Clematis* owl again.

The wood has a sprinkling of quite good large oak, ash and elm, with underscrub of coppiced trees and hazel, also some hawthorn, elder, spindle. Little sycamore.

The floor was thick with bright brown wet elm and drier brown oak leaves, some of the latter with spangle galls on, overlying a clearly calcareous stiff soil.

788A

Under a fallen branch I found a sluggish greenbottle (*Orthellia caesarion* (Meigen): we used to find them similarly under logs or loose stumps in winter in Bagley, and I think Richards may have taken them from the corpses of mice also.

B

{reverse side}

18 DECEMBER 1947.

789B. *Nebria brevicollis* (Fab.) C.E. det. 1950.

18 DECEMBER 1947. WYTHAM WOODS. HIGGINS COPSE.***

Robins were haunting track points, where some nest box corn had been spilled.

The dog's mercury was still green, but wilting over. Collected one good specimen to show the route and runner system. Pulled up a number that showed beetle (*Hermaeophaga*) damage to the leaves (there were actually a very small percentage so perforated) but found no beetle larvae on the roots. 788C

In the autumn wheat field just outside a lot of young plants 2-3 in. high had been nibbled, possibly by *Apodemus*; but the damage seemed to be too far out from the wood all to be so explained. 788D

On the stubble were flocks of greenfinches and ? corn buntings (short periodic wing beat, short chirrup – once or twice repeated).

On the path down from the top of Marley Wood to Botley Lodge, at the edge of the first great pasture field east of the ride, under a small Coral Rag stone were 3 or 4 *Agonum* (*Anchomenus*) *dorsale* (Pontoppidan), 789A (1 k.)

and a dozen larger black **Carabids**. B (1 k.)

22 DECEMBER 1947. WYTHAM WOODS.

In morning walked on the northern reserve area with Champion, Lloyd and Anderson, to determine the final boundaries of our reserve in relation to future in extraction rides. We arrange to surrender part of 10-acre copse reserve in return for a fine wedge of hazel woodland on the lower margin of Further Clay Hill, near the river; and some other detailed adjustments over Interplantation, which is to be surrendered to the afforestation except for Marsh 3.

{reverse side}

22 DECEMBER 1947.

790A The *Spirogyra* has been cultured and a number of the other species have made their appearance in the culture. The *Spirogyra* is *S. varians* (Kütz) Czurda. Some of the cells were infected with a chytrid fungus, *Olpidium* species probably *O. endogenum* (Braun) Schroeter.

This species which developed in culture and which were presumably present in small numbers in the inoculum were:

Oscillatoria sp.
Pediastrum boryanum
Scenedesmus sp.

22 DECEMBER 1947. S 30, WYTHAM WOODS,

Spring pool S 30 still had much *Spirogyra* (some brought back alive for Harper to culture). Many small black flies with slightly iridescent wings flitting on the water surface. Three brought home in tubes with water were very successful in not getting wet. 1 k. proved to be *Spinotarsella humida* (Haliday).
790A
790B

Cowpats numerous and must have affected fertility of the pool. No active maggots etc. at all, and dung not decomposing much now. One live grub in soil just under a pat kept to breed through. Failed.

Lloyd says:

- a) 7 Fallow deer now, stay mostly on this part of the hill. (Mrs. ffennell told him they were introduced circa 20 years ago, Japanese deer, later crossed with "some other kind".!)
- b) Thorne told him keepers used to burn over the open north slope for game management.

Under a very old decayed ash log at edge of ride in mixed wood, Common Piece, was a small nest of *Myrmica ruginodis* Nylander (2 queens). D. Wragge Morley det. 1948. A.J. Pontin confirmed 1954.
792

{reverse side}

13 MARCH 1948.

800A 1 ♂ *Campsicnemus curvipes* (Fallén). L.W. Grensted det. 1950.

800B *Paracollinella fontinalis* (Fallén), K.G.V. Smith det. 1958.

793A *Apis mellifera* L. 2 queens (not kept). Listed as /3 and /4.

13 MARCH 1948. WYTHAM WOODS.

Today the air was still and dry and full of warm sunshine (this few days has been a very exceptional warm anticyclone); and the spring vegetation and garden blossom, with an unusually mild winter behind it, is ahead of its usual dates.

People have done a lot of tree-cutting this winter: all the tall black poplars, by the road, at the edge of Wolvercote Pond; many stretches of pollard willows (pollarding) e.g. along the Seacourt Stream at Wytham village; 5 (all the) big black poplars on the lane up to the forester's house (one young one is left to succeed). Stumps of the latter seem to be sound wood, but there are old clearwing moth borings round the basal bark.

Sweeping over the wet soggy leaves (mostly sycamore) filling Stream 7A produced small flies, 2 of which are the small metallic Dolichopodid *Campsicnemus*. 800A lost

The sallows (*Salix caprea*) here and there blaze in the bare woods with a pale yellow fire of male catkins, and hum with large task forces of **hive bees**, which also visit the dull green female flowers – the one for pollen, the other for honey.

Collected insect visitors at 3 different trees.

- 1) ♂ *S. caprea*, 20 ft. high, in oak-mixed deciduous wood in upper part of Thorny Croft. The bees (2 k.) pollen dusted and heavy with harvest, mostly in the upper branches. No flies. No *Bombi* stayed: one ♀ paused a second and flew on. 793

A
B

Small bug (1 k.) *Anthocoris nemorum* (L.) G.G.E. Scudder det. 1956.

{reverse side}

13 MARCH 1948.

794A. W.J.L. Sladen confirm 1953.

794C *Anthocoris nemorum* (L.) G.G.E. Scudder det. 1956.

Apis mellifera L.

794D *Dorytomus taeniatus* (Fab.). P.J. Osborne det. 1955.

796 *Egle* (*Paregle*) species near *parva* Robineau-Desvoidy. L.W. Grensted det. 1948.
Says they are an unnamed species, of which there are several near *parva*.

795A. W.J.L. Sladen confirm 1953.

795B *Apis mellifera* L. 3 queens

795C 1 *Orthellia caesarion* (Meigen) C.E. det. 1948.

6 *O. cornicina* (Fab.)

795D ♀ *Musca autumnalis* Degeer B. Macpherson det. 1954.

13 MARCH 1948. WYTHAM WOODS***

(2) Similar ♂ ***S. caprea*** in 10-Acre Copse, open bracken-bramble-sallow with scattered oaks. Kept catkins specimen. (Catkins in mid-flower). 794 A

Again, numerous dusty **hive bees**, and the same small bug (as before, few; one kept). C

Also a weevil from beating the flowers. No *Bombi* or flies. D

At 10 ft. over flowering branches, a swarm of a score or two of small **flies** circling about, of which 4 caught. Not settled on the flowers. 796

(3) Small 9 ft. bush of ***S. caprea*** with ♀ flowers, 20 yd. from the last. 795A

Also humming with hive bees, but only one was seen pollen-covered, the rest clean and shining. Clearly, even at this great distance from the hives (? a mile, or more) there is a sharp difference of task. B

Many **green-bottles** (7 kept) and one brocaded 'house-fly' (as W 53 B): C

2 **tortoises** seen, settling momentarily on flowers. No bugs or *Bombi*. D

In an open space in 10-Acre Copse (mixed oak-deciduous) a **tortoiseshell**, a **peacock**, a **brimstone**, and along the grass ride nearby a **comma**.

On a large **sallow** trunk several rather quiet grey flies were sunning, 2 ft. up. In same area as (2) and (3). Two caught. 797

In Thorny Croft, in the mixed wood at the top a very decayed 20 ft. **elder** had fallen, breaking the butt and leaving 1 ft. stump. Its wood was punky and full of old

{reverse side}

798B ***Stenichneumon culpator*** (Schränk) ♀. R.D. Eady det. 1951 (British Museum)

798C as C.E. 798B.

798D See letter from O.W. Richards, 4.4.1952, determining these as *flavus* (Fab.) not *umbratus*.

13 MARCH 1948. WYTHAM WOODS***

borings. Breaking into this I found, in the horizontal broken end:

798

2 ♀ *Vespa crabro* L., one comatose, the other dead and decayed, each in a little chamber. I put back the living hornet “pour encourager les autres.”

A *Carabus granulatus* L. C. Elton det. 1948.

A

A large ichneumon, black with only a white break in the middle of the antennae.

B

Under the stump's bark in the rotten wood was another large ichneumon like B, but with more red on its body.

C

A group of small yellow ants, (3 kept) queen

D

A dead hulk, legless, but repairable, with structure clear, of the smallest of the 3 British stag-beetles, a ♂ *Sinodendron cylindricum* L. black, with 5-pronged thorax and a tiny little horn on its head. It grows in rotten wood.

E

The books say local, and V.C.H. give it only for Ewelme, Wychwood Forest, Water Eaton, and Bradford. “Mainly in beech” (Joy).

Under bark of a fallen rather old dryish oak branch in 10-Acre Copse, were several fat Tipulid larvae, of which one kept to breed through.

Failed.

Oak-mixed deciduous ridge-edge.

Near there a long-tailed tit.

{reverse side}

13 MARCH 1948

24 MARCH 1948

806B. Small beetle emerged from nest after a week. *Lathridius nodifer* Westwood.

13 MARCH 1948. WYTHAM WOODS***

The very early spring seems to have caught the bumblebees napping. A few ♀ *Bombus terrestris* or *lucorum* were hole hunting on moss-mercury ground or elsewhere in the oak-ash-sycamore woods in Common Piece and Thorny Croft; only one visited sallow ♂ flowers for a moment. The V.C.H. Oxon. records *lucorum*, *lapidarius* and *pratorum* ♀♀ on sallow flowers end April-early May!

Visited Marsh 3. The *Salix cinerea* was not in leaf or catkin, except one or two ♂ flowering trees.

The large *Carex* clamps had to be heavily **rabbit** grazed.

By the Marsh a woodcock (*Scolopax rusticola*) flew from the ground, a strong swerving flight, noiseless, bright fawn flash of colour, too big for a snipe, not an owl.

24 MARCH. WYTHAM WOODS.

A day of poised dead stillness, with sounds travelling far, and the far distance misty. I drove up to the Forest Nursery, to pick up a quite perfect tree nest of (evidently) *Vespula sylvestris* (Scopoli), which Probits found woven into a **sycamore** branch, 6 ft. up, in the deciduous woods just below and north of the Chalet. The outer covering is not made in individual-patterned units like the ground-nesting *Vespula*, but streaky round

806A

{reverse side}

24 MARCH 1948.

801.C. *Simulium variegatum* Meigen. L.W. Grensted det. 1952.

24 MARCH 1948. WYTHAM WOODS***

the circumference. The nest is (in the real anatomical sense) heart-shaped, and incorporates a sycamore twig with some dead leaves still sticking out.

On Rough Common, searched one of the steep slippery little ten-foot slopes where the grass is very short and the ground eroded here and there into gravelly-limestone "blow-outs". The ridges that make these little terraces are evidently the Coral Rag itself, but here and there one can still pick out a residual pebble of Plateau Drift. This slope was south-facing, and piping warm on this still sunny day (10.30 a.m., G.M.T.). Birch-hazel wood near. 801

2 *Cicindela campestris* L. running (some flies about too), of which one kept. [A]

1 *Acrydium (vittata)* species, dark, weak with spry hopper, not caught. (Quite dry here, no marshy ground near).

Curious brown bristly pupa case half sticking out of a hole in the bare soil, a few inches below turf. Quite empty. [B]

A very gaily decorated *Simulium* flying round me. [C]

Helicella itala (alive).

Large scarlet mite walking. n.k.

Then we visited the Ridge. At the Lord's Common end there are some *H. itala* shells in the grass.

On the Ridge, the drift of **ploughman's spikenard** dead flower stems with empty calyces is conspicuous. 802

Among it some small dog violets (probably *V. hirsta* ?) were in flower, and one was visited by a red-tailed *Bombus ruderarius* (Müller) ♀. O.W. Richards det. 1948. [B]

A minute *Draba* (?) in white flower on the path. *Erophila (Draba) verna* (L.) Chevall. W.J.L. Sladen det. 1953. [C]

{reverse side}

24 MARCH 1948. WYTHAM WOODS***

Leptothorax acervorum (Fab.) 2 queens D.W. Morley det. 1948.

802F 3 adult *Pollenia varia* (Meigen) probably. Prov. det. L.W. Grensted. 1949. 2 given to Hope Department. He notes:

"Only dissection of the genitalia could make sure.

For (1) Small size (2) 3 scutellar bristles on each side (this is a very good character) (3)

Facial carina very reduced. In one specimen practically missing.

Against. (1) They are fully 6.5 mm. long which is rather large for *P. varia*. (2) The 2nd pair of post-sutural acrostichals is very fully developed (in one case rather shorter and finer) (3) I cannot make the abdominal markings quite fit Wainwright's account of them. But I do not take this very seriously, as the shifting line makes them difficult to define. (4) There certainly is a small and much shortened facial carina (varying a little in the 3 specimens)."

24 MARCH 1948. WYTHAM WOODS***

The Ridge***

Haw. not yet out of bud, but **elder** sprouting open.

In each of two 3-inch diameter rotten **elder** branches lying on the ground in the spikenard-hawthorn area, was a small colony of a myrmicine ant, which I would not have found probably without using my axe, for they were right inside the decayed heart. 802D

They are dark reddish brown, with rugose head, small prong on waist, a shining but bristly gaster, and look rather small but longer in the middle than the usual *Myrmica*.

Under the **horse-chestnut** were some fallen rotten boughs (say 4 – 6 in. diameter). In the heart of one, opened by axe, work to huge grey translucent tipulid larvae. Near them, surprisingly, were three (? Tachinid parasite) **flies**, that shammed dead and then suddenly scrambled off, but were caught. Kept to breed out. F Failed.

Brimstones were seen flying about in the bare woods on Lord's Common, Little Ash Hill, and Common piece. How green the stems of the spindle fringing the wood are! And noble the drift of white beginning on the **blackthorn**.

In the field outside the Ridge, now tufted all over with some grass, were many small "purple" *Viola* in flower. 803

Under a small Coral Rag stone in this arable field was a colony of *Myrmica* workers, with some young; A B

2 queens *M. scabrinodis* Nylander var. *sabuleti* Meinert A.J. Pontin det. 1954. several *Platyarthus hoffmannseggii*, and a fairly small shining staphylinid. *Philonthus varius* (Gyllenhal) P.J. Osborne det. 1956. C

{reverse side}

24 MARCH 1948.

9 APRIL 1948.

24 MARCH 1948. WYTHAM WOODS***

Visited the **Sycamore Tongue** ("Pond 3 sycamores"). The buds are full to bursting (a few just opened) and nearly all had young aphids sitting on them. Kept a lot of these buds and aphids in 70% alcohol. 804 A

Noticed (only) one bud had three small bugs, rather like C.E. 794C, probably eating aphids (n.k.).

There is a good deal of (**rabbit**-killed partly) old wood, stumps etc., and in some cases a new tree has grown from a dead or coppiced stump.

In such a **rotten stump** at the base of a live tree was a large colony of earwigs, *Forficula auricularia* L. (2 ♂ kept.)

B

In another dead stump at ground level in rotten wood were two large beetle larvae (kept to breed through) failed

9 APRIL 1948. WYTHAM WOODS.

A keen wind, but fairly warm and sunny out of it. The ground dry, though we have been having heavy showers since April began. The ploughing is a month ahead of last year, and the blossom (e.g. crabs in gardens) is very early.

Walked up through the big grass field between the Forester's house and the Ridge. Violets and **dandelions** were flowering among the short grass plants. Under scattered small lumps of coral stone right

{reverse side}

807A *Agriotes obscurus* (L.) P.J. Osborne det. 1955.

B *Agriotes sputator* (L.) P.J. Osborne det. 1955.

807C *Stomis pumicatus* (Panzer)

807F *Pterostichus vernalis* (Panzer)

808D *Philonthus fuscipennis* (Mannerheim) ♂ C.E. det. 1950.

9 APRIL 1948. WYTHAM WOODS***

Out in this field were:

807

- A click-beetle A
- Another ditto, smaller B
- A small slender black **Carabid** with reddish antennae and yellow legs. C
- A staphylinid ***Lathrobium ripicola*** Gwalina P.J. Osborne det. 1956. D
- 2 small *Stenus*, black with yellow legs 1 ***Stenus clavicornis*** (Scopoli) P.J. Osborne det. 1956 1 ***S. rogeri*** Kraatz P.J. Osborne det. 1956 E

Several ***Agonum dorsale*** (Pont.) in a group, also seen under stone on the path up through this field. n.k.

- A small **shining black Carabid**. F
- A nest of ***Myrmica scabrinodis*** Nylander (1 kept) A.J. Pontin det. 1954. with a good many ***Platyarthus*** in. n.k. G
- And a small staphylinid with brown elytra. H
- And a pair of ***Perdix perdix***.

Walked on up to the near edge of “the Ridge” and stopped on the *Brachypodium* – rock rose area. Here under coral “pebbles” were: 808

- a) A nest of yellow ***Lasius flavus*** (Fab.) (2 queens kept) O.W. Richards det. 1952 A
- b) Ditto of small *Myrmica*, queen ***M. scabrinodis*** Nylander var. *sabuleti* Meinert A.J. Pontin det. 1954. n.k. B
- c) Ditto with a medium black **staphylinid** D
and a very substantial brown spider ♀ ***Amaurobius atropos*** Walck. E. Duffey det. 1951 E

{reverse side}

9 APRIL 1948.809B 2 ***Aphthona euphorbiae*** (Schrank) P.J. Osborne det. 1956.

9 APRIL 1948. WYTHAM WOODS***

In the woods generally the **sycamores** are in bud, half-leaf and flower bud, or in tiny expanded leaf; the **elms** in flower and faint green; the **oaks** and **ashes** still unfolded at all.

The strip of wood from Pond 3 to beyond Pond 3 sycamores belongs to Mrs. ff. and is let with the farming to Wise. The actual elder strip along “the Ridge” is University land.

This strip (= Brogden’s Belt) has evidently been planted some 50 or more years ago, as it has one or two horse chestnuts, a larch, also beeches and elms. It is very neglected and has much dead fallen wood.

On the mercury carpet (in furled leaf + flower bud – a green scattered layer) I swept:

809

2 *Hermaeophaga mercurialis* (1 kept) P.J. Osborne confirmed 1956.

Several smaller flea-beetles dark with yellow legs (black hind femora) (2 k.)

A
B

From a leaf-budding enormous old hawthorn inside this wood I beat:

810

2 *Lochmaea crataegi* (Forster) – reddish, black streaked allies of the heather beetle.

Chiffchaff heard.

Magpie seen.

{reverse side}

9 APRIL 1948.

811A Phoridae, 1 ♂ *Megaselia ciliata* (Zetterstedt).

C.N. Colyer det. 1959. (See taxonomic note with his det. list).

Specimens of flower buds and leaves kept.

Define main habitat as: “Sycamore coppice, woodland, edge of cocksfoot grass-arable field, Lower Seeds. Aphids abundant. Field or scrub layer.”

811B 1 ♀ *Amaurobius atropos* (Walckenaer) E. Duffey det. 1962

C 1 ♀ *Amaurobius atropos* (Walckenaer) E. Duffey det. 1962

9 APRIL 1948. WYTHAM WOODS***

Several inches inside a hollow touchwood log of **beech**, several tiny **black flies** (that run quickly to cover in a bundling way), with square-ended wings set and extraordinary shaped long legs. (3 k.) 811 A

Also a large spider (like 808E) in rotten hollow at the end of the log.
The same spider found among beech-sycamore leaf litter.

B
C

Did extensive collecting on "**Pond 3 sycamores**" which are in bud or just opening, and the green thickly covered with aphids. 812 n.k.

Kept six parasitized aphids 3 off under side of young leaves, 3 from outer side of bud scales. Only one emerged. The rest were moulting aphids.

{reverse side}

9 APRIL 1948.

812C. *Syrphidis* {? *Syrphus*} *ribesii* (L.) 2 ♂ B. Macpherson det. 1952 n.k.

N 1 ♂ *Thrips validus* Uzel 1 slide
42 ♀♀ *Taeniothrips inconsequens* (Uzel). G.D. Morison det. 1948. 1 alcohol tube and 3 slides. See notes in CN 202/3/1-20.

9 APRIL 1948. WYTHAM WOODS***

Visiting the buds and young leaves were

812

2 large "*Syrphus*"

C

A sluggish *Bombylius major* L.

D

A muscid fly n.k.

Several speckled bugs (1 k.) *Anthocoris nemorum* (L.) G.G.E. Scudder det. 1956.

F

A small fly

n.k.

An ichneumonid

A smaller hymenopteran parasite

A small ladybird *Coccinella* (*Adalia*) *10-punctata* L.

L

A good many *Coccinella 7-punctata* L.

M

A great many thrips both on flowers and leaf buds.

N

A grown geometrid caterpillar

n.k.

2 minute y. {? young, ? yellow} caterpillars

n.k.

{reverse side}

9 APRIL 1948.15 APRIL 1948.

9 APRIL 1948. WYTHAM WOODS***

A small spider with web strands among buds.

Another small spider

Both immature ♂ *Aranea ? cucurbitina* L. E. Duffey det. 1951.

812 R S

15 APRIL 1948. WYTHAM WOODS, BERKS.

Walked across from Northfield Farm to Hagley Pool and the river meadows below our nature reserve, and up the vertical path to S 30 and back above the reserve to Common Piece.

The river meadows are flat grass and heavily grazed by **cattle** (I would think overgrazed, judging by the great quantity of dung, and over-tramping in places). There was, in the warm sun, a great activity on fresh dung pats ten or twenty yards outside 10-Acre Copse and further on: small staphylinids, small *Aphodius*, a great many *Scopeuma* (mating on the dung surface) and many (though fewer) *Orthellia*. The only one caught (they are immensely quick off the mark – anything to do with predation by other flies?) was *Orthellia cornicina* (F.) (C.E. det. 1948)

813

On the woodland edge, below, along 10-Acre Copse and Hither Clay Hill, are several once-pollarded tall **willows** with very golden banana-shaped catkins; and leaves only just sprouting. Two of them had branches crashed off. *Salix fragilis* L. E.F. Warburg det. 1955.

814

{reverse side}

15 APRIL 1948.

4 *Kateretes bipustulatus* (Paykull) (One rather small one).

A pair of mallard (*Anas platyrhyncha* {= *platyrhynchos*}) on Hagley Pool.

15 APRIL 1948. WYTHAM WOODS***

On the upper triangle slope of pasture below Further Clay Hill the farmer had been burning off thorn etc., and had properly fenced off the lower end of the vertical path to prevent animals straying into the wood.

Hither Clay Hill is vocal with willow wrens. Further Clay Hill, on the open bracken part of our reserve (east end) has **wood anemone**, **bluebell**, **primrose**, **wild strawberry** in flower.

S 30 had a dozen or more water skaters *Gerris lacustris* (L.) – 1 ♂ 1 ♀ kept. 815
The pool was very full of green alga masses. I saw some *Gerris* of the same size as *lacustris* (n.k.) on the temporary “bourne pool” S 33.

Sweeping some *Carex* on the Thames steep bank I got a number of *Kateretes*. 816A B
These beetles seemed to be on the male flower heads.

Collected some *Carpinus betulus* L. flowers from Common Piece. 817

A pair of **redshanks** (*Tringa totanus*) was tillooming along the river side, where the Evenlode joins the Thames opposite Wytham Mead. These meads, though shortish grazed may have **Caltha** in flower: perhaps cows avoid them.

{reverse side}

15 APRIL 1948.

On rides and the river meadow, a good many peacocks (*Nymphalis io*) – two courting on flowering **blackthorn** in field hedge. Also a few **brimstones** (*Gonepteryx rhamni*), tortoiseshells (*Aglaia urticae*). One comma (*Polygonia c-album*) at the same spot as 13 March.

22 APRIL 1948.

818A 2 ♂ *Hemerobius humulinus* L. C.A. Elbourn det. 1963.

15 APRIL 1948. WYTHAM WOODS***

A **holly blue** on the lane near S 33 – there are hollies in the Abbey garden near. (*Lycaenopsis* now *Celastrina, argiolus*).

22 APRIL 1948. WYTHAM WOODS.

Went out and helped Southern & Co. to do a dusk sound-count of tawny owls on Radbrook Common. It was a clear cold full-moon evening, with rather a breeze, and only a few owls were calling. They began about 7.30 p.m. (G.M.T.) as the day birds were still shouting into the growing dusk. By nine o'clock all was silent, and the owls closed down temporarily too.

On small **privets** (3 – 5 ft.), in green early leaf and with still some old berries, at the margin of oak-beech-sycamore wood on the edge of Rough Common, by the Chalet, I got by beating:

2 small Hemerobiids with speckled wings

818A

1 small yellow banded bee or wasp. *Nomada panzeri* Lepeletier ♂ O.W. Richards det. 1948.

B

At my owl counting point, beech-sycamore belt between Radbrook Common and the field to its northeast, I got woodland edge

1 *Hemerobius micans* Olivier on under side of sycamore leaf. C.A. Elbourn det. 1963

819

{reverse side}

22 APRIL 1948.

22 APRIL 1948. WYTHAM WOODS***

From 8-8.30 p.m. (G.M.T.), although it was rather cold for insect activity, I searched by torchlight in the moonlight-dark on sycamores in mixed deciduous (mainly sycamore) wood bordering the north side of Lord's Common. Under side of leaves: 820

Green aphids abundant and moving about. n.k.
 1 *Hemerobius* A
 2 *Halyzia 16-guttata* (L.) adult no larvae at all n.k.
 Many *Coccinella 7-punctata*. no larvae at all
 A Syrphid larva, large B
 Various small, web spiders (between leaves, or tweaks and leaves)

A number of very delicate greeny bodied gnats. 2 ♀ 1 ♂ taken. They were hanging on or walking among the aphids. 1 ♂ 2 ♀♀ *Chironomus* (subgenus *Microtendipes*) *pedallus* (Degeer). K.G.V. Smith det. 1958. C

On sycamore trunks:

2 ♂ *Forficula auricularia* L., walking up 5-6 ft.
 One or two Opiliones.
 Some very young "Helix" (probably *Cepaea nemoralis*)

On dead grey squirrels hanging 5 ft. at "First Fork", Common Piece, 9 p.m. (G.M.T.) were several very sluggish flies. 821

1 Large blue-bottle *Calliphora vomitoria* L. ♀ G. Gradwell & B. Macpherson det. 1951 A
 1 delicate small long-winged fly *Neoleria inscripta* (Meigen). K.G.V. Smith det. 1958. B

{reverse side}

23 APRIL 1948.

B. *Helophorus aquaticus* (L.) P.J. Osborne det. 1956.

D. *Anacaena globulus* (Paykull) P.J. Osborne det. 1956.

23 APRIL 1948. WYTHAM WOODS.

In the afternoon, went up to "The Ridge" and Pond 3 sycamores. A keen open sunny day, with tremendous structure and delicacy in the landscape: **oaks** in flower and half leaf, elders in half-leaf, **hawthorns** nearly in flower and in vivid young leaf. But one can still see the main branches of trees through the light foliage.

Spring pool S 33 at the bottom of the lane, below the Forester's cottage, is some ten feet of very shallow water with muddy bottom and surrounded by rather large lush hedge-side herbage. I was surprised to find so much life in what I thought was a very intermittent bourne: no thorough search was made.

822

Gerris (? *lacustris*) on surface

n.k

UNDER A SMALL BRANCH IN THE WATER ON MUDDY SILT.

2 moderate sized grit-case caddis larvae

1 Large *Helophorus*

1 small *Helophorus* **H. flavipes** Fab. P.J. Osborne det. 1956

3 small oval beetles (2 k: 1 larger, one smaller)

Several stonefly nymphs

1 beetle larva

A
B
C
D
E
F

ON DAMP BARK OF THIS BRANCH;

2 small staphylinids *Lesteva longelytrata* (Goeze). C.E. det. 1950 (1 kept)

G

{reverse side}

23 APRIL 1948.

823 2 *Cidnorhinus quadrimaculatus* (L.). P.J. Osborne det. 1955.

Define major habitat as on page 69 across.

23 APRIL 1948. WYTHAM WOODS***

Bluebells just out, on Little Ash Hill and The Mount and the thinned sycamore area near the vehicle sheds.

Swept and abundant *Ceuthorhynchus* off a large nettle-goosegrass patch by the haystack site at the edge of Lower Seeds, (just near the “car park” at the Forester’s cottage.) 823

Under coral lump right out in Lower Seeds grass field (FIELD 1) was an *Abax parallelepipedus* (Piller & Mitterpacher), which suggests that there are a few nocturnal large Carabids out in the fields, as well as the numerous smaller forms. 824

Cowslips and **dandelions** and a few patches of **ground ivy** in flower in the sprouting grass-clover of this rolling limestone slope.

Up on the “Ridge” there is little life in the grass vegetation, though **rock rose** has its new leaves, and **wild strawberries** and ground ivy are in flower, and the big **horse chestnut** flowers just opening above drooped new leaf fans. Several peacocks (*Vanessa io*) flying and settling on the ground. No *Cicindela* seen, though I looked for them.

Pond 3 Sycamores. Perhaps it is the long drought this spring (until recent storms) and the shallow soil that has held them back. None are yet in full leaf, and only one or two have any flowers. The aphids are universally abundant and now have many winged forms.

{reverse side}

23 APRIL 1948.

B 13 ♀♀ *Taeniothrips inconsequens* (Uzel) G.D.Morison. det. 1948. 1 alcohol tube.
See notes CN 202/3/1 – 20.

For major habitat definition see page 69 across.

825F *Diplazon ornatus* (Gravenhorst) [as *Syrphoctonus*]. J.T. Perkins det. 1952

23 APRIL 1948. WYTHAM WOODS***

Sycamores*** 2.15-3 p.m. (G.M.T.)

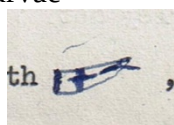
Aphids numerous, green wingless and winged. Very few brown parasitized seen. 825
(Dark green immobile ones emerged next day as perfectly good winged forms). n.k.

Thrips abundant in the flowers, in a sample of snapped flowers only, sorted in the lab. [B]
Only one or two from similar sample of leaves, from non-flowering trees. Plenty of winged and unwinged aphids on flowers. Also 2 tiny caterpillars.

1 *Meligethes* from flowers. ***M. aeneus*** (Fab.) P.J. Osborne det. 1956 [C]
5 very small ? Lathridiid beetles on flowers sorted in lab. (1 kept): ***Corticaria similata***
(Gyllenhal) J. Balfour-Browne det. 1950. [D]

From beating leaves:

1 medium ichneumonid, orange-red legged [F]
1 small globular apple-green spider, another small spider, both immature ♀ ***Aranea***
curcubitaria {? *curcubitarum*} L. E. Duffey det. 1951. [G H]
Immature ***Aranea*** ? ***curcubitaria*** L. E. Duffey det. 1951 [J K]
1 ***Calvia 14-guttata*** (L.) C.E. det. 1950 [L]
A few ***Coccinella 7-punctata*** (some on ground too) [M]
No ladybird larvae



Minute moth, tiger colours, fawn and silver, upper side of leaf. S
{reverse side}

825N ***Episyrphus cinctellus*** (Zetterstedt) ♀ B. Macpherson det. 1954

827B ♂ Common heath moth (***Ematurga atomaria*** (L.)). [Eats ling and heather and is abundant on heaths also clover, trefoil, broom etc.] G.C. Varley det. 1949.

23 APRIL 1948. WYTHAM WOODS***Sycamores***

825

Some "Syrphus" adults hovering, or settling. N1 taken from upper side of leaf.1 Large Syrphid larva on upper side of leaf, presented as Du Faur slide. Strong orange mark dorsally; rest pale yellow (as C.E. 820 B). n.k.2 small bugs (beaten) *Anthocoris nemorum* (L.) G.G.E. Scudder det. 1956 P1 small bee *Andrena nigroaenea* (Kirby) ♂ O.W. Richards det. 1948 RA few geometrid caterpillars n.k.

Walked back along the north border of Field 1 (Lower Seeds), where there is a very fine high scrub at the edge of the mixed oak etc. wood: of large spindle, hawthorn, blackthorn, crabapple, elder.

On the hawthorns were *Lochmaea crataegi* (N.K.) and a Hemerobiid: not *H. micans*, but dark speckled. 826 lost

Along here is an old quarry pit (Q 1) in the Coral Rag, fenced off from the field. A few *Bombylius major* were hovering over the ground, but I could find no *Andrena* colony. 3 P.M. (G.M.T.).

Two speckled woods (*Pararge aegeria* (L.)) rose from the *Brachypodium* verge of Pond 3 sycamores, at the field edge. (1 ♀ k). 827A

2.45 p.m. (G.M.T.).

Also a moth flying at edge of grass/scrub verge in Field 1. 827B

{reverse side}

23 APRIL 1948.

23 APRIL 1948. W YTHAM WOODS***

The dead squirrels at “First Fork”, Common Piece, were absolutely bursting with bluebottle and other carrion flies, that were clustering round any exudations.

Took only:

828

3 “House flies” ♀♀ *Hydrotaea dentipes* (Fab.) K.G.V. Smith det. 1958.

A

1 Small brown fly *Neoleria inscripta* (Meigen) K.G.V. Smith det. 1958.

B

2 Small black Sepsid flies *Piophilha varipes* Meigen. (1 kept) K.G.V. Smith det. 1958. C

{reverse side}

11 MAY 1948.

832B A good many dead individuals also, in galleries

832C Details by A. Macfadyen, 1948, as a species of Uropodid (Oribatid) mite – a group specialised for riding on but not parasitizing beetles. (2 slides; 1 alcohol tube). Savely (*Ecological Monographs*) notes Uropodids as fungus-eaters in logs.

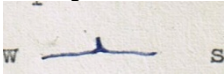
833 *Scolytus scolytus* (Fab.). C.Elton det. 1955.

11 MAY 1948. WYTHAM WOODS.

Today was damp and warm, the air saturated after heavy and prolonged thunder showers the previous evening.

The Forester showed me fresh **ash logs** by his house, on which numerous *Hylesinus fraxini* (Panzer) had got to work. 832 [A]

The clean bark had little piles of sawdust here and there, and one could find ♂♀ together

inside the shallow  shaped galleries. [B]

In one, with a ♂ and ♀, there were a fair number of globular dark mites walking on the beetles and in the gallery, which must have come on the beetles, I think. [C]

He also showed me fresh logs of common elm nearby, with many elm bark beetles at work, boring through the thick bark and ¼–½ in. down into the sappy wood. 833

{reverse side}

11 MAY 1948.

834B *Anaspis maculata* Geoffroy in Fourcroy. P.J. Osborne det. 1955. (not kept)

Major habitat defined as on page 69 across except put “Aphids scarce.”

11 MAY 1948. WYTHAM WOODS***

Walked up from the Forester's House outside Little Ash Hill wood margin, to "Pond 3 Sycamores". This big field has a crop of **cocksfoot grass** springing, but can still be walked in. There is a very sharp difference in the grass growth in the hollows and deeper soil, and on the rocky knolls.

On the margin of Little Ash Hill mixed deciduous wood and the field [No. 1] [= Lower Seeds], **hawthorns** and **spindles** and **oaks** (young leaf) are in flower.

Beating the big isolated spindle tree gave:

834

Several *Anaspis* (1 kept)

2 speckled Hemerobiids ♀♀ ***Hemerobius humulinus*** L. C.A. Elbourn det. 1963.

1 very smoky Hemerobiid ♀ ***Kimminisia betulina*** (Stroem) (var. *melancholica*) C.A. Elbourn det. 1963.

B
C
D

Beating flowering haw:

835

1 ***Acanthosoma haemorrhoidale*** (L.)

"Pond 3 Sycamores". 2-3 p.m. (G.M.T.).

The spectacular thing was the disappearance of aphids from most of the leaves and the consequent scarcity of aphid predators. The greater number of leaves were entirely without aphids. The one tree with a good many flowers had its aphids, though not very abundant, and one tree (without flowers) at the corner had a small aphid community.

{reverse side}

11 MAY 1948.

Major habitat definition, see previous page.

836L *Syrphidis ribesii* (L.) ♀. B. Macpherson det. 1952.

836G ***Grammotaulius atomarius*** F. ♀ ["exactly similar to a ♀ so determined by M. E. Mosley and almost certainly this and not the rare species, which is sometimes very like this in the ♀. No figs. of ♀ genitalia available". L.W. Grensted].

11 MAY 1948. WYTHAM WOODS***

It is conceivable that the rain-storms last night had something to do with it, but it seems more likely that my observation of 11 MAY 1947 (!!) is the explanation, and that flowers are a necessary stage in the life cycle migration; unless there is an alternative host plant.

Beating gave the following (non-flowering trees of course): 836

Wing or unwinged aphids. A dozen per beat into tray perhaps. n.k.
 Large brilliant green sawfly 2 ***Tenthredo viridis*** L. R.R. Askew det. 1961 (as *Rhogogaster* v.) ♂ + ♀ in same beat, fell together. B
 Ditto 1 ♀ C
 3 smaller sawflies, black shiny above, with white papilla on thorax, sides & belly light with darker markings. ***Macrophya rapae*** (L.). R.R. Askew det. 1961 [as *Pachyprotasis* v.] D
 1 small parasitic hymenopteran.
 Syrphid larvae. A few. One pupa emerged as large *Syrphidis* L
Coccinella 7-punctata adult a few. n.k.
 3 ***Hemerobius lutescens*** Fab. 2 ♂♂, and one with no body. C.A. Elbourn det. 1963. F
 Large black Bibionid fly common
 Huge Limnophilid caddis. ♀ ***Grammotaulius strigosus*** (Curtis) = *atomarius* (F.) L.W. Grensted det. 1948. G
 2 ***Phyllobius oblongus*** (L.) P.J. Osborne det. 1955. H
 1 bug ***Harpocera thoracica*** (Fallén) G.G.E. Scudder det. 1956. J
 1 small ladybird *Propylea (Coccinella) 14-punctata* (L.) K
 (no ladybird or lacewings larvae)
 Spider: ♀ ***Clubiona pallidula*** (Clerck) E. Duffey det. 1951. L

{reverse side}

11 MAY 1948.

837A ***Ophion ventricosus*** Gravenhorst [*O. impressus* (Thunberg) in K. & H.] J.F. Perkins det. 1951.

837E ***Tenthredo atra*** J.F. Perkins det. 1952.

D ♂ ***Bibio marci*** (L.) K.G.V. Smith det. 1958.

G ***Bibio marci*** (L.) ♂ B. Macpherson det. 1954. Not kept.

H Dun-bar *Cosmia (Caradina) trapezina* (L.) A.M. Emmet det. 1949. This is a general tree (oak, elm...) – shrub (sallow...) feeder, and is partly cannibal on other caterpillars.

K 1 ♀ and 18 larvae (instar. II) *Taeniothrips inconsequens* (Uzel). G.D. Morison det. 1948. 5 slides.

838B ***Bibio marci*** (L.) ♀ B. Macpherson det. 1954.

11 MAY 1948. WYTHAM WOODS***"Pond 3 Sycamores" ***

837

2 huge reddish Ichneumonids, cruising among leaves

A1 ♀ *Panorpa germanica* L. on upper side of leaf, 3 ft. C. Elton det. 1952B1 small bee, ditto. *Andrena jacobii* Perkins ♂ O.W. Richards det. 1948.C1 Large black Bibionid fly, alive, on upper side of leaf, with a black-bodied red-legged hymenopteran sitting on it, as with prey.D E1 Green spider among leaves, with a similar fly as prey, dead. These **flies** sailing about in great crowds everywhere today. Immature ♂ *Araneus* ? *curcubitina* L. E. Duffey det. F GMany, mostly green, medium-sized caterpillars on undersides of leaves. Some kept to breed out. Failed except one + pupa case.

Some making complete leaf-roll of small leaves. Kept to breed out. 3 failed.

A few **thrips** on flowers (by lab. sorting), mainly young.K

A huge long-legged for spider running in grass tussock at sycamore – field margin, with a large Bibionid fly in its jaws.

838A♀ *Pisaura mirabilis* Clerck. E. Duffey det. 1951.n.k. B12 MAY 1948. WYTHAM WOODSMonica Vizoso saw a blindworm (*Anguis fragilis*) in glade in open oak-sallow wood, in 10-Acre Copse. Southern has previously seen them in this area, but not elsewhere in the Wood; though Venables found a dead one in Marley Wood.

{reverse side}

12 MAY 1948.Blindworms, see page 85.

13 MAY 1948. WYTHAM WOODS.

Went to 10-Acre Copse with Monica Vizoso, Peter Hartley and Francis Ratcliffe, to slash paths through heavy thorn scrub, along the observation lines of her acre grid.

Collected some more *Hylesinus fraxini* (Panzer) in bark of ash logs at Forester's Cottage paddock. Saw no more mites. One female beetle *in situ* with eggs in side nicks of parent gallery mounted as slide. Some more parent galleries dried to keep in cellophane. 839

One was struck by the very large amount of female *Salix* (probably *caprea*) in seed: it is not conspicuous in early spring, but is evidently one of the dominant scrub species here.

Here, and in Common Piece etc., **oaks** are very heavily infested with caterpillars, so that the leaves are almost gone. I saw one sycamore among oaks, with leaves being completely stripped from the top downwards.

Just above Stream 7A a young frog about 1-2 in. long was on the ride.

While I was cutting blackthorn scrub a nightingale sang hard at me from close to!

One pearl-bordered fritillary (which species ?) flying at 2 ft. long ride between West Heronry Plantation and 10-Acre Copse, near where I formerly took an *A. euphrosyne*. One or two brimstones and small whites flying in the woods.

On the ground of 10-Acre Copse there is much bugle (*Ajuga*) and **wild strawberry** in flower. **Hawthorn** flowering. All scrub in leaf now, making very dense cover.

Hartley says willow wrens frequent the *Salix cinerea* of Marsh 3, in the spring, feeding on fallow insects. He also says 2 pairs of **hobbies** are in the wood again.

The **aspen** patch in 10-Acre Copse seems poor in condition, with a good many dead branches.

{reverse side}

15 MAY 1948.

840 A & B 2 *Phyllobius pomaceus* Gyllenhal. P.J. Osborne det. 1955.

15 MAY 1948. GODSTOW, OXON.

Went by bus to Wolvercote and walked to "The Trout". It was a hot sunny day with rising cool wind from the east, Whit Saturday, boats milling on the River, meadow of infinite yellow buttercups blazing in a sheet around a herd of little goats; and general aura of content.

On common nettles on the riverbank of grass was a population of metallic blackish green weevils, of which I took two in copulation. (same as C.E.).

840 A & B

Lepidium draba is in flower on the car park ballast-heap at the "Trout". It has increased greatly in abundance since I first noticed it a few years ago. It has a thick strong honey smell. I saw a lot of (I think) the same flower along the railway bank and a rubbish dump just north of West Drayton, from the train going to London.

16 MAY 1948. WYTHAM WOODS.

H.N. Southern reports the first black *Tabanus* (almost certainly *micans*) of the year attacking him at the "Black Hut", Common Piece. Record not used.

{reverse side}

27 MAY 1948.

Syrichthus malvae (L.) some of its host plants, such as *Rubus*, *Fragaria*, *Agrimonia* come here.

Also larvae in alcohol det. by R.N. Chrystal, 1948. Characters are:

- 1) 4 or 5 spines on left mandible.
- 2) Curved thoracic legs
- 3) Hairs on dorsal side of 10th abdominal segment.

27 MAY 1948. WYTHAM WOODS.

Went out at 11.15 a.m. (G.M.T.) till 3.15 p.m., to prepare for and take the Ecology Class, for sycamore fauna (See B...)

The area was all in Marleywood Plantation, which really presents a very natural picture of thick woodland of oak, ash, beech and sycamore, with heavy sapling growths of ash and sycamore, plenty of underscrub like dogwood, spindle, elder and haw, especially along the edge. The drive has a grass "glade", of calcareous fascies, with some *Bromus erectus* in flower. In the shadier parts of this grass are many *Listera ovata* in flower. In the open sunny grass the **grizzled skipper** flies. 841 lost

The oaks are terribly decimated by caterpillars this year, though one sees an occasional healthy tree. Many of the **sycamores** have suffered very badly, though again this is very patchy, and some under defoliated oaks are very little harmed.

G.C. Bolster found three (2 ♀ 1 ♂) stagbeetles (*Dorcus parallelipipedus* (L.)) in the middle of a big blown beech trunk in thick mixed wood, in the brown rotten central wood, which was much galleried & contained a vast whitish yellow 'chafer' grub probably of this species. 843

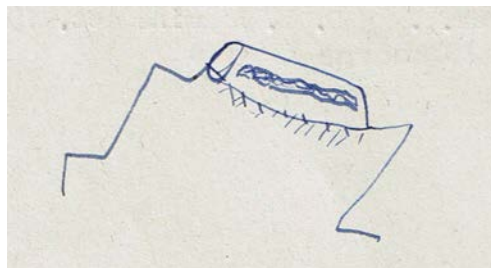
By the edge of the lower part of Stream 5 in thick wood, sweeping *Carex pendula* (now in flower) produced one ♀ *Nemoura erratica* Claassen D.E. Kimmins det. 1949. (See letter 2.3.49). That may be *Helodes* = *H. minuta* (L.) P.J. Osborne det. 1956 844 A B

{reverse side}

Sherardia arvensis in flower. C.E. 845 A. Not kept

Major habitat definition, see page 69 across. But put "Aphids very scarce."

A, B, C, pupae did not hatch.



2 JUNE 1948. WYTHAM WOODS.

With a Danish visitor, J. Anderson, and Monica Vizoso, who went off to another area while I visited “the Ridge” and “Pond 3 Sycamores”. High wind, warm, showery and sun.

The Ridge. (2 p.m. G.M.T.)

Elder just coming into flower, **hawthorn** over. **Oaks** very defoliated **ash** in full leaf not touched, **sycamores** locally badly eaten. First few flowers of **rockrose**; in full flower, also **houndstongue**. **Teasels** and **ploughmen’s spikenard** still rosettes.

There was slight damage (holes) in ploughmen’s spikenard leaves, also some old leaf mines type.

On a flowering *Cynoglossum officinale* two small brown flea-beetles (*Longitarsus*), 1 k. lost

POND 3 SYCAMORES. (2.15-2.45 p.m. G.M.T.).

846

One or two of the trees had leaves badly eaten by caterpillars, but as a whole it is not serious. Specimens kept. The only caterpillars seen were all geometrids of a fairly large size and varied colours. Kept three (different species) to breed out. D

There was also a small dull blueish green larva that rolls itself up in the tip of a leaf and secures the roll with silk threads down the join. One kept to breed out. E

(This was not uncommon also in Marleywood Plantation, 27 May).

No thorough collecting was done, the main object being to find out the sycamore aphid situation – which is extraordinary. Aphids are extremely scarce now, and by searching and beating for twenty minutes

{reverse side}

2 JUNE 1948.

J. ♂ *Syrphidis tormis* (Osten-Sacken) B. Macpherson det. 1954.

2 JUNE 1948. WYTHAM WOODS ***

____ I only collected one or two dozen, all winged green ones of genus *Drepanosiphum*. F
They seemed rather active, flying easily, but this only emphasised the scarcity seen during
beating. When brought in, several flew quickly to the window, into brilliant shafts of sun.
(There were no black aphids, and no groups of tiny young, which almost certainly come from
the latter).

Parasitized aphid husks were quite as numerous as live aphids, perhaps much more so, and
some were kept to breed out, others being already "fledged" as parasites. A good many empty
skins of aphids, but I am not sure whether these are moults or ones sucked by predators.

Of predators, I saw two *Hemerobius* (one kept). *H. lutescens* Fab. (no body). C.A. Elbourn
det. 1963

Two adults Syrphid flies (one kept);

one ladybird larva (no adults),

several Cantharid beetles, but the *Cantharis* were mostly flying about over the field and wood
margin. There were also some moth parasites, Hymenoptera on leaves, and spiders, and a
good many visiting flies.

Among odd insects collected was a winged psocid (n.k.).

Lost

There was a little red Eriophyid mite infestation of the leaves, and leaves were all full out,
canopy now good, after the rains.

{reverse side}

2 JUNE 1948.

2 JUNE 1948. WYTHAM WOODS ***

I searched in the wired-in bit, and the nearby woods between the Deer Pond and Common Piece, for **hornet** nests, without success. There are some very fine full-grown sycamores among the oaks and ashes, and there are a great many younger sycamores of all ages. One quite dead pole of sycamore, with the bark stripping off, and young **earwigs** under the loose bark (up to circa 5 ft.), and the dry hard wood had bore pin-holes, by which was a dead very thin "furniture beetle" of some kind.

846

Ptilinus pectinicornis (L.) C. Elton det. 1955.

Checked against original by
C.E. 5.5.56, for ticks etc.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 5.

3 June 1948 - 4 August 1949.

C.E. 847-990

Red ticks⁹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles¹⁰ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept

⁹ Shown as **bold** in edited version.

¹⁰ Edited to A or 00

3 JUNE 1948. WYTHAM WOODS.

Took the Zoology class to Marleywood Plantation to do a survey of woodland litter, 1.15-3.15 p.m. (G.M.T.).

Sweeping the 2-3 ft. *Carex pendula* (in flower) along the lower part of Stream 5, in dense deciduous wood, I found many *Tetragnatha montana* Sim, 847
 and took a *Helodes* adult *H. minuta* (L.) P.J. Osborne det. 1956 A
 8 ♀ and 1 ♂ *Tetragnatha*. (one ♀ with egg mass at end of abdomen). C.E. det. B

In a large rotten, very old deciduous log on the wood margin by the drive was a large nest of *Myrmica laevinodis* Nylander (2 queens). A.J. Pontin det. 1954. 848

{reverse side}

22 JUNE 1948.

A. *Myosotis arvensis* (L.) Hill W.J.L. Sladen det. 1954

B. *Orchis fuchsii* Druce W.J.L. Sladen det. 1954

853 C Common swift (*Hepialus lupulinus* (L.)). South says lays at roots of grass etc.; flying at dusk. Meyrick says larvae on *Lamium*, *Plantago*, *Narcissus* etc.!

D. ♂ *Tetrix vittata* (Zetterstedt)

22 JUNE 1948. WYTHAM WOODS.

Drove up to "Upper Ride" (W. of Great Ash Hill) just as dusk was beginning (8.30-9.15 p.m. G.M.T.). = "The Great Light"

Collect a dryish thin wiry *Myosotis* from the grass- *Juncus inflexus* association of the main ride, 853A
also a spotted *Orchis* with ? rabbit-nibbled leaves, from among *Juncus-Hypericum tetrapterum*. B

At the base of this *Juncus*, took a ? *Hepialus* moth that was fluttering and settling, C
also an *Acrydium* the short grass near rushes, at the Chalet Road end. D

The **oak** trees are partly having young and yellow-green leaves after complete defoliation, but some seem to have escaped defoliation here and there, though the latter had large numbers of *Tortrix viridana* adults (1 k.) 854

 Took some flowering white bryony (*Bryonia dioica*) trailing on the bracken between oaks. 855

{reverse side}

24 JUNE 1948.

856 The dark pink petals fall through. *E. cicutarium* agg. W.J.L. Sladen det. 1954

856A Collected 2 beautiful large moths with white and black-dotted ermine forewings, sitting on the lower leaves of *Cirsium eriophorum*, just below Pond 3.

Phycitid, *Myelois cribrumella* (Huebner). Two specimens. (They are not *Yponomeuta*, which are Tincids, a very similar colouration but smaller). Meyrick says in flower heads of *Carduus*, *Onopordon*, later entering stems, August -- April. The only Phycitid like this at all. (1 kept).

24 JUNE 1948. WYTHAM WOODS.

Visited Spring 2 and Stream 7A, with Prof. and Mrs. G. P. Baerends from Gröningen.

The limestone top path at My Lady's Seat was bright with small flowers in the short turf (*Erodium cicutarium*, plant k.; a dissected-leaved pink *Geranium*, and *Sherardia arvensis*); also on the margins were societies of **yellow rock rose** and **viper's bugloss** in flower. In short grass turf among the main *Brachypodium* was a lot of flowering **wild thyme**. 856

Stream 7A had only soggy masses of partly skeletonized leaves at the source, with apparently little animal life but some fat fly larvae. Owl-flies in attendance.

Lower (but above the shallows) was a clear runnel of water over blackisk {sic =? blackish}

{reverse side}

24 JUNE 1948.

860 *Psithyrus barbutellus* (Kirby) ♂. O.W. Richards det. 1948.

.

24 JUNE 1948. WYTHAM WOODS ***

limestone grit silt. Here were *Gammarus* (very small ones mostly), *Helodes* larvae, etc. In the "Jungermannia" that grows in the mossy edge under water, 2 *Anacaena*-like water beetles. 2 *Anacaena globulus* (Paykull) P.J. Osborne det. 1956. 858

The silt etc. here has a very few small Naviculoid diatoms. A sample was taken for high-power searching, but seemed singularly devoid of micro life -- only one or two nematodes. Prof. B. {Baerends} had expected to find case-bearing amoebae.

A ♀ *Haematopota pluvialis* (L.) alighting on man near here. 859

On the edge of Thorny Croft I took a **bumble bee** that looked like a *Psithyrus*. It was searching over a bramble at 1 ft.

On the path by here, a 8 in. long rotten branch section proved full *Myrmica*. The bracken in the woods is now shoulder high. 860 n.k.

{reverse side}

5 JULY 1948.

7 JULY 1948.

865A *Thymus serpyllum* agg.

865C *Hypericum hirsutum* L. W.J.L.Sladen det. 1954

5 JULY 1948. WYTHAM WOODS.

Went up to Rough Common with Prof. Thomas Park, from Chicago University. Met Probitts, who said:

He has **Sirex** sawfly and its parasite **Rhyssa** in larches in the East Heronry Plantation, and Chrystal is going to do some work.

On Rough Common, **viper's bugloss** was flowering along the path edge, with wild **thyme** (to which a **tortoiseshell** visited), and a good deal of **rock rose** in the *Brachypodium*.

A few **marbled whites** about.

[E.W. Jones told me the other day that there was in 1947 a **hornet's nests** in a hollow oak in woods just below Pond 1, perhaps 10-15 ft. up.]

7 JULY 1948. WYTHAM WOODS.

Went up to "The Ridge" at lunchtime 12.30-1.45 p.m. (G.M.T.). A strong breeze, but warm sun mostly.

Flowers noticeably out are **rock-rose**, ***Brachypodium pinnatum***, **wild thyme**, **viper's bugloss** (a few, more in the hayfield margin), **wild rocket** (one large plant), **white bramble**, **St. Johnswort** (at edge by bramble and bracken).

865	A

One **mullein** in bud, with very fat speckled caterpillars on it. n.k.

C

{reverse side}

7 JULY 1948.

A. *Agapetes galathea* (L.) 3 ♂♂

B. *Coenonympha pamphilus* (L.) ? sex

D ♂ *Tetrix vittata* (Zetterstedt)

867 2 *Curculio pyrrhoceras* Marsham. P.J. Osborne det. 1955

7 JULY 1948. WYTHAM WOODS ***

"The Ridge" ***

866

A few **marbled whites** flying around, and others rose when disturbed from the ***Brachypodium*** (3 k.).

A

Also a **small heath** (k.).

B

On the grass was a small green homopteran (only one seen).

C

Sweeping *Brachypodium* gave an ***Acrydium***
and one adult ♀ each of ***Chorthippus parallelus*** and a ***C. bicolor***

D

(n.k.).

On an oak at the edge of the Ridge I got two balanine weevils by **beating**, very
active.

867

Caught a ringlet (***Aphantopus hyperanthus***) flying over tall bracken on margin of
wood and the field.

868

A jar full of brown water with mosquito larvae in it, from a hole on the big stump of
a black poplar felled last winter, on way up to forester's cottage. Open situation in
long hedge gap, woods on other side of road.

869

Bred out 1♀ ***Culex pipiens*** L.

Kept larvae and pupae in alcohol (mounted on 2 slides).

{reverse side}

10 AUGUST 1948.

10 AUGUST 1948. WYTHAM WOODS.

Went out 12 noon-3 p.m. (G.M.T.) mainly to get some fresh ash logs by cutting down with my axe a small tree in Thorny Croft. As I was doing so a full grown ♀ *Meconema thalassina* jumped down either off the ash or the oak close to it.

Saw Probitts. He said:

- (1) Very few ground wasps nests this year (they are ab. {= ? abundant; ? absent} in Oxford now). He found where a **badger** had tried but failed to grub one up, near the Singing Way.
- (2) A student of Chrystal's is at work on the ash bud moth in Wytham.
- (3) There was a **wild hive bees'** nest in 1947, but not in 1948, in a large solitary ash above the new conifer plantings on Radbrook Common.

{reverse side}

10 AUGUST 1948.

889A L.W. Grensted det. 1949 as possibly new species of *Phytomyza*, but uncertain because abdomen missing. It may be *P. gentianae*, which is non-British.

The larvae go into the stems also. Some pupated; and emerged:

- 1 small fly
- 2 chalcids (larger, smaller)
- 1 chalcid (larger)
- 1 chalcid (larger)
- 2 chalcids (larger)
- 1 chalcid (smaller, LOST)

890 ♂ *Argynnis paphia* (L.)

10 AUGUST 1948. WYTHAM WOODS***

(4) His boy brought in a damaged **Cossus** caterpillar last year, from black poplar on lane up from Wytham. Has not seen adult here yet.

Today it was cloudy-sun and warm and the ground wet. Clouds of *Hydrotaea* on Thorny Croft and 10-Acre Copse.

The rides have quite recovered from the smashing they had with the Ministry of Supply tractors two or three years ago. I walked along above Common Piece and "Interplantation", also from S 30 back to Thorny Croft. There is grass turf mostly, with much **centaury**, that has leaves considerably infested with white mines of fly or moth (k. to breed out, and one specimen pressed). 889A

These were collected at Thorny Croft. There is also ground ivy, selfheal, and various other flowers. *Centaureum umbellatum* Gilib. W.J.L. Sladen det. 1955 B

In these green rides, including where they are flanked with thistles etc. I noted: 890

speckled wood

ringlet

silver-washed fritillary

(1 k.)

green-veined white

small white

peacock (1)

meadow brown

and was (at Thorny Croft top) attacked by *Chrysops caecutiens*.

The figwort occurs too, but seems all to be in seed now (*S. nodosa*). I saw no *Vespulas*.

{reverse side}

10 AUGUST 1948.

891A *Crunoecia irrorata* (Curtis). L.W. Grensted det. 1948. [Mosely notes it as a spring stream or waterfall form, often with *Tinodes* or *Wormaldia*.]

E *Notarcha ruralis* (Scopoli). Meyrick says it spins web in nettle leaves, it is widely distributed, adults in May. It is a Pyraustid.

892 *Notarcha ruralis* (see above).

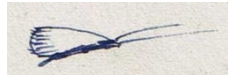
10 AUGUST 1948. WYTHAM WOODS ***

Visited Marsh 3, now at the season set in a jungle of bracken, from which one only emerges into a dense marsh jungle up to 4-5 feet high of *Carex*, **large horsetail**, *Epilobium hirsutum*, some **hemp agrimony** (both in flower) *Urtica* etc., tangled among the *Salix*, on which are draperies of **wild hop**. Very intense feeling of microclimate, isolation and spidery life.

Here, by sweeping the marsh vegetation I got:

891

2 small **caddis**, brown, circa 7 mm.



1 lost

A *Helodes minuta* (L.) P.J.Osborne det. 1956.

A smaller beetle *Cyphon paykulli* Guérin-Ménéville

[Letter 29.3.63] confirmed D.K. Kevan 1962, as this species name now *Coarctatus* Paykull

A small metallic brown moth or caddis, wings flat. (Not kept).

A **medium-sized**, thin-winged, white moth with delicate dark marks across it.

A
B
C

E

The stream was running.

On bracken in "Interplantation" 20 yards from Marsh 3, a **grass snake** was curled up "asleep" 2 ft. from the ground.

Visited the W. Heronry Plantation to look for larch sawflies but saw none. I caught a **moth** just like 891 E, on the nettly patch in a larch-spruce desert. Near here a *Phallus impudicus*. Also a handsome half-funnel bracket fungus and base of spruce trees.

892

{reverse side}

10 AUGUST 1948.

893 *Glyptotaelius pellucidus* (Retzius) [A pond and lake form that lines its case with cut leaf fragments.]

Mary Laurie has found the larvae of this in Pond 1 on Radbrook Common. It makes an extraordinary case covered with leaves (in this case bits of dead sallow leaves).

895A ♀ *Physocephala rufipes* (Fab.) L.W. Grensted det. 1950.

B ♂ *Conops quadrifasciata* Degeer L.W. Grensted det. 1950.

Open ride in mixed wood, Thorny Croft.

14 AUGUST 1948.

Hylesinus fraxini

10 AUGUST 1948. WYTHAM WOODS ***

In the middle of this larch part was a single large **hazel**. From it I beat a **large caddis** and saw another much smaller one!

893

They must be visitors from the river below.

Similarly I beat two smallish caddis from oaks in Thorny Croft.
But these may have hatched from Stream 7.

894

A family of young **sparrowhawks** very noisy in the W. Heronry Plantation.

On a flowering marsh thistle (*Cirsium palustre*) (dark purple, tall and free, specimen k.) flower was a **Conopid** fly of a dark pattern;

895A

on a **meadow thistle** (lilac, denser growth) flower was a very active **Conopid** that I completely mistook for a very small wasp. = T/5 (mixed) (edge)/3

B

These meadow thistles (*Cirsium arvense*) have a peculiar swollen stem gall (1 k.). It stunts their growth and seems to prevent flowering. Connold says the parasite is a **Urophora cardui**, a Trypetid fly that finishes gall about end of August, 4 fly larvae per gall.

C

Collect the wood **Campanula trachelium** which is scattered and not uncommon in the woods. W.J.L. Sladen, confirmed 1953.

D

14 AUGUST. WYTHAM WOODS.

Went up 3.30-4.30 p.m. (G.M.T.) to look for activities of **ash** bark beetles on live or dead trees, but found no significant evidence on the subject. Drove up the Chalet road to the "Great Light" ('Upper Ride') and from here walked down the vertical ride to Interplantation and wandered back through Great Ash Hill. It was dead calm, warm and sunny. The Great Light now has a mass of tall **teasels** in flower, standing in magnificent lines along the major part of the path. On the flowers were scores of fresh **peacocks**

{reverse side}

14 AUGUST 1948.

896C 3♂ **Tetrix vittata** (Zetterstedt)

14 AUGUST 1948. WYTHAM WOODS ***

(also sunning themselves on bracken), a dozen commas, several fresh brimstones, and a few silver-washed fritillaries, gatekeepers, green-veined and large whites. Also some ? ♂ bumbles and 1 brown argus.

On the lower field layer and grass were some meadow-browns, gatekeepers, walls and a large skipper, and ringlets.

The ground was sparkling with stretches of St. Johnswort (all *Hypericum quadrangulum*, which Druce records for Wytham, but says “very rare”, and “not seen lately”, and gives as “very local and rather rare” for Berkshire); and centaury, in flower. 896A

Sweeping this produces a striking beetle, head down in prayer, shining black with lateral yellow marks, *Cryptocephalus moraei* (L.) which N. Joy says comes on *Hypericum*, and Donisthorpe on *H. perforatum* at Windsor). 896B

The centaury leaves are extensively white-mined.

Sweeping also produced three *Acrydium*, the largest of which had conspicuous white marks on the femore. 896C

I was attacked by ♀ *Chrysops caecutiens* (L.). 897

No wasps or hornets were seen anywhere today! It is my impression the fruiting of *Scrophularia nodosa* is very poor, which might be a result.

{reverse side}

14 AUGUST 1948

898A A clavicorn, *Soronia grisea* (L.). N. Joy says on flowers and at *Cossus* trees (Donisthorpe mentions latter for Windsor; perhaps honey and sap flows have something in common).

B Copper underwing (*Amphipyra pyramidea* (L.)). Apparently Oxon. is about northern limit to ab. {? = abundance} (or was). It is a general deciduous tree-shrub feeder, including oak, birch, willow.

900 ♂ *Physocephala rufipes* (Fab.)

14 AUGUST 1948. WYTHAM WOODS***

On Great Ash Hill there are local aggregations of scattered old ashes, also areas of pure sycamore, with some fine old trees, and groves of their offspring, as well as much regenerating coppice, up to 8-10 ft. Sweeping sycamore gave only one aphid, and the only predator seen (apart from a few spiders) was one *Halyzia 16-guttata*. There is a complete knockout of the sycamore leaf community this year. Incidentally, most of the older trees show considerable effects of the caterpillar eating, though none are actually defoliated. The **oaks** have partly recovered, though many have mould badly on the leaves.

On the trunks of large sycamores harvestmen were very abundant, especially the small-bodied very long-legged one.

On one such trunk at 4 ft. was a **beetle**. Under loose bark of a dead young oak trunk at 6 ft. while several **copper underwings**. (1 k.) 898 A B

Collected a stem of *Paris quadrifolia* in fruit:
the leaves withered, but the bracts not.

899

By the cart sheds (Lovers' Barn) at the bottom of field there is a colony of woolly thistle (*Carduus eriophorum*) in flower - about 4½ ft. On one I took a **Conopid** fly with light lines on face. 900

Spindle now in green fruit.

{reverse side}

15 AUGUST 1948.

15 AUGUST 1948. WYTHAM WOODS.

Visited the "Great Light", ('Upper Ride'), "The Ridge", and Rough Common, 3.30-5.30 p.m. (G.M.T.). It was sunny but there was a strong west wind. As a result **peacocks** were fewer (and almost the only butterflies) on the teasel flowers in Great Light, and even they had a job to hang on. Collected two. The only other butterflies were a few "browns".

The plants in flower in Great Light are:

901A

<i>Dipsacus fullonum</i> (= <i>sylvestris</i>)	abundant
<i>Hypericum quadrangulum</i>	abundant
<i>Centaureum</i> sp.	abundant
<i>Prunella vulgaris</i>	abundant
<i>Scutellaria galericulata</i>	occasional
<i>Malva sylvestris</i>	occasional
<i>Euphrasia "officinalis"</i>	few
<i>Holcus</i> , and small grasses in turf.	few- abundant or dense
<i>Juncus</i>	l. dense
<i>Potentilla anserina</i> .	l. abundant
<i>Senecio jacobaea</i>	occasional
<i>Epilobium hirsutum</i>	occasional
<i>Carduus arvensis</i> (or ? <i>pratensis</i>)	few- abundant. (few in flower no galls).
<i>C. palustris</i>	l. abundant.

The association is essentially one of rather calcareous meadow of a damp facies. (cf. skullcap and rushes and willowherb), sheltered by the woods in glade fashion (cf. teasel, marsh thistle). The Light must lie about at the base of the Coral Rag shield (slopes above; and sandy rabbit holes on slopes below; cf. also the "Deer Pond" periodic spring). It differs quite

{reverse side}

902 A *Antherophagus nigricornis* (Fab.) P. J. Osborne det. 1956

902 B. ♂ *Conops quadrifasciata* Degeer. L.W. Grensted det. 1950 not kept

15 AUGUST 1948. WYTHAM WOODS ****

fundamentally from the dry limestone spaces of the top shallow rendzina soils, which are more like chalk grassland e.g. absent from the Great Light almost or entirely are: rock-rose, false brome, bugloss, ploughman's spikenard, houndstongue, harebell.

Hypericum quadrangulum does not seem to come on the dry tops, and Druce calls it wet-ditch, brookside species! I suspect that the Light may be a flat terrace of the Coral Rag that has had a good deal of plateau drift colluvium washed on to it and also has springs of a mild kind. Its dampness varies patchily, to judge by the *Juncus* clumps.

I swept no more *Cryptocephalus*, though paying special attention to the St. Johnswort, but got a small active bright brown clavicorn (kept) and saw some more *Acrydium vittata*; also swept a **Conopid** fly.

902 A B

Rough Common. Noticed quite a scattering of harebells (*Campanula rotundifolia* -- the leaves are really thin and narrow up the stem) growing up to flower in thickly dominant *Brachypodium pinnatum*. Also quite a large society of *Hypericum perforatum*, growing on what may have been the burned area, as the grass seemed thinner. n.k.

One marbled white only.

{reverse side}

906B. 2 *Limnophilus lunatus* Curtis. L.W. Grensted det. 1948.

907 3 young *Metatropis rufescens* (Herrich-Schaeffer).

15 AUGUST 1948. WYTHAM WOODS *****

Swept from (wind-lashed) birches on the south edge of Rough Common were several *Lithocolletis* 904 A

I beat a beech near by and got none more. Also a white and grey smallish moth on the birch. *Argyroploca betuleta* (Howarth) C. Elton det. 1952. [B]

On a group of rather wind-checked wayfaring trees (*Viburnum lantana*) at the same spot (and out from trees, in the scrub zone) were some large galerucids -- ***Galerucella viburni*** (Paykull), said by N. Joy to come on *Viburnum opulus*. They have very soft elytrae, easily dented. (They have been recorded from Headington Wick Copse.) This might almost count as a calcareous scrub limited species. [905]

The Ridge. Very blowy up here and no collecting was done on the bare ground. Beating an elder (close to an oak) produced a large Fulgorid (***Cixius nervosus*** (L)) W.E. China det. 1951. [906A]

Beating oaks and elders produced no more, but from oak a ***Meconema thalassina*** adult was beaten, and also two medium-sized **caddis** with marbled brown wings. [B]

I visited the rabbit-fenced triangle of wood on the way down, above Common Piece, and swept a few young ***Metatropis*** off **enchanter's nightshade** patches (the fruits green but sticky). Kept in alcohol. [907]

Also here found a very old twig of ash, dead, with the workings of ***Hylesinus oleiperda*** (n.k.).

Collected some **viper's bugloss** from low limestone grassland, Lord's Common to press. [910]

{reverse side}

15 AUGUST 1948.

911. ***Sphaerozetes*** one of three species normally found in moss etc. (cf. in Cothill *Molinia* soil). A. Macfadyen det. 1949. [C.E. 911*]

4 SEPTEMBER 1948.

16 AUGUST 1948. WYTHAM WOODS ***

Half-a-dozen *Sympetrum* were settling and cruising on the sunny road up to the Chalet (by the fenced triangle), between thick deciduous wood and scrub.

Also some shining dark red-brown globular **mites** clustering in a cracked twig (bark) of dead ash branch on large old ash. 911

4 SEPTEMBER. WYTHAM WOODS.

Went up at 9 a.m. (G.M.T.) to the Chalet, to see where R. Muir had been watching where the bats roost. There is one long-eared (*Plecotus auritus*) that enters the roof ridge into the top long lab., and half-a-dozen **pipistrelles** that get into the double wall through a gap under outside weatherboards.

I noticed that the **sycamores** here are mostly heavily blotched with black fungus (*Rhytisma*), and this seems general in the wood. 913

{reverse side}

4 SEPTEMBER 1948.

6 SEPTEMBER 1948.

4 SEPTEMBER 1948. WYTHAM WOODS *****

Collected a small flowering plants of *Erodium cicutarium* agg. W.J.L. Sladen det.
1955. from the almost bare coral of Lord's Common;
and some *Hypericum quadrangulum* from the Great Light.

914

915

6 SEPTEMBER. WYTHAM WOODS.

Spent 4 hours (7.15-11.15 a.m.- G.M.T.) going round Mick Southern's trap lines, with him and Thomas Park, on the North Hill, between the Chalet, Great Ash Hill, West Heronry Plantation, and the lower areas (of our Reserve). Great catch of *Apodemus* and *Clethrionomys*, with two *Sorex araneus*. The chief things one

{reverse side}

6 SEPTEMBER 1948.

6 SEPTEMBER 1948. WYTHAM WOODS****

noticed about the woods were:

- (1) The autumn had begun. The slow warming sun and mounting light, and the still spider-bound plants, and the rather overspent moth-eaten look of the woods, and the yellow or brown tinges beginning to appear in **sycamore**, St. Johnswort, and some grasses, marked the turn. There is hardly any leaf fall yet, only a few **sycamore**: but when one sweeps the **dog's mercury** the leaves sometimes break brittle from the stems. The birds are rather silent, but we sometimes heard a marsh tit, a hobby, a pigeon, or a bullfinch.
- (2) The **sycamore** is much infested with black blotch, and that some trees are badly tattered from the early summer caterpillars. **Oaks** that were bare now have a solid green replacement of foliage -- but it is barren of life (and of acorns) like the sycamores.
- (3) On Great Ash Hill there are **fallow deer** tracks along paths -- one looking like a deer -- plus -- badger path.
- (4) The ground vegetation of the oak-ash-sycamore is very uniform and unvaried: **Dog's mercury** (with moss layer that seems richest on the limier upper slopes) far dominant, dully so. Small followers up are bracken (locally dominant where canopy is thin or absent). **Arum**,

{reverse side}

6 SEPTEMBER 1948.

916 ***Feronia madida*** (Fab.) R. Miller det. 1951.

917 A & B ***Nebria brevicollis*** (Fab.) C.E. det . 1950.

One of each kept.

6 SEPTEMBER 1948. WYTHAM WOODS*****

Campanula trachelium, etc. With clearing or rides many species come in abundantly.

- (5) The **aspen** group. The adult trees are poor and have many dying branches, but there are some new saplings at the edge.
- (6) **Elders** and **hawthorns** carry a heavy crop of berries, but **oak** and **sycamore** have largely failed.

Other special observations:

- (7) We saw **Gentiana amarella** in flower in the green ride below and north of the Chalet, where Mick says it was scarce last year. He has seen **bee orchids** this year "on the top".
- (8) A *Pterostichus* in mouse trap spruce litter in West Heronry Plantation. 916
- (9) Four other black **ground-beetles**, of which a good many were seen running (8.15 a.m., G.M.T.) in *Mercurialis* mixed wood, and again (10 a.m. on fox earth bare sand (damp), and north foot of Great Ash Hill just above Heronry Plantation. They looked as if they were migrating. 917A B

{reverse side}

6 SEPTEMBER 1948.

- 918 3 *Brachypterus urticae* (Fab.) (2 k.) P.J.Osborne det. 1956.
- 919 *Trechus obtusus* Erichson. W.W.Murdoch det. 1962

9 SEPTEMBER 1948.

on *Dipsacus fullonum*:

- A. *Vanessa atalanta* (L.)
- B. *Polygonia c-album* (L.)
- C. *Gonepteryx rhamni* (L.)

6 SEPTEMBER 1948. WYTHAM WOODS *****

- (10) About the same place on 3 ft. flowering nettles, were small beetles (on flowers), like *Meligethes*. 918
- (11) Also a small ground-beetle running on moss-*Mercurialis* soil, in mixed deciduous wood on coral zone above. 919
- (12) Took a specimen of the large umbellifer *Angelica sylvestris* (L.) that grows in the open scrubby part of Hither Clay Hill. W.J.L. Sladen det. 1955. 920
- (13) In the Chalet were two queen *Vespula* in the window of the first-floor room. *V. vulgaris* (L.). But 1st abdominal segment as *germanica*. C. Elton det. 1950. n.k.

9 SEPTEMBER 1948. WYTHAM WOODS.

Went to prospect for the students' field course next week. It was suddenly oven hot with sun; though a cool breeze swept Rough Common, the woods notably sheltered by the Great Light from the south-west. We were there 1.45-3.30 p.m. (G.M.T).

"The Great Light" ('Upper Ride'). Nearly all the flowers I listed on 15 August were over or nearly so: only a few **teasel** flowers still, and these being visited by several **red admirals**, two **commas**, a **brimstone** (one each of these specimens collected), while I saw flying low in the light **meadow browns**, a **green-veined white** (fresh), and a very small blue. A few sluggish and odd visitor bumbles also. 922 A-C

A *Vespula* on the short grass ground, near some dry chips of wood. 923

{reverse side}

9 SEPTEMBER 1948. WYTHAM WOODS_*****

- A. 2 *Haltica oleracea* (L.) P. J. Osborne det. 1956.
 B. *Staphylinus stercorarius* Olivier. C.E. det. 1950.
 C. *Philonthus fuscipennis* (Mannerheim) ♂ C.E. det. 1950.

- E. *Haltica oleracea* (L.) P. J. Osborne det. 1956
 F. Capsid = Mirid: *Dicyphus epilobii* Reuter. C.E. det. 1950.

925. *Sepsis fulgens* Meigen 3 ♀♀. C.E. det. 1950. (Specimens accidentally destroyed. They were compared with another of this species det. by L.W. Grensted).

926 *Chrysopa ventralis* Curtis 3rd instar C.A. Elbourn det. 1965

9 SEPTEMBER 1948. WYTHAM WOODS****

Sweeping the ground and field layers gave me:

924

On *Hypericum quadrangulum*/grass/etc. (0 -- 1 ft.):

2 Green flea beetles

1 large "**Quedius**" (but it has hairy thorax)

1 smaller **black staph.** (trying to fly: another did).

1 ***Acrydium vittatum***

On *Juncus/Epilobium*, another flea-beetle like a (near Pond 4). ***Heltica lythri***

Aubé C.E. det. 1950.

On , ditto.

A
B
C
G
D
E

On a pure patch of *Epilobium hirsutum*:

F

Some very delicate yellowish green **heteroptera**, not seen ever before.

On a patch of *Juncus inflexus* near the spot marked as "Deer Pond" on the map, and edge of Great Light under a tall ash was an enormous aggregation of small Sepsid flies, probably ***Sepsis communis*** (cf. O.E.S. 21), thickly clustered all up the rushes over a space of several square feet. Tremendously active and flying dartingly from the net, a good deal of tendency to walk or run upwards. Kept 3 ♀♀.

925

The **oaks** and **sycamores** were practically sterile of herbivorous life, but I took a small camouflaged lacewing larva on a young sycamore in open scrubby area.

Chrysopa species C. Elton det. 1955

926

The **ashes** have a fair sprinkling of life, with small flea-beetles, procids, flying ? jassids, and I saw a green lacewing.

No grasshoppers seen in the grass, except the one *Acrydium*.

{Loose scrap, handwritten}

Larva of camouflage-carrying *Chrysopa* sp. on the young sycamore leaf, scrubby canopy, open scrubby glade, oak-ash-sycamore wood, Upper Ride, Wytham Woods, Berks. 9.9.1948. C. Elton collect det. 1955.

926

{Normal text resumed} {reverse side}

927. ***Troilus luridus*** Stål. Nymph. W.E. China det. 1951.

9 SEPTEMBER 1948. WYTHAM WOODS***

We saw at a muddy patch on the path of the west end of the Great Light with a small **badger's** footmark and the imprints of a **fawn**.

Rough Common. Miss D. Vernour saw a **grass-snake** in a hollow on the grassland, near the *Hypericum* patch; also a **great spotted woodpecker** in a clump of hazels on the margins, where the **squirrels** had been at the green nuts.

I beat a sparse but good fauna from birches, and on a young birch got 2 nymphs of the Pentatomid , which is very vivid metallic green and orange. 927

10 SEPTEMBER 1948. WYTHAM WOODS.

Went to the Chalet woods, Rough Common, and Brogden's Belt, with Thomas Park, to choose sites and methods for the ecology field course next week.

On Rough Common I collected a very white and dark marked ♂ **Chorthippus bicolor** n.k. and a largish plain brown **Acrydium vittatum** on the short grass quarry slope where the tiger n.k.

{reverse side}

10 SEPTEMBER 1948.

C 2♂ 2♀ **Philonthus fuscipennis** (Mannerheim). C. Elton det. 195
(1 ♂ and 1 ♀ kept)

Nymphs of **Acanthosoma haemorrhoidale** (L.), which moulted to adults in lab. by 12.9.48. One kept.

10 SEPTEMBER 1948. WYTHAM WOODS****

beetles run in May.

In the warm calmish sun a great many small *Philonthus* (black-green metallic staphs.) were flying very actively at 6-10 ft. over the same area. I caught 4. 929 C

I beat two green **pentatomid** bugs from berried hawthorn at the Common edge. D

The **birch, haw, hazel** all have almost no fauna when one beats, and mostly it is predators like ladybirds and spiders!

In the mixed planted wood (mostly beech and sycamore) called "Brogden's Belt", behind "Pond 3 Sycamores", we examined a lot of fallen old trunks. On a large mossy rotten beech trunk lying in the shade, were many winged ants swarming -- *Myrmica* which some of the many smoky ♂s (?) were grappling with brighter brown ones (♀s ?). All on the log top. (1 p. kept.) 1♂ 1♀ *Myrmica scabrinodis* var. *sabulati* Meinert. Nylander A.J. Pontin det. 1954. 930

11 SEPTEMBER 1948. WYTHAM WOODS.

Again visited the woodland strip behind "Pond 3 sycamores", with Park, to stake out a series of logs for students: to study them as refuges for littler forms and as successional stages in decomposition. Noticed *Phosphuga strata* and *Abax* under several, and the usual molluscs, including *Ena obscura* and *Oxychilus alliarius*. Walked down by Field 1, now covered with **red clover**, whose scent floated thickly in the sweet air.

{reverse side}

13 SEPTEMBER 1948.

931A Collected *Inula conyza* in flower from the top of Field 1. 932A.

A great many of the sycamores have been severely **rabbit-ringed** in the past: some lie dead with old *Ptilinus* workings in them, a few still stand erect dead, or even alive (as part of a multiple old coppice group) with no cambium at all on the girdled part!

93A. *Staphylinus stercorarius* Olivier. C. E. det. 1950.

B 1 queen C 1♀ *Myrmica ruginodis* Nylander A.J. Pontin det. 1954

D ♀ *Philonthus fuscipennis* (Mannerheim). C.E. det. 1950.

13 SEPTEMBER 1948. WYTHAM WOODS.

Went up to "Brogden's Belt" to make a final check upon logs for the ecology class. There had been terrific rain most of yesterday, yet the Coral Rag ground was only damp, so porous is the soil up there.

On the way up by Field 1, I found several *Agonum dorsale* under Coral Rag boulders at the field edge (path up to Pond 3).

In the stubble oats of Upper Seeds, several common **partridges** whirled about.

The trees of "Brogden's Belt" are mostly planted old ones, of 19th century no doubt: **sweet chestnuts** (at least 4), **horse chestnut** (1; and 1 across "the Ridge"), **lime** (one or two), beech (a good many), **larch** (at the west edge); beside oaks and sycamore of no very great size mostly.

Under a thin plank on *Brachypodium* grass at the west margin of the Belt was a large and gay "**Quedius**"; 931 A
 while under another in the same place was a very big *Myrmica* (in grass edge) B,C
 nest containing workers and a few winged ants (one of each k.) and a not very big *Philonthus*. D

Great tit (*Parus major*) seen foraging among trees in the Belt.

Helicella virgata (banded and not, 1 alive 1 shell, on grass edge) 932

{reverse side}

15 -- 18 & 20 -- 21 SEPTEMBER 1948.

933A, B	♀♀ <i>Fannia mutica</i> (Zetterstedt) K.G.V. Smith det. 1958
C	1♀ <i>Hydrotaea dentipes</i> (Fab.) K.G.V. Smith det. 1958
D	1 <i>Catops grandicollis</i> Erichson J. Balfour-Bourne det. 1952.
	1 <i>Catops fuliginosus</i> Erichson J. Balfour-Bourne det. 1952.

20 SEPTEMBER.

934.

A.	<i>Psithyrus campestris</i> (Panzer) ♂. O.W. Richards det. 1948.
B.	<i>Megachile ligniseca</i> (Kirby) ♀ O.W. Richards det. 1948.
C.	<i>Halictus morio</i> (Fab.) 2 ♂ (only 1 k.) O.W. Richards det. 1948.
D.	<i>Ancistrocerus callosus</i> (Thomson) ♀ [A Vespidae]

935B Two parasites emerged. Otherwise failed.

15 -- 18 & 20 -- 21 SEPTEMBER 1948. WYTHAM WOODS.

For six days I was intensely occupied with a teaching course in animal ecology, for 17 students (mostly non-graduate, from University College, London), which led them through grassland, woodland litter and field layer (*Mercurialis*), scrub and tree faunas, bird feeding zones, and Stream 8 in Thorny Croft. The weather was exceptionally superb for this year. No heavy leaf fall had begun yet. Most of the collections, which were extensive and added many new forms to the survey picture, are catalogued under "W.E.C." ("Wytham Ecology Course"). A few subsidiary ones are included below.

15 SEPT.

Dead *Clethrionomys glareolus* on grass ride below Chalet, (oak-sycamore wood on Coral Rag), 8.30 a.m. (G.M.T.). 3 flies on (among others) and two *Catops*. 933A B

C D

20 SEPT.

Some bees and wasps collected by R.B. Freeman on the sand zone at top of Radbrook Common.

934

A *Psithyrus* and another **bee**, on flowers of

Cirsium arvense on sandy (bracken-elder bank) and field edge.

A B

Two small "*Halictus*" on sand (bracken-elder bank) and field edge.

C

A ? *Crabro* on flowers of white campion in arable field. (*Melandrium album*)

D

21 SEPT.

Took Trypetid stem galls on *Cirsium arvense* in ride at top of Thorny Croft, also leaf mines of a fly, to breed out. n.k. failed. 2 larvae kept in alcohol.

{reverse side}

13 DECEMBER 1948.

13 DECEMBER 1948. WYTHAM WOODS.

Went out at 8 a.m. (G.M.T.) just as a yellow sunrise was washing a mild eastern cloudy sky, to visit lines of Southern's mouse-traps with Mary Laurie until 11.30. Later on it rained with cold squalls. The wet made all the woodland colours glow intensely: foxy red dead bracken, green fern clumps, vivid feathery moss cushions on soil and dark logs and boughs. In Common Piece I noticed a (**fallow**) **doe** of the dark russet or chocolate kind of deer that form the small Wytham herd. Just above, inside the the rabbit exclusion fence, was a small **spindle** obviously rubbed and broken by deer. This is a mild late wet season, and there is plenty of green **mercury**, **spindle** in pink berry,

{reverse side}

13 DECEMBER 1948.

♀ A. ? *atropos* Walck. M. Williamson det. 1949; says Wytham ♂♂ he has examined are variants of the species.

13 DECEMBER 1948. WYTHAM WOODS***

and comfortable green “rosettes” of campion, bugle, ground ivy and forget-me-not leaves. The moss growth on the ground is very beautiful and lush in many places.

There are a fair number of **hollies** scattered about Common Piece.

In one of the spruce clumps near “Black Hut”, in Common Piece, I found an old rotten (Norway) spruce log full of hundreds of thin ? Mycetophilid fly larvae (k. some to breed out);

also an ***Amaurobius***.

941

failed B

In the lower zone of Common Piece, not far from the field edge were dozens of stalwort pale-fawn funnel-shaped or flat-funnel-shaped toadstools, from 3 - 6 in. across. In stems were larvae of ? Mycetophilid flies. K. two to breed these out. E. W. Jones det. the fungi as ***Clitocybe ? infundibuliformis***.

failed

The amount of small decaying wood (branches and twigs) is really tremendous.

{reverse side}

16 JANUARY 1949.

16 JANUARY 1949. WYTHAM WOODS.

Went in afternoon (3.15 -- 4.15 P.M.) to the pine clump at the entrance to the "Great Light" ("Upper Ride"), and explored the limestone escarpment between the latter and the ride above "Interplantation", keeping on the top, in Holly Hill Copse. The woods (oak-ash-sycamore with a few odd trees about -- **beech, yew, crab** (?), pine etc.) are rather open. (**Fallow**) **deer** tracks about. The green rushes of the Great Light where in sharp contrast to the glowing brown of dead bracken. It was a mild day; and one could glimpse Cassington Church and the River below, through the bare trees.

Dead logs and branches are frequent, though not abundant. I chopped open the more decayed & very red & damp rotten wood of an almost barkless 20 foot beech branch lying on the ground under its tree in mixed deciduous wood. It was old enough to have some well-established moss patches on it. In half an hour I got a very good selection of the fauna found by W.E.C. 15-16 in Brogden's Belt last September. 943

2 *Carabus violaceus* L. (1 k.)

1 *C. nemoralis* Mueller

4 *Cychnus caraboides* (L.) (1 k.)

1 *Phosphuga atrata* (L.)

Several *Sinodendron cylindricum* (L.) (1 ♂ n.k. ♀ seen)

A
B
C
D
E

6 *Melanotus rufipes* (Herbst) adults.

F

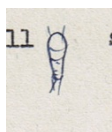
In at least three cases a larval (= pupal) skin was curled up by the beetle in its "burrow", and at least one beetle had teneral thoracic colouration. This is larva previously thought to be *Bracon*. Kept 2 large adults + skins, (of which one of each presented to Hope Department) and one small adult (thin, ♂); and 4 larvae.

1 different beetle larva *Denticollis linearis* (L.). E. W. Fager det. 1953.

G

1 *Philonthus decorus* (Gravenhorst). C. Overgaard Nielsen & C. Elton det. 1951.

J



1 small shaped staph. *Conosoma testaceus* Fab. P.J. Osborne det. 1956

H

{reverse side}

16 JANUARY 1949.

♀ emerged 25.2.49 ♂ emerged 3.49 *Coelocrabro leuostomoides* Richards. O.W. Richards det. 1950.

Q ♀♀ *Ichneumon gracilentus* Wesmael. R.D. Eady (Brit. Mus.) det. 1951.

16 JANUARY 1949. WYTHAM WOODS***

2 huge white diaphanous larvae, with little black retractile chitinized heads. 943
failed

1 smaller ditto. (slc.) K

Several medium-sized Tipulid larvae, greyish. (Alc.) L

4 ½ inch **brown pupae** this shape. (Kept alive). 3 hatched, other failed. (2 kept) M

1 small shining round a fly pupa failed

1 smaller ditto failed

2 small-medium dark ichneumons, with red bands on legs & hind abdomen Q

1 ♀ earwig (*Forficula auricularia* L.) R

Lithobius, *Oniscus*, *Porcellio scaber*, *Amaurobius* ? *atropos*; Earthworms
(last mainly in lower wet parts); tiny collembola. n.k.

3 *Oxychilus alliarius*, 1 *Goniodiscus rotundatus*, 1 *Marpessa laminata*.

Alive, and well inside log spaces, apparently hibernating. n.k.

Not a bad fauna -- 9 beetles 6 ? fly larvae, 1 ichneumon, ? 1 centipede, 2 woodlice,
? 1 worm, springtails, 3 snails: at least 24 species, of which 2/3 were real denizens,
and the rest refugees.

Knocked to pieces a very soft rotten sycamore log of same length but thinner, a little
way off on similar ground, and apart from old *Ptilinus* holes, and a few woodlice, it
seemed almost uninhabited.

N.B. *Sinodendron* galleries may be very important in beech.

{reverse side}

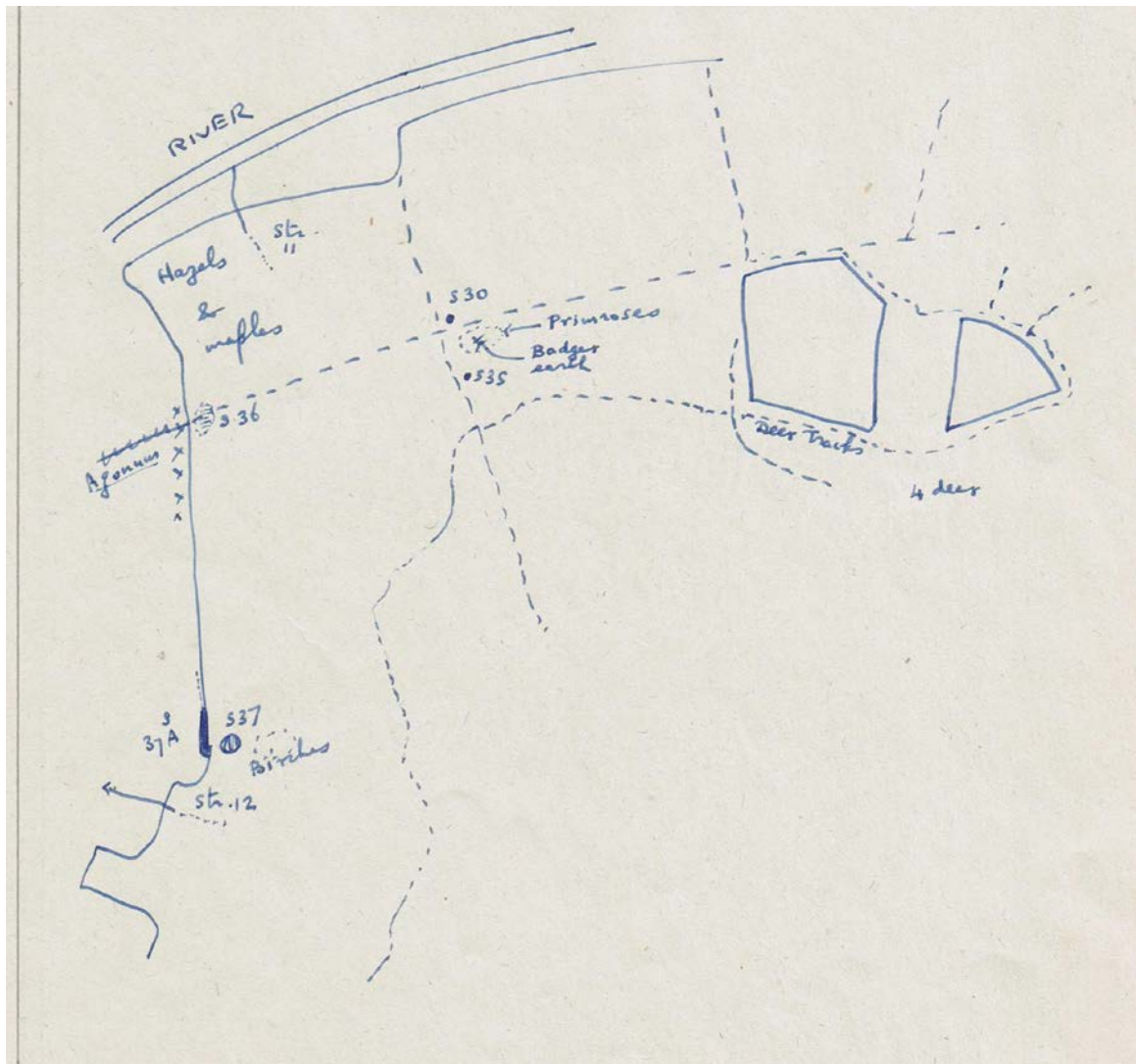
25 FEBRUARY 1949.

25 FEBRUARY 1949. WYTHAM WOODS.

Walked in the North-west quadrant of the North Hill (see map).

Saw four hornless smallish (**fallow**) **deer**, dark russet, with white rumps. Moving in mixed deciduous wood. Also tracks near here. Mick Southern says the maximum number known at present is in 11: a party of 50 people failed to drive them to be shot last week.

Spring 30 was very meagre and muddy, and its source trickle a few yards above -- a tiny seepage stream with mud banks, and mating ***Gammarus pulex*** in the wet muddy moss. The spring pool itself had two kinds of small



{reverse side}

25 FEBRUARY 1949.

25 FEBRUARY 1949. WYTHAM WOODS ***

Spring 30.....

flies flitting on wet mud, of which I caught one. *Parydra quadripunctata* Mg. det. K.G.V. Smith 1958. 947

Just above here is a huge and fairly recent active single **badger** earth in the sand. On the outskirts I picked up a fairly complete skull + jaw of an adult badger with worn teeth, condition fairly old. 948

Around here **primroses** were abundant, just beginning to flower, associated with **wood spurge**, which now has crimson stems and green and crimson leaves.

It is fairly general to say that **bracken** is not abundant on the Coral Rag slopes, and begins to dominate open ground on or below the sand-grit belt. Above, *Mercurialis* - moss gave the woods an open feeling. Lower down there is much more scrub and **maple** too.

Stream 11 rises rather indefinitely of the boundary of the N.R. {Nature Reserve} on Further Clay Hill. Probably the upper reaches dry in summer because it is intermittent even now, (like Stream 7). Its channel has rather deep banks, and this like the other streams on Wytham carries a suggestion of being formed at some rainier period.

It contained no *Gammarus*, but it runs down through a marshy pasture swamp-pool, to the River close by, where a Thames Conservancy gate stands. It has a shell sand bottom and is dead-leaf.

{reverse side}.

25 FEBRUARY 1949.

950 *Oxytelus sculpturatus* (Gravenhorst) P.J. Osborne det. 1956.

* A/C to Arkle in Witney Geological Mem., these seem to be oysters *Gryphaea lituola*, from the Upper Oxford Clay, which are common.

25 FEBRUARY 1949. WYTHAM WOODS***

The Nature Reserve and part of the rest of Hither Clay Hill, and the marginal part of Hill Copse have evidently had the big trees cut over in the past. There are many huge old **hazels** (in full catkin), and large and fine **maples**.

Under a bit of wood on rough grassland above the river mead near Stream 11, a small black Carabid. *Agonum viduum* (Panzer). M.J. Davies det. 1954.

949

Under flood refuse on River bank, a small squarish staphylinid.

950

Spring 36 is on sandy ground (presumably over clay), a small patch of very rabbit-grazed *Carex*, just inside the deciduous wood margin. It has no stream, and practically no pool.

Just outside here along the grass edge of a ploughed field, were great numbers of green and brown *Agonum dorsale* (Pontoppidan), under transported bits of Coral Rag lying on the sand (in which were many large Jurassic **oyster** shells, of which I took a fine specimen). Some of the stones had aggregations of 10 or more of these beetles, and I probably saw over 70 beetles.

There is no water connection between Spring 36 and Spring 37, as the deep ditch runs over a col, and is dry.

Spring 37 is a rather large *Carex* marsh with very little free water, in deciduous wood margin. It seeps into an outside shady ditch

{reverse side}

25 FEBRUARY 1949.1 MARCH 1949.

B. ____ ♀♀ *Ichneumon gracilentus* Wesmael. R.D. Eady (Brit. Mus.) det. 1951.

25 FEBRUARY 1949. WYTHAM WOODS ***

a foot or more of water deep and some 50 yards long, petering out gradually to the north. It may be a recent result of ditching. On the surface of the weedy ditch were several *Velia "currens"*, which I have not seen in Wytham before, though Mary Laurie had it in Pond 1.

Stream 12 also rises very indefinitely and has an upper dry channel. At the wood margin there were *Gammarus pulex* and stonefly larvae on the dead leaves. The banks have some *Carex* but it is mostly in thick shade, like Stream 8.

Stream 35 is the one that has been there most years, -- a spring coming out where a tree has blown over. It has **brooklime**, and today I found some *Chara* (stinking of fish) rather alga covered. Almost hopeless to name: not kept.

1 MARCH 1949. WYTHAM WOODS.

Went out all morning with Southern, to help with mouse ringing in Common Piece, where the sun shone coldly on the many ash trunks, and **elder**, and other shrubs are beginning to bud, and the **ashes** almost in flower.

In a very rotten ash log, in an ash-larch woodland patch, Common Piece, were (c. 11 a.m. G.M.T.)

- 1 ♀ *Vespula rufa* (L.) C.E. det. 1950.
- 2 red and black ichneumonids
- 1 *Carabus nemoralis* Mueller
- 1 *Phosphuga atrata* (L.)

A
B
C

n.k.

{reverse side}

27 MARCH 1949.31 MARCH 1949.16 APRIL 1949.

27 MARCH 1949. WYTHAM WOODS.

Went to Great Ash Hill. Today discovered the genuine Deer Pond (Pond 4), which is quite a permanent-looking pool in sallow-oak woodland at the edge of the Great Light. It has a *Juncus* "*communis*" marginal belt, *Chara* in the water, and a clump of *Typha latifolia*. This may be source of *Aedes rusticus*? It is very well concealed by scrub and bracken.

31 MARCH 1949. WYTHAM WOODS.

Went out to help an owl-noise counting party at dusk, under Southern's direction, but the keen cold breeze or the seasonal time (they are already on nests) prevented success. The **ground ivy** was beginning to flower on the sandy field banks of Radbrook Common, and Southern saw two **woodcock** near there.

16 APRIL, WYTHAM WOODS.

Went to the Forester's house and thence to "the Ridge", where I tripped over some fence wire and a gashed my left hand badly on an elder snag.

Probitts had finished last week cutting some ash tree now stacked in his yard, and being visited by

{reverse side}

20 APRIL 1949.

953 2 *Anisandrus* (= *Xyleborus*) *saxesini* Ratzeburg (= *xylographus*) G.H.
Thompson det. 1955

954 2 ♀ *Andrena armata* (Gmelin in L.) O.W. Richards det. 1949. Only 1 k.

16 APRIL 1949. WYTHAM WOODS****

hundreds, perhaps thousands of *Hylesinus fraxini* of which I collected a number that were crawling on the bark or cut ends. Many were flying around in the sun and alighting & prospecting. There were also a few much smaller very narrow cylindrical bark-beetles on the ash logs (which were next to a great stack of hazel). 953

Probitts has just finished cutting a huge partly dead ash that stands below his house in Wise's field. He found the hollow dying inner part of the main trunk full of ***Sinodendron*** larvae.

A **brimstone** was flying in his garden, and another along the outer margin of Little Ash Hill woods, where there is some buckthorn. I think it could be said that the butterfly usually flies at 'scrub height'.

On the way up to the Ridge outside that wood, the little quarry had rabbit earths, **ground ivy** and '**strawberry**' in flower, and flowers of last year's **carline thistles**. Under Coral Rag stones were large colonies of the little yellow ant, one mixed with a small *Myrmica* (?), and another with ***Platyarthus***.

The Field (1) has rough grass beginning, and masses of flowering ***Nepeta*** and small clear purple violets. ***Bombylius major*** ♂ seen on a *Nepeta* flower.

20 APRIL 1949. WYTHAM WOODS.

Went up to Rough Common and Woodcroft Copse. Southern, P. Crowcroft and Bill Potter, were weighing 4 young white fluffy tawny owls from a shallow hole in a large elm at the west end of the Common. **Tree pipit** singing on oaks by the *Calamagrostis* patch. (Southern says they nest on the Common, also **woodlarks** this year). A pair of flowering **wild cherries** (*Prunus avium*) on the patch had a few bright tawny stout *Andrena* visiting flowers. 954 (2 k.)

{reverse side}

20 APRIL 1949.

20 APRIL 1949. WYTHAM WOODS***

also some of the hovering '*Eristalis*', but no *Bombi* or *Apis*.

Woodcroft has about 5 acres of good **hazel** coppice under thin oak-birch-ash, which is now being cut for a shorter rotation than the 20 years or so this had been left (the ground flora, as bluebells, much reduced by thick canopy, and much bare leaf litter.)

Some big bits of felled ash, evidently decayed on the tree, had the huge holes and old workings of *Hylesinus crenatus*, in the holes (as well as in cracks etc.) the kidney black fungus had grown its lumps (*Doldina concentrica*).

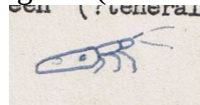
Probitts says he got *Scolytus* on dead oak branch at bottom of second larch plantation last year. "The titmice love it"; also that the elm *Scolytus* has one wintering generation of larvae.

On a fresh birch stump, under a chip, in Woodcroft Copse, I found

955A

A small truncate staphylinid <i>Omalium rivulare</i> (Paykull) P.J. Osborne det.	
1956	(n.k.)
A 4-spotted fungus beetle	lost

Spent some time on the quarry area of Rough Common. The *Cicindela campestris* were frequent, especially on the steep south-facing slopes where the grass is short and there are bare soil patches. Some looked bronzyish-green (? teneral). They are



very hard to see at rest, as they stand stiffly like this

They fly swiftly, but were not running much, though the sun was hot.

{reverse side}

20 APRIL 1949.

Callophris rubi (L.). W.F. Burrows tells me he has seen them at the same spot (in previous years?)

957 ♀ *Sphecodes ehippus* (L.). O.W. Richards det. 1949. (Parasite on *Halictus*)

959 ♀ *Halictus minutus* (Schrank) O.W. Richards det. 1949. (he actually put '(F.)').

20 APRIL 1949. WYTHAM WOODS *****

I also searched around and saw *Cicindela*

- (1) over neighbouring short-grass area on this quarry part of the Common north of the road, but most abundant on the steep south-facing slopes.
- (2) two on Lord's Common, on similar ground, north, but not south of the road.
- (3) none on "the Ridge".

At the *Cicindela* slope on Rough Common caught a **green hairstreak** as it flew along a few feet over the grass and a few yards from the wood.

956

Bombylius major ♀♀ were hunting busily along the tiny soil cliffs of gravelly limestone soil, but no *Andrenas* seen, though several holes of that size. On such a cliff caught a small red magenta **metallic bee**.

957

Simulium erythrocephalum (Degeer) very abundant on the Common, and quite a pest (though not biting) if one sits. Two kept. 2 ♀♀. K.G.V. Smith det. 1958.

958

On Lord's Common I took a very small **bee** on a site similar to 957, exploring. Also a soft *Carex* in flower, (n.k. not determinable without seed) 2-3 in. high, in short limestone grass south of the road. (n.k. not determinable without seed)

959

At the Forester's cottage, no *Hylesinus* flying or visible, though plenty of boring dust in evidence.

{reverse side}

29 APRIL 1949.

1 MAY 1949.

3 ♀♀ ***Halictus calceatus*** (Scopoli). O.W. Richards det. 1949. (1 kept).

6 MAY 1949.

♀ ♂ ***Rhamphomyia sulcata*** (Meigen) with *Dilophus febrilis* (L.). B.M. Hobby det. 1949 1 set kept.

29 APRIL 1949. WYTHAM WOODS.

While visiting my ash bark-beetle experiment in the Forester's paddock, I visited also the edge of Field 1, by the wooden barns. A humming-bird hawk-moth (*Macroglossa stellatarum* (L.)) was visiting also, at **ground-ivy** flowers in a sheltered corner. Near here also a **speckled wood** in a grass ride.

1 MAY 1949. WYTHAM HILL.

Went up through Field 1 to the top. Took 3 *Halictus*, crawling pollen-dusted on **dandelion** flowers in the grass field. 961

6 MAY 1949. WYTHAM WOODS & PARK.

Went up on the first warm afternoon of this chilly May, to adjust the bark-beetle experiments at the Forester's paddock. There saw two brightly coloured brown-banded beetles (longicorns or predators?) Among the ash log pile. (= *Thanasimus formicarius* (L.))

Two huge **sycamores** in very full flower in the pasture of Wytham Park, near the woodland edge. No aphids on the fully opened tender green leaves, but a fair number on the sticky flower raceme stalks, winged, blackish. Thousands of small *Dilophus* on the leaves, not much on the flowers, and flying generally. A score or more seen, and four sets collected of ♂♀ **Empid** in copulation with ♀ holding fly prey. Collected from flowers of sycamores, though some also seen on leaves. Quite absorbed in this game they were and could be knocked into a tube. 962

{reverse side}

6 MAY 1949.

963E *Carex acuta* L. W.J.L. Sladen det. 1955.

963C *Coccidula rufa* (Herbst) P.J. Osborne det. 1956

2 ♀♀ *Tetragnatha montana* Simon.

6 MAY 1949. WYTHAM PARK *****

Field number 2 is partly springing up corn. In the south-west corner where I once found a flint that seemed 'worked', there are scattered flat fragments of red unmarked pottery or tile. This might well have been an occupation site, as there are springs just below and it is on a sheltered hill slope.

Wormstall Duck Pond has had its fence repaired and cattle seem to be excluded, though old tramplings show. The vegetation is unbrowsed and flourishing, but the dam is still broken and the marsh is only just covered with water in muddy swamp pools and can mostly be walked over. The stream flows through.

I swept the main central marsh which has *Carex* dominaant in flower, 963 E
 mixed with *Epilobium hirsutum* (now a foot or so high) subdominant, and a little
Typha latifolia, *Scrophularia aquatica* etc. as well. There are *Haltica lythri* Aubé A
 on the willow-herb (2 k.); *Kateretes bipustulatus* (Paykull) on the *Carex*; B
 and general sweeping produced a pinkish-brown small ladybird; and two
Tetragnatha. Saw but did not take 2 *Nemoura* on *Carex*. C, D

The shallower marsh has *Juncus*, *Epilobium hirsutum*, water mint, moss, *Cardamine pratensis* (in flower), etc.

There are numerous willows, probably *Salix atrocinerea*, and several small willows. Off these willows, at 5 - 9 ft. I beat a lot of stoneflies:

{reverse side}

6 MAY 1949.

(5 ♂ 5 ♀ *variegata* presented to Hope Dept.) A-T/A3 /Woody)

964D ♂♀ *N. erratica* Claassen.

6 MAY 1949. WYTHAM PARK****

Wormstall Duck Pond****

964

11 ♀ 7 ♂ *Nemoura variegata* Olivier

A

These are light greenish-coloured, with no red on the abdomen.

1 ♀ *N. erratica* Claassen.

B

1 ♀ *N. dubitans* Morton. Conf. H.B. N. Hynes 1960. (See letter 13.6.60)

C

These two have reddish brown abdomens, and rather darker or thicker wing veins than *variegata*, and smokier wings. They look very alike until one examines the genitalia.

Two *Nemoura* walking up the trunk of a willow close together at 5 ft. 3 p.m. (G.M.T.) put in a tube soon copulated, the ♂ sitting above the ♀ and twisting his abdomen round under hers to attach his into the slit under her genital projection on Segment VII.

D

All these stoneflies had a very marked negative geotropism, shown by walking up a tube to the top.

{reverse side}

22 MAY 1949.

Saw a *Gomphus vulgatissimus* (L.) around the log-pile.

22 MAY 1949. WYTHAM WOODS.

Went to visit my ash log experiment in the paddock of the forester's house.

Found a *Thanasimus formicarius* (L.) under one of the experimental logs 967A
standing on a plank, and another in a crack in the bark of a large ash log in Probit's
log pile; B
infested by *Hylesinus fraxini* (Pz.) in both cases. Hanson says it is an important
conifer bark-beetle predator, and N. Joy says 'about fir trees'.

Went out to the "Great Light" ["Upper Ride"], where **bugle** and **forget-me-not** were
the only flowers except **hawthorn**. The *Juncus inflexus* seed heads had the seeds
much eaten inside by a *Coleophora* that was pupating, in white papery cases.

'trifid-pinched' end K. to breed out. Failed to emerge.

{reverse side}

22 MAY 1949.

24 MAY 1949.

971A *Byrrhus pilula* L. C.E. det. 1950.

971B ♂ *Denticollis linearis* (L.)

972 ♂♀ *Nemoura erratica* Claassen. C. Elton det. 1949.

973 *Rhingia macrocephala* (Harris) (= *campestris*). C. Elton det. 1949.

22 MAY 1949. WYTHAM WOODS ***

Also here a patch of *Scrophularia nodosa* had most of its leaves very heavily skeletonised by a small greenish-yellow beetle larva. Kept some to breed out, and specimen of damaged plant. ? *Cionus* weevils failed 969 B

Took one small piebald moth flying low in the grass-*Juncus* area, with oaks near. 970

24 MAY 1949. WYTHAM WOODS.

Went to Marleywood Plantation. It was warm and partly sunny, after a heavy night rains. 1.30 -- 3 p.m. (G.M.T.)

Search for and found an excellent group of standing and fallen rotting beech, for advanced ecology class to news this week. Plenty of *Dorcus parallelopipedus* (L.) in standing rotten trunks and fallen wood. 971 A

Also found a *Byrrhus*, and an *elaterid* adult in top inch of fallen rotten beech. B

Two *Nemoura* swept from the flowering *Carex pendula* by the lower part of Stream 5, in thick deciduous wood. 972

A *hoverfly* visiting flowers of *Ajuga reptans* on woodland margin by ride. 973

Several deadish trees (mainly beech) have been felled and trunks removed but some the 'brash' left. This Plantation is denser underwood and canopy than most parts of Wytham. It is rather damp and has a great many patches of pendulous sedge.

Slight defoliation on a few *oaks*, and a good deal of eating of *sycamore* by caterpillars. Aphids coming up well on sycamore, but very few predators except Cantharid beetles.

{reverse side}

26 MAY 1949.

28 MAY 1949.

Again saw *Gomphus* around the logs.

29 MAY 1949.

26 MAY 1949. WYTHAM WOODS.

Spent the afternoon with B.M. Hobby and four zoology students, working over beech trunks and logs in Marleywood Plantation.

In the open grassy-brambly part of twayblades (*Listera ovata*) are notably abundant in flower bud, perhaps having spread, where the grass and bramble were burned for rabbiting (? last winter).

28 MAY 1949. WYTHAM WOODS.

Went to visit my ash logs at the Forester's paddock. Observed 2 *Rhingia macrocephala* (Harris) visiting flowers of red campion (*Lychnis dioica*) in the wood near. Also an abundant *Meligethes* on hazel. n.k.

H. Probitts showed me large moth caterpillar galleries in the butts of cut largish willow logs -- old workings. Says he saw a *Rhyssa* hunting for *Sirex* [= *Urocerus*] galleries on the bough of a larch near the Chalet; and that a dead larch in the occupied Heronry Plantation had longicorns on it.

29 MAY 1949. WYTHAM WOODS. 'DAWN PATROL'.

As I could not sleep, I got up just after 5 (4 a.m. G.M.T.) and went out in the absolute fresh calm after dawn, "in the white and the walk of the morning." The daisies on St. Hugh's lawns were closed, the buttercups all over Port Meadow and neighbouring fields furled and clasped in themselves, even the hedge parsley seemed so too. The Thames at Godstow was steaming in the clear warm sun, into a cloudless air. The woods themselves seemed solid and heavy with night rains or dew. Young rabbits kept bouncing across the rides in Wytham Woods. The whole wood seemed subtly more alive and active than in the dead of afternoon.

{reverse side}

29 MAY 19 .

Probitts later today had an accident falling from this tree, though not a serious one.

975A *Xorides brachylabris* Kriech. (given by K. & H. as *Rhadinopimpla brachylabris* (Kriechbaumer) ♀
R.B. Eady (British Museum) det. 1951. Museum kept 1 ♀.
Ichneumonidae, Banchini.

29 MAY 19 . WYTHAM WOODS****

From Lord's Common I pushed through the southern patch of it (where I noticed a small **wayfaring tree**) into the great swell of limestone field that lies between Brogden's Belt and the Singing Way. Here is a very noble and far view across the park and beyond to the Pasticks, -- a corridor of fields filling the hill-tops between woodland belts, poor enough for crops, and yet looking well-sheltered. At this end, the thin fallow has a very grand weed flora of *Erodium cicutarium* (in flower), a large disc-seeded crucifer, grass (ryegrass mainly), a little **houndstongue** (in flower), and quantities of *Sherardia arvensis*.

But the glorious discovery was several great patches of thick henbane (*Hyoscyamus niger*) in flower in the middle of the field. More to the margin are **mulleins** (*V. thapsus*) and **teasels**.

There is a beautiful woodland belt, mostly from planting trees (beech, **wych elm**, etc.) Between here and the Singing Way and Rough Common -- the area I think known as "Blenheim". The **bugle** is very fine and there is a huge **wayfaring tree**. On the margin of this wood and the field -- close to the scaffolded water-tank the bugle (*Ajuga reptans*) was being visited by three kinds of bumble-bees. Here I caught an Asilid fly on bramble-bracken and, 3 ft., 5-45 a.m. (G.M.T.). n.k.

Mainly deciduous wood edge of Upper Seeds and Chalet Woods.

There is also the practically dead larch (see 26 May), where I saw three ♀ Ichneumonids sitting on a much burrowed (and woodpecker-pocked ?) trunk, and collected two ♀♀. 975A
I also dug out a large longicorn larva (*Tetropium gabrieli* Weise E.A.J. Duffy det. 1954.) from under bark, and one that seemed pupating (k. to emerge). B failed

{reverse side}

29 MAY 1949.

*They didn't seem to, nor were they interested in *Holcus* or *Agrostis*.

29 MAY 1949. WYTHAM WOODS***

From here to Rough Common old quarry drew me, to the tiger-beetles and the romantic suggestion of glowworms perhaps feeding on *Helicella italia*. The latter seem abundant and large this year, and a good many were walking in the wet thin grass, in a warm beneficent sun. I took some alive to see if they eat *Brachypodium**, and some fresh shells (who cleans them out, glowworms?). 976

The little gravelly eroded places have a good many bee and wasp holes, and some on flat



earth

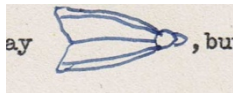
that might be *Cicindela* larvae but I could find nothing by digging.

At 6.15 a.m. (G.M.T.) small Crambid moths began to fly about, at 2-3 ft. over the short quarry grass. 977

The two I took were quite different though, one having grey-ash body and grey and white streaked forewings and grey hind; A

the other larger, with similar ground colours but a tawny head and many spots on the forewings, as well as streaks. At 6.30 I caught a dingy skipper ♂ (*Erynnis tages* (L.)) B
flying low over the same area, where its food plant *Lotus* is common in flower. C

This is the first I have seen in Wytham (or elsewhere). It looks like a dark moth and settles



this way

, but the hooked clubbed antennae quickly show its group.

There were also one or two small heaths (*Coenonympha pamphilus*) flying among the taller grass.

On Lord's Common saw two woodlarks (*Lullula arborea*) very close and tame. One looked like a young, the other had nesting material in its beak. The legs of the young were pink. Tails short.

{reverse side}

29 MAY 1949.

978 Z *Adalia decempunctata* (L.) P.J. Osborne det. 1956

29 MAY 1949. WYTHAM WOODS****

The hazel trees around the rim and slopes of the old quarry on Rough Common have a rich fauna. On them I took and kept

978

A *Chrysopa carnea* Stephens ♀ C.A. Elbourn det. 1963.

A very gaily coloured Tipulid ♂ *Ctenophora pectinicornis* (L.). C.E. det. 1950

A two-red-spotted black ladybird.

X
Y
Z

Saw a ♀ *Gomphus vulgatissimus* (L.) on the leaves.

Visited the Deer Pond (Pond 4). It is obviously quite deep, and is very full of vegetation. No aquatic emergents seen except one dragonfly that flew away very fast (? *Gomphus* or *Sympetrum*).

6 JUNE. WYTHAM WOODS.

Went up to look at my ash logs in the Forester's House paddock, 11.15 a.m. (G.M.T.) warm sun. In the ash-log file there were several *Thanasimus formicarius* (L.) running, with their curious jerky movement. Also three *Clytus arietis* (L.) On these and other deciduous logs. Prospecting on ash logs with thick bark pitted with old *Hylesinus crenatus* holes was a small black "Crabro" n.k.

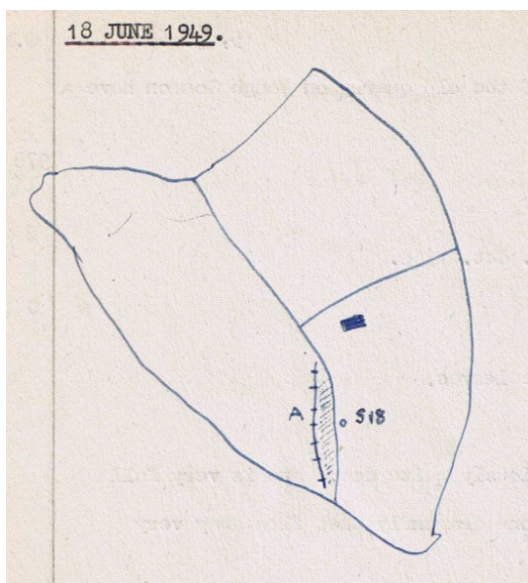
Coelocrabro cetratus (Shuckard) O.W.Richard det. 195

978P

{reverse side}

18 JUNE 1949.

♀ *H. pluvialis* (L.)



18 JUNE 1949. WYTHAM WOODS.

Went to the pasture fields (The Follies) above Marleywood Plantation, which one reaches up the old coach road, now very densely flanked and even arched by the wood, with a great deal of elm and elder. The red campions have some leaf mining. A *Haematopota* attacked me, just where there is much *Carex pendula* marking a seepage flush. n.k. examined in lab.

In the upper field, at A, the cattle-grazed pasture is short with plenty of white clover. One is at the escarpment of lime rocks and below is a very rough field which is practically a rabbit warren. It is fenced by barbed wire above the old hedge-line, which is now a wide and wild line of huge elders in flower, and haw clustered thickly with green berries. The warren field has scores of huge *Cirsium eriophorum* and a good deal of *Cynoglossum*, the latter in flower and being mined on a good many leaves (some kept to breed, and one pressed). Caught one of the ermine-marked Phycitid moths, *Myelois cribrumella* (Huebner), but did not keep it (cf. C.E. 856A). failed

A muddy spring, much cattle-tramped, rises at the elder hedge, and is now "Spring 18". It sweeps away gradually in a dip of damp pasture. Numerous flies, and one small *Helophorus* on the damp mud. *Gammarus* and *Helodes* large larvae under a piece of wood in the water.

{reverse side}

26 JUNE 1949.

983A. 1 ♀ *Lonchaea scutellaris* Rondani. L.W. Grensted det. 1950.
Presented to Hope Department, which has no specimen.

983B. Also, by experimental ash log C 4, dead on plank, a vivid scarlet and black-spotted beetle.

A. Mirid bug, *Rhopalotomus ater* (L.). C.E. det. 1950. A grassland predator.

B. ♂ *Euophrys frontalis* (Walck). E. Duffy det. 1952.

26 JUNE 1949. WYTHAM WOODS.

Went up to visit my log experiment at the Forester's cottage, and looked at his log pile too. On a pile of elder or maple logs was a most peculiar small fly walking about in the sun. It has a sharp sting-like ovipositor. 3 p.m. (G.M.T.) 983A.

Walk up to "the Ridge" through Field 1 (Lower Seeds) (which is just having its hay cleared), in a blistering heat that gave me slight sunstroke. 3-3.45 p.m. (G.M.T.)

On the woodland grass-scrub edge of the field, scores of **meadow browns** were flying in parties or singly. Notably abundant. (Saw one **speckled wood** in the shady grass ride by the sheds below).

The upper knob of limestone in Field 1, just below the Ridge, is as usual too shallow a soil to give a crop. It has this year a magnificent stand of a score or two very large plants of viper's bugloss (*Echium vulgare*) -- the violent blue flowers fully out on stems a foot or more high. These were being visited numerous by two kinds of rather small *Bombus*; also some **hive bees**; and more than a score of **large skipper** butterflies; and one ♂ *Pieris brassicae*. 983 A,B

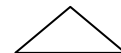
On the patchy *Brachypodium* of the Ridge I flushed out one new-looking **marbled white**, and several **small heaths** and **meadow browns**. By sweeping I got a small *Crambus* (n.k.), a **black bug** (cf. C E. 979C), and a tiny jumping spider. 984 A B

One plant of *Orchis pyramidalis* in flower (not ever noted by me in Wytham before, though in Druce) at the margin of the grass zone, on the east end. Not touched, except to take one flower unit for checking.

{reverse side}

31 JULY 1949.

We saw a single **dappled deer** in Common Piece and again by



Enclosure.

31 JULY 1949. WYTHAM WOODS.

Went up to Rough Common. Warm and overcast and damp air, with a cool wind. On the Common quite a lot of gatekeepers (*Maniola tithonus*) were fluttering over brambles or other vegetation on the woodland edge or by the quarry hazels. Along the Singing Way (North Hill) were **ringlets**, **speckled wood**, **wall**, **large white**, **meadow brown**. One **marbled white** on the Common.

Under a Coral Rag stone on sandy soil at the top of a field of Radbrook Common I took three species of beetles (there were also black *Pterostichus*)

Small *Amara* or *Harpalus*, very bristly legs, green-black metallic with yellow legs.

Amara lifrons (Gyllenhal) ♂ M.J. Davies det. 1953 988 [A]

Bembidion, greenish metallic with yellow legs. *B. lampros* (Herbst). R. Miller det. 1952. [B]

Small elongate staphylinid with hairy elytra. *Xantholinus linearis* (Olivier) P.J.Osborne det. 1956. [C]

In the last two days Peter Crowcroft has found two *Vespula* nests, underground, in woods around the Chalet.

{reverse side}

4 AUGUST 1949.

4 AUGUST 1949. WYTHAM WOODS.

Escaped from my desk at last and wandered in the thickening summer jungles on the North Hill, and afterwards took home the last of my experimental ash logs.

Common Piece, Ten Acre Piece, Thorny Croft, and Great Ash Hill have been very much dried by the June drought. Many flowers, such as **teasels**, in the glades are stunted. But there was a flare of colour from **ragwort**, **rosebay**, **hairy willow-herb**, and a more moderate candelabra of **mash thistle** and **burdock**, in the rides and glades.

Butterflies were frequent enough in these places: a good many **meadow browns**, **gatekeepers** and **large** and **green-veined whites**; and fewer **speckled woods**, **walls**, and **brimstones**. There were several peacocks at their usual station on **teasel** flowers in the Great Light. One **silver-washed fritillary** at Thorny Croft. The **walls** fly and look like small fritillaries on the wing, having a swift turning flight.

Several times I saw a dullish yellow-green *Sympetrum* (presumably *flaveolum*) in the sheltered glades. No *Simulium* or mosquitoes, but swarms of *Hydrotaea*. Wasps (*Vespula* of the *vulgaris/germanica* type mostly) were quite common, visiting various flowers.

Angelica white flowers in Thorny Croft were packed with red soldier-beetles, some in copulation.

Many *Bombi* about, including some on flowers of **ploughman's spikenard** on the ride below the Chalet which continues the Great Light: here also **viper's bugloss** in flower.

Wood figwort in some places had been severely skeletonised by the beetle larvae I got earlier this year, so that their seeding failed. Others had some or all in fruit and were undamaged.

{reverse side}

4 AUGUST 1949.

989A *Gilletteella* ("Adelges") *cooleyi* (Gillette)

4 AUGUST 1949. WYTHAM WOODS****

Stream 8 was dry, though the *Carex* part at the source had damp mud.

In the Great Light the **centaury** seemed quite free from leaf mines, though I found one plant in the ride above Interplantation, with young mines. Very likely a crash in fly numbers, from overparasitization in last year's abundance. ***Hypericum quadrangulum*** in flower.

Common thistles (***Cirsium arvense***) in the ride above Hither Clay had *Urophora* galls in the stems, green.

The *Pseudotsuga taxifolia* at the top of the West Heronry plantation is well infested with white cotton woolly egg tufts in the coccid (imported from western North America) and ***Adelges cooleyi*** (Gillette),

989A

which usually in this country leads to a parthenogenetic life on the Douglas fir only, though it can locally make sexual galls on spruce. Its usual ladybird enemy, ***Aphidecta oblitterata***, B was present and according to forestry literature, eats eggs and adults of this coccid: I found it on Douglas fir at Tubney. There were some other life also, but I did not note it: more than one has usually met with on this fir (cf. Strontian), which suggests a community developing only when *Adelges* is present.

I swept two of a small, actively flying brown heteropteran off the dense hemp agrimony (*Eupatorium cannabinum*) stand in Marsh 1, (with the trees near). ***Monalocoris filias*** (L.)
W.E. China det. 1957.

990

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 6.

31 August 1949-16 July 1951.

C.E. 1006-1059.

Red ticks¹¹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles¹² round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

¹¹ Shown as **bold** in edited version.

¹² Edited to A or 00

31 AUGUST 1949. WYTHAM WOODS.

Went up from 12 noon to 2:45 p.m. (G.M.T.) to prospect places for the Graduate Ecology Course next week.

Speckled woods were abundant (and the only abundant species) in the woodland glades, rides and edge, all over, and even occurred in Wormstall Duck Pond scrubby wood. No **meadow browns**, **ringlets**, **walls**, **peacocks**, **tortoiseshells**, **green-veined whites** seen.

One **painted lady** in the stubble, Field 2. Went down into the Park, where a huge population of the woolly thistle (*Cnicus eriophorum*) covers the pasture slopes -- in seed now, on dead stalks. On grass were **small heaths** and **gatekeepers**: no large **meadow browns**.

Wormstall Duck Pond. The cattle and horses had been in and trampled and eaten (and manured) all the marsh except a 'reserve' of willow-herb etc. in the muddy water. The stream above was running, very shallow trickle over the soft mud and with grass.

Spring S 2, was also 'alive' though the merest shallow trickle. But *Gammarus* and *Planaria alpina* were visible; and many *Pericoma* owl-flies on the nettles around.

It is a heavy and early **blackberry** year, and a very heavy **elderberry** crop.

{reverse side}

31 AUGUST 1949.

31 AUGUST 1949. WYTHAM WOODS****

There is much regeneration with young ones of grey poplar in the region around S2.

On the shallow limestone between Pond 3 and Pond 3 Sycamores, there is a thick grove of **ploughman's spikenard**, now turning to seed.

Blue-green metallic small flea-beetle abundant by sweeping rocket (in flower) in the limestone field south of Lord's Common (= Upper Seeds). n.k.

On Pond 3 sycamores there were the fewest aphids I have seen for this time of year on **sycamore**, and only a trace of predators. Several aphids, 1 lacewing larva, and several ladybirds, one or two spiders, and an earwig!

Hermaeophaga mercurialis is fairly abundant in the Chalet woods, but patchy and damage to leaves not severe.

Swept two Heteroptera off mercury here (oak-ash-beech-sycamore wood, Coral Rag): reddish with dark bars on abdomen and legs and antennae like little Indian clubs. (One seen also on the same habitat, on Great Ash Hill, 2 September).

Rhopalus subrufus (Gmelin in L.)

1007

C. E. det. 1950. (Associated with *Hypericum perforatum*, they say.)

H. Probitts yesterday cut down a hornet (***Vesper crabro*** L.) nest from the top of a dead common elm closed to the Chalet, at a height of 25 ft. A fine structure (see W 288). Just as I was going to arrange to take it away, a live hornet arrived and quietly entered the nest hole, though the piece of tree was lying on the ground! (On 2 September there were two live young queens, which Freeman and I released by Three Pines.)

Visited the Deer Pond (S 34). It is damp mud but has no surface water. A patch of tall *Sparganium* (? *erectum*) only a few square yards, had a 'Donacia'. 1 taken: 1008 metallic green. ***Donacia versicolore***a (Brahm) ♀. C.E. det.1951.

Took a ***Leptothorax acervorum*** nest on Lord's Common, in young sycamore glade at edge of Coral Rag, in 2 in. dry dead sycamore bough, on ground. Half kept as nest specimen. 1009

{reverse side}

4 SEPTEMBER 1949. WYTHAM WOODS.

30 OCTOBER 1949.

4 SEPTEMBER 1949. WYTHAM WOODS.

Spent most of the day there. I was choosing and marking out log, litter and mapping habitat sites for a class of seven who came for an Ecology course 6-15th. We were up on Great Ash Hill, Rough Common, the Ridge and Brogden's Belt.

We saw a **comma** (the only one seen) on brambles on the Ridge.

30 OCTOBER. WYTHAM WOODS.

With Richard Miller, a University of Colorado graduate, to prospect the middle parts of the Hill for working sites in which to study wood-mouse food. The leaves still on the trees, though a few frosts have begun to scatter them down.

The Pasticks field has an interesting bare wood with rather close canopy, standing isolated. In an old log we found **Cychrus rostratus**. Vole (**Microtus**) colony in marginal grass tussocks at the east end of the Jew's Harp.

Spring 2 had fast shallow trickle, with *Gammarus* and *Planaria alpina*.

Green woodpecker at **yellow ant** (*Lasius flavus*) hills in the park.

{reverse side}

12 DECEMBER 1949.

*now *Operophtera* K. & H.!

12 DECEMBER 1949. WYTHAM WOODS.

Went with George Varley in the morning to see the place where he is doing a population study of cycles of the winter moths (***Cheimatobia* brumata***), which is the chief oak defoliated here. He and Southern have cleared the fairly open under-scrub of blackthorn etc. from about an acre of weedy middle-aged oaks, in 10-Acre Piece below the aspen copse. The trees are only touching each other's canopy in places. Male and (wingless) female winter moths walk up the trunks and are caught (& egg-lay!) in netting traps. He says he has encountered over 600 kinds of animals this year (he started in early spring) on and under these oaks....

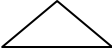
There are ***Microtus*** traces in the *Deschampsia*

{reverse side}

12 DECEMBER 1949.

12 DECEMBER 1949. WYTHAM WOODS****

caespitosa patches at the bottom of his area.

Goldcrests working in  Douglas firs (East Plantation, North Hill)

Fallow deer tracks numerous in 10-Acre Piece, and in one open spot there was a sort of circus round of tracks by and in a small soil pit.

{reverse side}

19 JANUARY 1950.

19 JANUARY 1950. WYTHAM WOODS.

Walked on the North Hill in the morning, with Amyan Macfadyen and C. Overgaard Nielsen, who intend to study soil animals. There had been a heavy frost rime -- the first for weeks in this mild winter --, in which were to be seen that tracks of **fallow deer** on Rough Common. There was fresh deer dung on the edge of Lord's Common. There are said to be about 20 deer now, though 1 or 2 was shot the other day.

On Great Ash Hill five **goldfinches** were eating the seeds *Arctium vulgare* in an open this glade. When the birds were still, in the mild winter sunlight their ruptive colours made them difficult to pick out.

The forestry student, Proctor, has several vole-mouse/rabbit/bird exclusion cages set out, to study regeneration.

The moss growth is very lush this winter. It seems to diminish under the larger trees, where litter and shade our heaviest; and though here it is luxuriant on old branches lying on the ground (which implicates litter, not tree shade), and at the base of trunks. The leaf litter must act in opposing ways by (a) cutting of light. (b) keeping the air moist below it. There is a very abundant growth also on rock outcrops in the wood.

{reverse side}

6 MARCH 1950.

J.H. Burnett examined, but never reported results.

17 MARCH. WYTHAM WOODS.

1011 A *Drusilla (Astilbus) canaliculata* (Fab.) 1 kept.

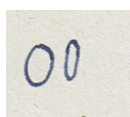
1011B 2 *Scolopostethus affinis* (Schilling). G.G.E. Scudder det. 1956.

6 MARCH 1950. WYTHAM WOODS.

Went at to the Chalet Woods and Lord's Common in the morning with Richard Miller, to follow his trap lines.

A huge rotting hawthorn bole on the ground, in the bracken-elder-grass zone at the Common edge, had a fair number of animals in the reddish-brown galleried wood, which was firm but not very hard and flaked apart easily in a soggy mass of lumps. These included:

1 dead remains of <i>Sinodendron</i>	n.k.
1 young larva of <i>Melanotus rufipes</i> (Herbst).	n.k.
1 small <i>Oxychilus alliarius</i>	n.k.



Some yellowish seeds like this apparently carried into quite small galleries ? by ants. Some were sprouting.

Today, after a night of mist, the sun broke through early and a hill in still warmth. At first the quarry on Rough Common still held a basin-full of mist, indicating the damning-in of cold air locally.

Dog's mercury is sprouting and pushing up through the still thick leaf litter.

17 MARCH 1949.{sic} WYTHAM WOODS.

Went to the Forester's Cottage, to look at a big ash he just felled. It had hibernating *Hylesinus fraxini* and *H. crenatus* in. Edge of wood (deciduous).

Under a brick among *Arum-Nepeta-Galium mollugo* near elder stump, at edge of his grass paddock were two brown staphylinids with very cocked up tails and some small speckled heteroptera, with swollen front femora (2 k.) 1011 A B

{reverse side}

19 MARCH 1950.

1012 C ♂ *Osmia bicolor* (Schrank) O.W. Richards det.1950. (This species has been recorded going into shells.)

19 MARCH 1950. WYTHAM WOODS.

Walked up by My Lady's Seat and Bowling Alley Plantation. Between the latter and Sunday's Hill is a secret patch of very shallow limestone vegetation covering several acres, that might well have been a bowling green perhaps before rabbits decimated it. Numerous large empty shells of *Helicella italia* (L.), and young live ones, and very abundant aggregations *H.*_____ smaller species, alive, both dark and light-bodied crawling on damp patches of close-rabbit-grazed vegetation 1012 A
including a tiny "**Geranium**" (= *Ranunculus parviflorus*). B
BUT see C.E. 1014C An "*Andrena*" collected on the surface, out of a dead *italia* shell. C

22 MARCH 1950. WYTHAM WOODS.

Today D. Kempson and Probitts and I cut up a young ash tree to start the season's bark-beetle experiments.

Probitts told me that

- (1) They cut down this winter a partly hollow ash that had an accumulation of old **hornet** nests in, including last year's, in Woodcroft Copse.
- (2) **Badgers** don't seem to mind the stings of wasps when they dig up the nests. But he found last year two nests of wood bees i.e. *Bombus* one in Woodcroft Copse and one over on the eastern woods of North Hill, where the badger had dug them up and rolled in the bracken nearby, apparently because of stings.
- (3) After larch were cut last year in the Heronry Plantation, both species of **Sirex** (*S. gigas*, etc.) were common of the felled trunks.

{reverse side}

7 APRIL 1950.9 APRIL 1950.

7 APRIL 1950. WYTHAM WOODS.

Gill Godfrey is seeing one or two **blindworms** on "The Dell" (grassland above Spring 2).

Probitts says they occur near the Nursery in grass. Southern has several records of various parts of the wood. Miller got a bone in a tawny owl pellet at the Pasticks.

9 APRIL 1950. WYTHAM WOODS.

Went to Field 1 and the Ridge. The shallow grassy parts of the field, on the upper limestone bosses, were a blaze of blue violets, many with as many as fifty blooms on a clump. (By the 22nd they were rapidly fading).

{reverse side}

21 APRIL 1950.

21 APRIL 1950. WYTHAM WOODS.

Peter Crowcroft brought in a live **slow-worm** from the “lower part of Sunday's Hill”,* and Macfadyen and Nielsen have had two on grass quadrats from “The Dell”. Probitts (whose name I at last find, is Herbert) certainly saw some at the west end of Rough Common last year, in “long grass”.

* Annotated on punch-card: “Basking on fallen branch, Nealing's Copse, beside pylon at edge of Radbrook plantings.”

{reverse side}

22 APRIL 1950.

Summer time (1 hr.) began on 16 April.

Probably *Micropteryx calthella* (L.) C.E. 1952

1014 A. ***Andrena pubescens*** Olivier. O.W. Richards det. 1950.

22 APRIL 1950. WYTHAM WOODS.

Went up twice today to the Forester's Paddock to try and trap live *Hylesinus fraxini*. The temperature was about 12 °C at 9.30 (G.M.T.) and 13-14° at 3.30 p.m. There was an east breeze, but it was warm in shelter, where the following notes were made.

10.30 a.m. **Peacock** butterfly on nettle patch (on rick site at bottom of Field 1).

Chiff-chaff singing. **Blackthorn** blossom practically over, but still visited by syrphids, "*Eristalis*", *Bombylius major* (small).

2.30-3.30 p.m. Walked up the margins of woods in Field 1, to the Ridge. **Spindle** and **haw** in flower bud and young leaf. On spindle one specimen of a micro-moth, caddis shaped, with olive green wings that had two small dull crimson spots on each (fore). n.k.

Haw had a good many *Lochmaea crataegi*. n.k.

Took a small **bee** walking on the almost bare shallow rock rose-grass-moss of the "Ridge". 1014

A
C

Here tiny scorpion grass <1 inch, in flower, also minute *Ranunculus parviflorus* <1 in. in flower in patches. This is what I saw on 19 March at Sunday's Hill, thinking it a Geranium.

Dissected a rather dry touchwoody oak bough on the ground in woods near by the Ridge, which was old stuff with loose bark:

{reverse side}

22 APRIL 1950.

1015 B 1 ♂ *Tipula flavolineata* Mergen emerged circa 10 May 1950. C.
Elton det. 1950.
Other larvae failed.

22 APRIL 1950. WYTHAM WOODS ****

Oak log:

1 large <i>Melanotus rufipes</i> (Herbst) larva (under bark) 1015	A
2 huge? Tipulid larvae (far in wood). Kept to breed through.	B
1 Scolytid in bark hole. Dead. Brown elytra. Headless.	n.k.
1 <i>Oxychilus alliarius</i> (Miller). Small, strong garlic smell.	n.k.

1 queen *Myrmica ruginodis* Nylander A.J. Ponting det. 1954. From small nest under loose bark.

C

 n.k.

Not much else but *Porcellio scaber*, Iulids and *Lithobius*, and collembola,-under the bark. n.k.

1 *Amaurobius atropos* Walck ♀ E. Duffey det. 1953.

D

{reverse side}

6 MAY 1950.

6 MAY 1950. WYTHAM WOODS.

Noticed the nanny white mother **goat** in the paddock deliberately reject dead nettle stems (***Lamium album*** in flower) but relished eating ***Urtica dioica*** and grass. Probitts confirmed that this is usual with his goats. So I chewed a dead nettle leaf for a few moments: it tasted leathery and sour and nasty, and furthermore it left a very sore place on the roof of my mouth for some hours after. P. also tried a leaf and thought it nasty. This, if it applies to rabbits and cattle and sheep (which are surely more choosy than goats) would explain the abundance of white dead nettle on so many field edges, where its presence is vital to bumblebees in the spring.

{reverse side}

11 MAY 1950.

Paris quadrifolia

1018 D, E. ***Micropterix calthella*** (L.). B.M. Hobby det. 1950. Larva feeds on moss/hepatics.

F. ***Chalcoides fulvicornis*** (Fab.) C. Elton provided det.1954.

11 MAY 1950. WYTHAM WOODS.

5.30 -- 6 p.m. G.M.T. After doing some ash bark beetle business I walked along to Interplantation. Off the *Pseudotsuga* drooping branches at the top of the East Heronry Plantation I beat a dozen caddis of two sizes, both active in the net (and also at night in tubes). A few coccids (n.k.) 1018 A B

A large oak felled for timber has smashed down a yard or two of the eastern edge fallows of Marsh 3.

The Marsh had water flowing in it, but the field layer was dry and only just beginning to grow up. (**Herb Paris** in flower nearby). From sweeping this I got a *Tetrix subulata* (L.) -- by the edge of the upper stream trickle. [C]

Here, and also 50 yards away on mercury-bluebell in the open I swept a number of tiny olive metallic green **micro-moths**, with purple spot near wing base.

2 from Marsh

[D]

1 from mercury-Scilla

[E]

On the *Salix atrocinerea* were small metallic green **hopper beetles**. They nibbled overnight a *Salix* leaf kept in the tube. [F]

Sweeping mercury among oak-sycamore-ash etc. near second fork I got a hazel weevil *Balaninus nucum* (L.). [H]

{reverse side}

MID--MAY 1950.

MID-MAY 1950. WYTHAM WOODS.

Heavy wind blew down the largest **ash** tree on the estate; just above "3 Pines" by the road. Probitts found **Dorcus** on it. He also saw a **blindworm** by the nursery, on Rough Common -- in the *Calamagrostis epigeios* patch.

{reverse side}

30 MAY 1950.

Carex flacca (flower), *Dactylis*, *Aira caespitosa*, **Potentilla anserina**, *Arctium lappus*, *Rumex*, **meadow-sweet**, **wood forget-me-not**, thistles (? meadow), bird's-eye speedwell, **crosswort**.

Very many medium brown click-beetles climbing grass etc., here and in the more open woods.

1022

- B **Caenorhinus germanicus** (Herbst). P.J. Osborne det. 1955.
- C **Apion apricans** Herbst P.J. Osborne det. 1955.
- D **Apion dichroum** Bedel P.J. Osborne det. 1955.
- E **Apion aestivum** Germar P.J. Osborne det. 1955.

30 MAY 1950. WYTHAM WOODS.

To Marleywood Plantation, in search of good beech logs for the Zoology Class tomorrow. 12-2 p.m. (G.M.T.).

The grass verge and big glade are always teeming with insect life, and sprinkled with flowers. There is no doubt the soil is pretty calcareous, and there is e.g. a certain amount ***Bromus erectus***. The woods are also rich and the lower ones thickly canopied and regenerating ash and oak and sycamore. Possible reasons for this local richness of wood and meadow are the well-watering spring streams from the pasture above; the limey and fairly heavy soil; perhaps few rabbits.

The verge, a true meadow association with local shade, had a good expanding colony of twayblades (***Listera ovata***) in bud or flower (some stems, but not many, picked); **bugle** (flower) wild **strawberry** (flower) goose-grass, and grasses like *Brachypodium ? sylvaticum*. From this I swept:

1022

a small pale brown ***Cassida flaveola*** Thunberg

a small *Rhynchites*-shaped, blue-black, hairy or scaly weevil.

large number of black, yellow-femur *Apion* (Key 3).

a number of yellow-legged *Apion* (key 2 or 3).

a ***Malachius bipustulatus***.

A
B
C
D

n.k.

Various Telephorids and numerous flies; including *Scatophaga* (cattle in pasture above) hunting.

n.k.

{reverse side}

30 MAY 1950.

1023 B. ***Harpalus aeneas*** (Fab.) C.E. det. 1951.

C. ♂ ***Agrypon flaveolatum*** (Gravenhorst). J.L. Perkins det. 1960.

30 MAY 1950. WYTHAM WOODS***

Patrolling the drive were **brimstones**, **orange-tips** and a small or green-veined white.

The woods above the drive were oak-ash-sycamore-(beech), and fairly thin canopy.

The oaks and sycamores are not being defoliated this year, though there are caterpillars on the oaks and a slight rain of dung. The ground flora includes rather gentle white-flowered brambles, red campion, *Brachypodium sylvaticum*, *Arctium lappus*, **wood avens**, mercury (with abundant *Hermaeophaga*), bugle, dock, etc. There are a good many fall or cut logs, but mostly so old as to be touchwood with little in but *Myrmica* nests. On two different bare logs I caught two kinds of Carabid running in the sun.

1 *Feronia (Pterostichus) cuprea* (L) (confirmed M.J. Davies key 1952) 1023 [A]

1 *Harpalus*, mistaken for the former, as its metallic green-bronze is identical, but different shape, and the legs brown not black. (*cuprea* is the one I took in cut-over Hell's Coppice, and not hitherto in Wytham). [B]

In the field layer here, at 1 ft., a remarkably stem-waisted Braconid half inch long. [C]



The face is yellowish-green and the tarsi are light coloured.

Willow wrens were singing.

Many *Panorpas* about on herbs and brambles.

{reverse side}

30 MAY 1950.

31 MAY 1950.

30 MAY 1950. WYTHAM WOODS***

The **sycamores** in Marleywood Plantation are very poor in life: only a crop of caterpillars and some ladybirds. Aphids scarce or absent. Where flowers persist on the trees there are some beetles and bees.

The thick woods, oak-ash-sycamore-(beech-elm) were quite dark and dank compared with those above, and full of nettles and mercury and brambles, the latter in the more open bits. Many tipulid or mycetophilid flies resting on the field layer at 1 ft. I took a pair of $\frac{3}{4}$ in. pale fawn ones in copulation. 1023 D

The ***Carex pendula*** in flower by stream has *Tetragnatha*, etc. The stream is nearly dry, and pairing ***Gammarus*** were sculling about in pools $\frac{1}{2}$ in. deep.

Last year's standing and fallen dead beeches in their open glade thick with bramble and nettles are hotching with life: *Dorcus*, *Sinodendron* etc., and have some nice bracket fungi. I took a brilliant fresh scarlet ***Endomychus coccineus*** (L.) under rather dry loose bark on dead standing beech, 5 ft. (which had various fungi on it). [E]

31 MAY 1950. WYTHAM WOODS.

Marleywood Plantation: 12 -2.15 p.m. (G.M.T.) the grass verges of the drive are really fine examples of ungrazed and uncut meadow. I suspect that they must have been scythed or slashed in the past, as young haw and sallow, and seedling ash (and some oak and sycamore)

{reverse side}

31 MAY 1950.

1024 B. ***Trypetoptera punctulata*** (Scopoli). L.W. Grensted. det. 1951.

E ***Lema lichenis*** Voet P.J. Osborne det. 1956.

31 MAY 1950. WYTHAM WOODS***

are invading it. There is need for careful management here.

Today there were **orange-tips**, a courting pair of **brimstones** of which one was yellow and the other almost white. And one or two **grizzled skippers** (*Pyrgus malvae* (L.)) of which one taken.

1024

A

By a thistle colony in the grass, a gorgeously speckled grey and white Trypatid fly -- the gall maker? Speckled over the whole of wings and body.

B

On *Rumex* 12-18 in. high I found

1 ♀ *Gastrophysa* (= *Gastroeidea*) *viridula* (Degeer)

1 *G. polygoni* (L.)

1 smallish 11-sided blue glabrous Chrysomelid with large eyes

C

D

E

A **speckled wood** at the forest edge.

A **great spotted woodpecker** and a **chiffchaff** in the open wood of oak etc. above the drive.

I saw a young **grass snake** in the grass verge, not far from the lodge.

{reverse side}

7 JUNE 1950.

1025 C *Sitona suturalis* Stephens. P.J. Osborne det.1955.

15 JUNE 1950.

7 JUNE 1950. WYTHAM WOODS.

Lunched out and afterwards took a field class, in Marleywood Plantation, in sweltering heat that was astonishingly tempered to a cool dim sea-bottom atmosphere in the thick developing wood of oak-ash-etc. with sycamore, ash, hazel undergrowth.

We were attacked by a good many tree-hole mosquitoes, *Aedes geniculatus* (Olivier), of which two kept. 1025 A

From sweeping the long grass in the open by the drive, where thistle, crosswort, goose-grass, Lotus, vetches etc. are rapidly growing up, I got

A brown and dark staphylinid *Staphylinus latebricola* Gravenhorst B

Smallish dark blue-black weevil with black thighs and brown tibiae and tarsi. C

15 JUNE 1950. WYTHAM WOODS.

Went up to "the Dell" (above S 2) to watch the soil sampling work of Macfadyen and Overgaard Nielsen, on the thick *Brachypodium pinnatum* grassland half-way down the slope. There is a foot or more of soil. The top bit looks grey and good, and O.N. says there is some 2% of grass root (dry wt.) in it. The vegetation varies a great deal, mainly through rabbit action. The main hollow of the slope where they have a 10 x 10 in. area, is almost pure *Brachypodium*. Above, there is a rather rich calcicolous and very patchy and variable grass-herb association in which other the tall grasses are also important.

{reverse side}

15 JUNE 1950.

1026

A	<i>Festuca rubra</i> L.	W.J.L.Sladen det. 1955.
B.	<i>Poa pratensis</i> agg.	W.J.L.Sladen det. 1955.
C.	<i>Vulpia bromoides</i> (L.) S.F. Gray.	W.J.L.Sladen det. 1955.
D.	<i>Poa trivialis</i> L.	W.J.L.Sladen det. 1955.

1026 J	1 ♀ <i>Psithyrus rufrestris</i> (Fab.) Several seen, sucking thyme flowers, sluggish. This is minute parasite of <i>Bombus lapidarius</i> .
K	1 ♀ <i>Bombus terrestris</i> (L.)
L	1 ♂ <i>B. pratorum</i> (L.) All det. C.E., confirmed by C.O.Nielsen.

G	<i>Geranium molle</i> L. C.E. det. 1958.
G*.	<i>Galium pumilum</i> Murr. E.F. Warburg det. 1958. = <i>Drusilla (Astilbus) canaliculata</i> (Fab.)

15 JUNE 1950. WYTHAM WOODS *****

“The Dell”*****

I collected a *Festuca* (? *rubra*), and three scarcer grasses, in flower. 1026 A-D
 There is some *Dactylis*, but only abundant near the path. (*Bromus erectus* is only common on the verges of the track down through Fields 1 & 2, where rabbit pressure is presumably less, and ends abruptly where hay-mowing begins to be a factor.)

I also collected flowers of *Linum catharticum* (E), *Geranium dissectum* (F), *G. molle* (G), *Galium cruciata* (H). E-H

There is not much **rock-rose** on the Dell, but some fine patches of flat **wild thyme** in flower, to which **bumble bees** were resorting. J-L

On the richer vegetation area I took a resting **small heath**, M
 and a small speckled white moth sitting this way at rest and having a head
 like a *Crambus*. N

Running on bare sand of a rabbit burrow at the bottom of the Dell was a **staphylinid** -- yellowish brown with very cocked up tail, looking the same as C.E. 1011 A. lost

A fresh **painted lady** on the top field above the Dell, which is a rather failed-lucerne crop full of *Carduus nutans* and **white campion**.

Field one has **common blues** and **small heaths** flying in its long hay grass.

{reverse side}

2 SEPTEMBER 1950.

There was the emergence about 26-27 August (see W.E.C.)

1046 B. *Halictus morio* (Fab.) ♂ O.W. Richards det. 1951.

2 SEPTEMBER 1950. WYTHAM WOODS.

Sweeping *Mercurialis* at the end of July in the Chalet Woods and near "3 Pines", had produced only 1-3 beetles per several sweeps. Today there were no *Hermaeophaga* at all at either place: though the leaves were pretty extensive though not gravely perforated by the spring over wintering population. Either (as with my *Hylesinus* experiments) emergence of the (late) summer brood from the soil is late, or there has been a real crash, as there was some four years ago.

This year practically every **sycamore** litter leaf is gone by now and the ground has only a few **oak leaves**, in scattered pockets, except where beech occurs. Leaves of the **limes** near the Chalet do not seem to have decayed either, though they are supposed to be soft and edible. Lost

Swept a Cambrid moth from the grass field in Upper Seeds (lost): there is a poor tussocky cock's-foot sowing, but the rubbly coral soil and also huge patches of **ploughman's spikenard** in flower, thistles, and scattered **teasel**, **mullein** and **rocket** (of the larger plants). 2.30 P.M. (G.M.T.)

On Rough Common, in shelter of a south-facing bank (sun and north wind) little ? parasitic bees were flying and settling restlessly on the 1 ft. face of B (one)

{reverse side}

2 SEPTEMBER 1950.3-4 SEPTEMBER 1950.

A 1♀, 2♂ *Melinda gentilis* Robineau. Desvoidy B. Macpherson det. 1954

1047.B ♀ *Myathropa florea* (L.). L.W. Grensted det. 1952.

2 SEPTEMBER 1950. WYTHAM WOODS***

of rubbly Coral Rag soil, on a bare depression.

Flying were **wall, brown argus, meadow brown.**

In the Chalet Woods, a **red admiral** sailed over the brambles, to settle in the shade on the moss zone at the base of an oak, 6 in. -- 1 ft.

3-4 SEPTEMBER. WYTHAM WOODS.

Both days I did much laborious tramping over the North Hill. The growth of vegetation is very lush and rank, because of the exceptionally wet year.

(3rd) While digging into the side of a very ancient rotting beech log in Brogden's Belt, about an inch in and 2 in. from the ground, in a clearing among thick brambles, I found some half dozen greenish-blue metallic "bottle flies" very sluggish or feigning dead and thereafter extremely spry. 1047 A

(4th) A very large clear black and yellow Syrphid on a teasel flower on the Ridge. B
And ♀, queen ants from a *Myrmica* nest in a very old birch stump, under bark, 3 ft. in dank jungly oak-ash-elder wood north of the Ridge. C

1 queen 1 winged ♀, *Myrmica ruginodis* Nylander A.J. Pontin det. 1954.

{reverse side}

15 OCTOBER 1950.

15 OCTOBER 1950. WYTHAM WOODS.

On Rough Common the aggregation of ***Helicella italia*** on thistle rosettes were very conspicuous, and most of them seem to be at work on decaying leaves among the still green ones.

{reverse side}

29 NOVEMBER 1950.

29 NOVEMBER 1950. WYTHAM WOODS.

Went up to Bowling Alley Plantation with Eric Duffey, who is counting grassland spiders. There had been several days of fog and frost which had loaded the beech twigs with long (1-2 inch) lines of pointed ice crystals, grown away from the S.W. wind. And on the cow parsnips near "Pond 3", the old flower heads were iced up like glass chandeliers. The thaw this morning was bringing down the ice from the trees with a crackling fall, to accumulate in shallow heaps of crystals on the bare ground.

We visited the very shallow limestone area described on 19 March. On the brow of the slope beyond, above the forest conifer plantings, in a small area of deep *Brachypodium*, next to scrub with haw and privet on one side, and turning to rabbit-grazed turf not unlike Rough Common on the other. Many yellow ant mounds. Some *Hypericum perforatum* locally in the long grass.

{reverse side}

1 JUNE 1951.

1 JUNE 1951. WYTHAM WOODS.

This has been one of the coldest and most backward springs I can remember. The {sic} The Halting spring halting constantly, and by no means standing at ease. But today, a beating warmth (out of the wind, which was still in the east), and very dry ground except where the dew survived in shady spots at noon. Even now the oak, ash and sweet chestnut are not in full canopy of leaf.

Walked from Three Pines to the Ridge, Brogden's Belt, the Dell, My Lady's Seat and back, 10.30 a.m. to 1.30 (G.M.T.).

The huge shattered **ash** just below Lord's Common still lies there. Not far from it are two groves of 10-20 year old sapling ash, now pruned below

{reverse side}

1 JUNE 1951.

A **brimstone** in glade by Three Pines.

B. *Anthoxanthum odoratum* L. W.J.T. Sladen det. 1954.

1 JUNE 1951. WYTHAM WOODS ***

by the foresters -- a foretaste of the sort of semi--natural woodland management we shall have. Coppicing and other clearances have certainly improved the ground flowers already: **bluebells**, **red campion**, **yellow dead nettle** and other nice glade flowers.

Inside the hollow stump, 3 ft., was a ♀ hornet (*Vespa crabro* L.) palpitating in the sun. "The Dell" illustrates very well the minute micro-climate differences that a few yards bring. The bowl of the Dell was sunstroke hot, the top quite cool in the east wind. A few pearl-bordered fritillaries (*Argynnis euphrosyne* (L.)) here (one k.) and on the grass slope near the gorse above Radbrook Common. (Yes) 1050 E
Also a **peacock** on the Dell; and a good many **large whites**, also on the Ridge and in the wood generally. **Speckled wood** in Brogden's Belt.

On the Ridge *Bombus agrorum* was visiting the flowers of bugle (*Ajuga reptans*) which are conspicuous in Wytham now.

On the hour-glass neck of the hill, near the **gorse** patches (which are very flourishing, and still flowering, and have at least two sorts of micro-moths settling -- of which I kept one) there is a very nice belt of grassy-brambly ground between the oaks and sweet chestnuts, and the sandy belt lower down. n.k.

There is not much *Brachypodium* but more of finer grasses like a foxtail (?) in flower. B

Also twayblade, (bugle), a crimson large single vetch, etc. A **cuckoo** visiting a nearby oak revealed to me its narrow pigeon-like graceful head, jerking as it sang.

{reverse side}

2 JUNE 1951.

1050 C *Cantharis rustica* Fallén.

1050 D *Harpalus aeneus* (F.)

2 JUNE 1951. WYTHAM WOODS.

Did much the same walk as yesterday, 2.30-4 p.m. (G.M.T.) in clear hot sun.

On the Ridge we noticed bugle, strawberry, a tiny *Ranunculus (parviflorus)*, birdseye speedwell, **houndstongue**, **hawthorn** in flower, and a few **rock roses**. A **small heath**.

In Bowling Alley collected a **sailor-beetle** off the shallow limestone vegetation (only one seen). Some cinnabar moths were visiting ragwort rosettes.

1050 C

On the Singing Way above Radbrook Common **orange tips** were flying, and I collected a *Harpalus* running on the dry earth track.

D

On the grass near some trees, three young **great tits** (unable to more than flutter) were lying quite close in a row.

{reverse side}

16 JULY 1951.

16 JULY 1951. WYTHAM WOODS.

With Rick Miller, to the "Bowling Alley", and the open big planted beech woods of the Singing Way. Was glad to find Douglas Veale had left some good chunks of beech branches, though most of the ground is clear,

{reverse side}

16 JULY 1951.

1059 A ♂ ghost moth (*Hepialus humuli* (L.)).

* *Verbascum thapsus*.

16 JULY 1951. WYTHAM WOODS.

We found, in very old rotted wych elm logs, in the beech wood edge, adult *Dorcus*, full grown larval *Melanotus rufipes*, and *Limax maximus*. 1059A

A **Hepialid** (swift) moth with silken thick white wings was swept by R.M. from the *Mercurialis perennis* carpet under tall beeches and sycamores. There are a good many *Hermaeophaga mercurialis* about, and limited leaf perforation: they seem patchy in distribution.

Abax not uncommon under logs in the beech belt.

'The Bowling Alley'

Today this was an entrancing field of flowers, but scattered thinly like flowers on an old French tapestry: pink **centaury** (no leaf mines), **ragwort** (crowded and partly defoliated by *Tyria jacobaeae* caterpillars, which were wandering everywhere else too), **cow parsnip** (with mating *Rhagonycha fulva* (Scopoli) on, B ♀ ♂ though these also patronise the ragwort flower heads), **selfheal**, a small 'hawkweed', and grasses (including small isolated patches of *Brachypodium*). Some small **mulleins** (1-2 ft.), rather starved, had yellow froghoppers with black-streaked forewings (not on other plants), and two had been stripped by some caterpillar. *Evacanthus (Euacanthus) interruptus* (L.). W.E. China det. 1951. 2 k. C

At the east edge is a belt of young

{reverse side}

16 JULY 1951.

1059

D *Cryptocephalus labiatus* (L.)

G. *Chrysis cyanea* (L.) ♀ O.W. Richards det. 1951.

H. ♀ *Amblyjoppa laminatoria* (Fab.) R.D. Eady (British Museum) det. 1951.

16 JULY 1951. WYTHAM WOODS ****

birches, mostly 1-8 ft. high. On these were a good many small blue-black

chrysomelid beetles (as C.E. 1056 R), and two were mating.

1059 D

I swept a micro-ish moth of grey-brown-white mottling, from low vegetation,

E

and saw another like it on the birch, which also had many green unwinged and winged aphids.

F

Behind the birch is a fringing row of grown **pin**es and **lar**ches in Bowling Alley Plantation, from which I beat a brilliantly jewelled small bee or wasp.

G

Flying over the Alley, was a huge red ichneumon, taken by R.M.

H

A small mosquito (*Aedes geniculatus* (Olivier)) attacked us while sitting under trees at the edge.

Very rubbed n.k.

We had notice a beech tree hole circa 5 ft., not far from here.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 7.

12 October 1951- 14 August 1953.

C.E. 1074-1123.

Red ticks¹³ mean ready to be indexed. Crossed red ticks mean indexed.

Circles¹⁴ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept

¹³ Shown as **bold** in edited version.

¹⁴ Edited to A or 00

12 OCTOBER 1951. WYTHAM WOODS.

Walked from “3 Pines” down to Interplantation and back along the slopes up to the west end of “Upper Ride” = “The Great Light” and so back. It was sunny but cool, and the plants were drenching wet. **Sycamores** now only beginning to fall at all extensively (and apparently unusually severely spotted with black fungus), **Mercurialis** and **nettles** still green, and **spindle** berries unburst, indicating a rather late onset of autumn. The **bracken** is terrifically high and dense in Interplantation, and some other openings.

Pond 4 Deer Pond. This has giant luxuriance of marginal marsh with **Epilobium hirsutum** nearly 6 ft., *Juncus ‘communis’*, **Alisma plantago**. Outside this is **J. inflexus**, also an open patch of very rich moss with a small articulate rush, and a little **Equisetum limosum**. Inside the marsh is *Sparganium*, and in the water **Lemna minor** and **trisolca**. Quite varied for such a tiny pit. 1074
The bottom had fairly stinking dead vegetation and mud, with small *Asellus* and a few old dead broken shells of a small *Planorbis*. [A] B

On bracken area among oaks, of Interplantation, a young **grass snake** was sunning.

Farther up, on the Coral Rag slopes below “Upper Ride” there was a fine society of small wavy bright brown (white-bellied) bracket fungi growing on an ancient rotten barkless fallen oak trunk. (Not far from Stake 152 H.N.S.). They had been nibbled by ? slugs). 1075 A n.k.

I also found two small unexpanded “eggs”, white with hyphal threads below, growing on litter close to a small log, of stinkhorn (***Ithyphallus impudicus***).

{reverse side}

12 OCTOBER 1951.

{facing page with nothing on front side}

12 OCTOBER 1951.

1074 A. 3 ***Asellus aquaticus*** (L.) I.E. Efford det. 1959.

1075 A. *Polyporus* species

12 OCTOBER 1951. WYTHAM WOODS****

About 75 yd. south of stake 152 was a line of five broad-leaved Helleborines (*Epipactis purpurata*) in seed (-- bag-like seed heads all the way up the flower stem), two of them growing as twin stems. I kept two seed 'pods' to press. 1075 B
The flowering specimen brought in by H.N.S. in August was not far from here (Stake 158). The colony found today was growing on Coral Rag slopes among *Mercurialis* and a little scattered dwarf bracken, under oak-sycamore (ash near).

On the same area and neighbouring slopes of the kind a great many smallish *Tipulas* were disturbed from the field layer.

At the west end of "Upper Ride" several hornets were cruising in the sun around oak and sycamore foliage bordering the ride at heights up to 25 ft. I could not find any nest.

{reverse side}

25TH OCTOBER 1951.

25 OCTOBER 1951. WYTHAM WOODS.

Went on the trapping round with Southern in the morning, on the slopes north-north east of the Chalet. It was still and misty with sun towards mid-morning. The conditions are just as described for Wychwood, as regards the state of vegetation and the lateness of leaf-fall. **Maples** are easy to distinguish at this season, and though commoner on the lower clay areas (where regeneration can be seen), they are well scattered in the rest of the hill. Southern has seen a **fallow deer** eat a **spindle** bush down; tracks are pretty common.

A few Tipulid flies in the *Mercurialis* on the oak-ash-sycamore on Coral Rag, of which I kept one. 1080

{reverse side}

28 MARCH 1952.7 APRIL 1952.

28 MARCH 1952. WYTHAM WOODS.

On the 24th I began a new season's work on ash bark-beetles. This is the fifth year of it, though I did no fieldwork in 1951.

This month vegetation has been very forward, after a mild winter. There has also been a distinct increase of pre-vernal flowers in the woods that were thinned of sycamore in 1946. Thus parts by "First Fork" and "Three Pines" have good clumps of **primroses** in flower, many violets in flower, and apparently a great increase in **Arum**. The dark purple, base-springing flowers of violets growing in open woods near "Three Pines" appear to be **Viola odorata**. They have a distinct scent (confirmed by three people), roundish leaves, blunt sepals, stolons, and only slightly hairy (decumbent) pedicels. n.k.
But some lilac ones need also looking at. Tansley nowhere mentions *odorata* in his lists, and the books say it does not come much in natural woods. (F. Whitehead suggests that the ffennells may at one time have planted out some sweet violets).

Yesterday and today great cold set in, with very high winds from north and north east, developing by 29th to heavy snow squalls that have dumped an inch or two of it on the garden.

5 APRIL 1952. WYTHAM WOODS.

Went up to look at ash log 'traps', 2.30 -- 4 p.m. (G.M.T.) It was moderately warm, after tempestuous morning showers. Looked carefully at the thinned woods between the 'Jones Enclosure' and 'Three Pines' (part of Holly Hill Copse), north side of the Chalet Road. An old bank runs here, perhaps a boundary of the original Great Wood. This is partly in the open and carries primroses, violets etc. in some felicity. The woods were thinned in 1951, being rather dense youngish sycamore

{reverse side}

7 APRIL 1952.

1083 A. W.J.L. Sladen confirmed 1953

- C. Identified as *V. reicherbachiana* by J.E. Lousley 1953 (without having seen my notes). The British Museum coloured card of *riviniana* is also the other species!

7 APRIL 1952. WYTHAM WOODS****

coppice with little but *Mercurialis* below, and oaks and a few ash etc. sticking up above in a scattered way. They took out all but main poles of the sycamore and left the better large trees. Already **bluebells** and **primroses** are increasing in abundance, and violets, also a few **Anemone**, **lesser celandine**, barren strawberry (*Potentilla sterilis* (L.)) Garcke* etc. 1083A*
There are two equally common violets in flower:

- (1) The *V. odorata* L. mentioned on 28 March. B
- (2) A much paler, almost lilac species *V. riviniana* Rchb. (really one of several main splits of old *canina*), with pointed (sharply) sepals, scentless flowers, and a tufty growth without obvious stolons, and a sort of tap root. This differs completely from *canina* (s.s.) which has sharply pointed, ace-of-spades leaves, and no basal rosette leaves, and usually a yellow spur. From its close ally *V. reichbachiana* (= *sylvestris*) it differs especially in having pale-spurred flowers with a groove on the end.

On a single flower of dandelion growing on the open bank was a visiting bee ♂ *Andrena bicolor* (Fab.) I.H.H.Yarrow det. 1960 D

Simulium were out today. I caught two flying round me and settling momentarily, at "Three Pines" = T/5 (Deciduous) (Edge)/3. 2 ♀♀ *Simulium erythrocephalum* (Degeer) K.G.V. Smith det. 1958. E

{reverse side}

11 APRIL 1952.

13 APRIL 1952.

A. *For nomenclature see A.A. Allen letter 18.5.52, who det.

18 APRIL 1952.

11 APRIL 1952. WYTHAM WOODS.

To beetle traps, and thereafter Rough Common and the Singing Way. Many planted daffodils in flower on the Singing Way.

Under loose bark of a large rotting oak branch under its tree, on beech-oak fringe below the Singing Way was a full-grown larval *Athous villosus* (Geoffroy in Fourcroy) and many *Marpessa laminata*. n.k.

13 APRIL. EASTER SUNDAY. WYTHAM WOODS.

To beetle logs, on a warm cloudless afternoon.

At the sliced-pear jam jar (see W 521) 3 ft. on sycamore in woods at First Fork I collected (3.30 p.m.) 1084

3 *Epuraea unicolor* (Olivier) = *heeri* Tourn (1 k.) A.A. Allen det. 1952.

1 *Soronia grisea* (L.)

1 *Lathrimaum Anthobium unicolor* (Marsham) P.J.Osborne det. 1956

A
B
C

A **brimstone** butterfly visiting *Viola riviniana* flowers on open bank by road below “3 Pines”, and a **peacock** on the road here.

18 APRIL. WYTHAM WOODS.

To beetle logs, and the “the Ridge”, 10.30-12.30 a-pm. (GMT). Hot, sunny, cloudless, grass still wet with dew in shadier places.

10-20 **dandelions** in flower on the bank below “3 Pines”, on Chalet road side. On these small bees, of which I took 4, one being a red-bellied *Sphecodes*. 1085 A-D

A	♀ <i>Sphecodes ephippius</i> (L.)	I.H.H. Yarrow det. 1960
B, C	♀♀ <i>Halictus fulvicornis</i> (Kirby)	I.H.H. Yarrow det. 1960
D	♂ <i>Andrena chrysosceles</i> (Kirby)	I.H.H. Yarrow det. 1960

{reverse side}

18 APRIL 1952.

(* This path was being used as a short cut by the Warden, Meads, who readily agreed to a detour.)

25 APRIL 1952.

1086A	2 <i>Omalius rivulare</i> (Paykull) P.J. Osborne det. 1956.
1086B	<i>Epuraea heeri</i> Tourn. (= <i>unicolor</i> Brit. Cat. nec Oliv. <i>X-rubrum</i> J. Sahlb.) A.A. Allen det. 1955 (see his letter 3.11.55).
1086C	1 <i>Omalius rivulare</i> (Paykull) P.J. Osborne det. 1956.

18 APRIL 1952. WYTHAM WOODS

A **peacock** was visiting dandelion flowers and a **brimstone** cruising on wood-road margin.

Many **lesser celandines** in full flower at open wood-road edge.

On "The Ridge", which has developed to clear a trampled path for good seclusion*, and many bright reddish-orange *Andrena* were cruising for nest sites.

Below "The Ridge", a nest of *Myrmica* under one of the timber chips of the huge ash, whose stump still remains. In a glade of open oak-ash woodland, *Myrmica ruginodis* Nylander A.J. Pontin det. 1954.

1085 E

25 APRIL 1952. WYTHAM WOODS.

Visited ash logs 2.15 – 3 p.m. (G.M.T.). **Brimstone** flying in road 3 ft. Warm, cloudy-sunny.

Some *Drosophila* traps were being visited by beetles near "First Fork". Wet 'dried apricots' in carton, height 18 in.

1086

Hung on sycamore. Small staphylinids and an *Epuraea*.

A B

Hung on elder. Small staphylinids (3 k.)

C

Site as in C.E. 1084.

On a damp and muddy cart-track in "Upper Ride", near the Deer pond, was considerable insect activity; 2.45 p.m. G.M.T

1087

Many small 4-spotted *Bembidion articulatum* (Panzer) 2 k. P.J. Osborne det. 1955.

A

Larger bluish-green two-spotted *Bembidion biguttatum* (Fab.) 2 k. P.J. Osborne det. 1955.

B

1 *Stenus clavicornis* (Scopoli) P.J. Osborne det. 1956.

C

2 small *Helophorus* n.k.

1 *Tetrix subulata* (L.)

E

1 *Lestera longelytrata* (Goeze) P.J. Osborne det. 1956.

D

{reverse side}

5 MAY 1952.

A **grass-snake** in the bramble-field layer edge, by the Hut.

5 MAY 1952. WYTHAM WOODS.

Went to meet Eric Duffey at “the Bowling Alley”, to see his microclimatic recorder, (with Michael Davies). The machine is the joint work of Aryan Macfadyen, Denys Kempson, and E.D. It measures through 11 thermistors.

E.D. has recently noticed two small bees carrying lengths of dry grass stem 1-2 in. long and dumping them each in a pile on the ground of the Bowling Alley. This is now a fascinating mosaic of tiny flowers like *Ranunculus parviflorus*, minute ‘scorpion grass’ and barren strawberry. There is a fairly good cover of non-grassy matty low plants on this open limestoney place at this season.

One of the bees had stuck into a sticky-stick trap near one of the ‘nests’. Under each was a large old white *Cepaea nemoralis* shell. The bee *Osmia bicolor* Stephens (see ♀, W 532, collected today; and ♂ from a *Helicella italia* shell in March).

It makes its nest in shells (chiefly?) and has this haycock habit, which may be protection from insolation, perhaps from birds too.

A single *Cicindela campestris* was also stuck on a trap-stick, dead, ht. Hitherto never found on the Alley, and would certainly have been noticed.

{reverse side}

10 MAY 1952.

B. ♂ *Norallisoma spinimanum* (Fallén) K.G.V. Smith det. 1958.

C. ♀ *Tipula variipennis* Meigen.
L.W. Grensted det. 1953.

F. 2 *Helophorus flavipes* Fab. P.J. Osborne det. 1956.

There is a note about this in the ‘*Biological Flora*’, that some remains were found up trees: attributed to birds -- but could be grey squirrels?

10 MAY 1952. WYTHAM WOODS.

Visited ash logs and neighbouring woods, 9.30 -- 11.30 A.M. GMT. It was warm, and damp after rains in the previous week, with only a little wind inside the wood. Everywhere animal life was rampaging.

Deer Pond. The edge is easy to get to at this time, before the bracken has grown. There were two *Cardamine pratensis* in flower in the bog, and a small (young) **grass snake** was coiled on the wet moss in the sun. Later it took to the water.

Sweeping the marginal tall *Juncus*, *Epilobium hirsutum* -- 6 in.-2½ ft, I got 1088

2 <i>Tetragnatha</i>	A
1 Fly	B
1 Crane fly	C
1 large <i>Helophorus</i>	lost
several green micro-moths <i>Micropteryx calthella</i>	(1 k.) E

“Upper Ride” (“The Great Light”). In water in tractor ruts on clayey soil, 2 small *Helophorus* swimming feebly (k.); and many small flies on water surface (n.k.) F

Arum maculatum flowers in this part of the woods have nearly all been crunched off and mainly eaten. By what animal? I could not find an intact specimen, yet they were abundant a week or two ago.

{reverse side}

10 MAY 1952.

One *Listera ovata* in flower bud among mercury here.

1089

B.S	2 <i>Agriotes acuminatus</i> (Stephens)	P.J. Osborne det. 1955. 1 kept
C.	1 <i>Athous vittatus</i> (Fab.)	P.J. Osborne det. 1955.
	1 <i>A. haemorrhoidalis</i> (Fab.)	P.J. Osborne det. 1955.
D.	♀ <i>Otites guttata</i> (Meigen)	K.G.V. Smith det. 1958.
F.	<i>Phaedon tumidulus</i> (Germar)	P.J. Osborne det. 1956.

Polyporus squamosus Fr.

(Record not used, owing to omission of person det. it)

10 MAY 1952. WYTHAM WOODS *****

Studied the rich community active on and in *Mercurialis* societies of the oak-ash-sycamore in "Jones Enclosure" below "3 Pines" by the road: 1089

Saw several *Tachyporus chrysomelinus* active on leaves, also two *Pryochroa serraticornis* resting.

On a shoot of *Mercurialis perennis* ♂ flowers with stamens were half-a-dozen *Micropteryx calthella* (1 k.) ? eating pollen A

Many tiny & some medium-sized click-beetles on *M. p.* leaves (2 of each k.) B, C
1 Otitid fly on leaf of *M. p.* D

Hermaeophaga mercurialis is rather abundant and there is already considerable leaf perforation. Medium tipulids frequent, and I took ♂ ♀ in copulation on under-side of *Mercurialis* leaf. E

A bronzyish medium-sized Chrysomelid beetle on leaves of *Heracleum sphondylium* 1 ft., under oak etc. One on each of two plants (1 k.). F

A large round scaled whitish-fawn foliose bracket fungus with a stalk occurred on an old deciduous stump. They are to be seen in other places also.

"3 Pines". In deciduous woodland ride below I took an Otitid fly sitting on *Arctium (lappus?)* leaf, 10 in. ♀ *Otites guttata* (Meigen) K.G.V. Smith det. 1958. G

{reverse side}

12 JUNE 1952.

Also ♀ *T. micans* attacking logs 1 -- 2 ft. in open in lower seeds. 1 kept.
C.E. 1092 A*

- C. ♂ *Acanthocrabro vagabundus* (Panzer) I.H.H. Yarrow det. 1960 (as *Crossocercus (Blepharipus) v.*)
- D. ♂ *Pompilus spissus* Schioedte I.H.H. Yarrow det. 1960
- E. *Lonchaea tarsata* Fallén L.W. Grensted det. 1952 (see his letter 23.6.52).

12 JUNE 1952. WYTHAM WOODS.

Went up to "The Ridge" and Brogden's Belt, 11-12.15 a.m./p.m. GMT. Hot, partly sunny partly overcast, dampish air, dry ground, very little wind. Flies (*Hydrotaea*) perhaps as abundant and active as I have ever known them: in woodland glade and ride, on the open Ridge (field layer in open, air above!), on Lower Seeds (hay and ground vegetation), inside Brogden's Belt (dense beech-mixed wood). In the last there were also ♀ *Chrysops caecutiens* (2), ♀ *Tabanus micans* (2) 1 k., 1092 [A] ♀ *Aedes rusticus* 2 k. attacking me 1-3 ft. while sitting under beech. [B] The *Aedes* must breed in the water tank by the "Snake Pit" brick structure, about 75 yd. away. The tank has dead leaves in it, but no mosquito pupae were seen at surface.

On the limestone knolls below the Ridge, in Lower Seeds, where crops grow sparsely (hay this year), there is a very large number of wild strawberries (*Fragaria vesca*) in fruit. They grow prostrate on the more open patches, 0-2 in.

I swept the field and ground layers on the open "Ridge" (grass, rock-rose etc.) and kept:

A striped yellow and black tiny wasp [C]

A thin small black wasp with red-banded abdomen, that runs very swiftly and darts about. [D]

Inside the 4 ft. quite hollow stump of the huge ash by the Chalet Road below Lord's Common was a shining small fat blue-black fly, flying about very busily and settling on dead wood, say 1-2 ft. [E]

{reverse side}

12 JUNE 1952.1 JULY 1952.

12 JUNE 1952. WYTHAM WOODS****

While collecting the young yellowish-green leaves of cherry laurel (***Prunus laurocerasus***) on The Mount (mixed wood margin to road verge) I noticed that the little dark glandular lumps near the mid-rib at the base of each leaf. It appears that these are extra-floral nectaries, said to be much visited by bees in June. Kept leaf specimens.

1093

1 JULY 1952. WYTHAM WOODS.

Walked on the North Hill with Miss Bertha Lutz, of the National Museum of Brazil, who knows the animals of tropical forests (especially frogs) very well. ***Orchis fuschii*** (a few) in flower in the "Great Light" ("Upper Ride"). **Bee orchids** in flower (a few) in the "*Aquilegia* glade" above the badger town below Rough Common, and on Rough Common itself (in long *Brachypodium* by roadside where we do the grasshopper census). And a **pyramidal orchid** near the *Viburnum* on Rough Common, in grass.

{reverse side}

29 AUGUST 1952.

1104 A. W.J.L. Sladen confirmed 1953.

29 AUGUST 1952. WYTHAM WOODS.

Went out to Brogden's Belt and "the Ridge" to choose old beech logs for the Autumn Ecology Course (the idea of these originated partly with Thomas Park, and they have been held for 9 working days in September of 1948, 1949, 1950; 1952. The weather has so far been almost perfect in all these years.)

2.30 -- 4 p.m. GMT, very hot and cloudless, flies rather bad.

On "the Ridge" a good deal of small *Euphrasia* is in flower, and some short (< 6 in.) ***Gentiana amarella*** L. (s.s. provide details by C.E. from the new Flora). 1104 A

At one spot, where *Brachypodium pinnatum* merges into bracken-bramble of the wood margin (near the horse chestnut), I swept a good many reddish Heteroptera -- *Rhopalus*. There was a little ***Hypericum*** near. ***Rhopalus subrufus*** (Gmelin in L.) G.G.E. Scudder det. 1956. 1104 B

The **blackberry** crop is everywhere larger and at the full.

In Brogden's Belt, a big beech branch blown down has a fine fungus growth under the loosening bark. The fall must be about a year or so, not more than two years old. Among the fungus was: 1 k.

1 ***Endomychus coccineus*** (L.) F

A good many "Cis", both light and dark brown, 12 ***Cis boleti*** (Scopoli) (2 k.)

A.A. Allen det.1955. C

Several very small shining black clavicorns shaped rather like *Cis*.

Octotemnus glabriculus (Gyllenhal) 1 k. A.A. Allen det.1955 D 1 k.

{reverse side}

30 AUGUST 1952.31 AUGUST 1952.

30 AUGUST 1952. WYTHAM WOODS.

Spent the afternoon searching the Chalet Woods and the area in and below Lord's Common for suitable Stage 1 and 2 log sites i.e. fallen trunks and branches with firm wood and loosening bark, for field classes. There are very few, or at any rate too scattered for convenient class wood. I think the need would be met by lopping off every year a lot of dead and dying oak branches with bark on but wood not good enough for fuel or timber. Probitts agrees that this would be quite practicable if we could supply the labour to climb and cut. The logs would have to be tagged to indicate their dedication to Ecology, and could be shared between us and the Forestry research people.

31 AUGUST. WYTHAM WOODS.

In the morning went along the singing way and found some excellent fallen elm, beech and ash in the western end of the Jew's Harp. This is evidently a mainly planted shelter-belt, like Brogden's, between arable fields, and the West wind certainly comes whistling into it and the corallian ground is rather dry. One has to go to these ill-kept woods to find the simulacrum of succession in a natural forest (where up to 17% of the ground can be log covered).

In the afternoon went up to Brogden's Belt to label these Stage 3 beech logs, and the Chalet Woods to mark out litter stations;

{reverse side}

31 AUGUST 1952.1 SEPTEMBER 1952.2 -- 10 SEPTEMBER11 SEPTEMBER

31 AUGUST 1952. WYTHAM WOODS

I believe the **blackberry** has been spreading in many places on the woodland glades and edges, and on Rough Common, and as so few animals take the fruit which has an astronomical crop, wonder if the checking of human picking by the last 5-10 years "enclosure" has made any difference.

1 SEPTEMBER 1952. WYTHAM WOODS.

Went up to the Jew's Harp in the morning and marked sites for log work. There are a great many **speckled wood** butterflies (and very few others except an odd meadow brown) in "edge" habitats, such as grass-ride/scrub; grass-ride/bramble or mixed field layer, grass-ride/wood, hayfield/wood/, hayfield/bramble-mixed low scrub. They nearly all fly below 6 and often at only 1-3 feet.

2-10 SEPTEMBER. See notes under W.E.C. The weather for the Course was fine -- it rained on Sunday -- but the latter part was cold, with night temperature almost down to freezing sometimes. This is a quite exceptionally early cold.

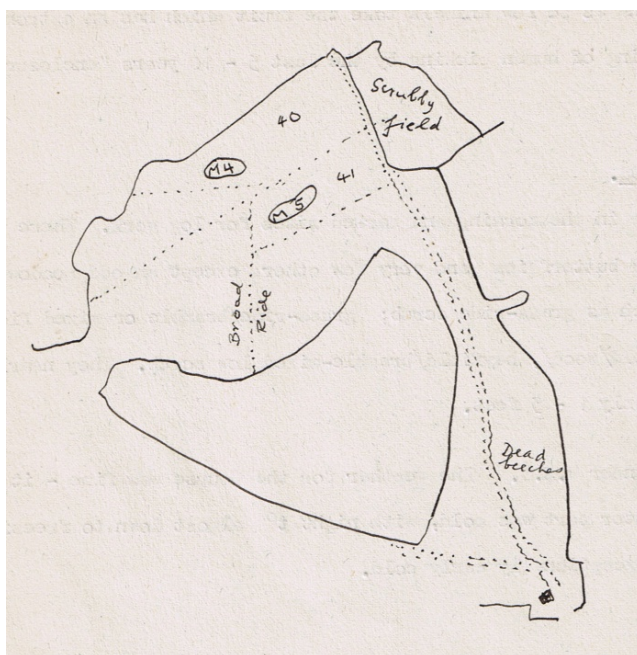
11 SEPTEMBER. WYTHAM WOODS.

Went out with Joseph Connell and M. Delaney, the former a Californian ex-airman graduate working at Glasgow University, the latter a Nature Conservancy-aided graduate studying Thysanura at Southampton. Delaney worked 8.30 -- 10.30 a.m. GMT on the very decayed

{reverse side}

11 SEPTEMBER 1952.

1105 1 adult *Tachypodiulus niger* (Leach). C.A. Elbourn det.1967 n.k.



'Scrub Edge' C.E.

11 SEPTEMBER 1952. WYTHAM WOODS***

beech logs and standing dry dead beech I used for a Zoology Class in 1949 and 1950 (see LOG 29 B....). These are in a glade in Marleywood Plantation (marked as Compartment 45 on the Forestry blank map), which now has a heavy cover of brambles etc., and is rapidly filling up with sapling ashes. He found no *Thysanura*, also no *Dorcus* or *Sinodendron*, but did find ***Melanotus rufipes*** in the ground-lying logs. He kept a large shining black active millipede with white legs, from under very dry bark of broken large standing beech, 4 ft. 1105

Connell and I explored Marley Wood during this time, and saw several **grey squirrels** both here and in Marleywood Plantation. The squirrel damage to youngish (up to 20 ft.) **sycamores** is striking -- a great many standing dead with their browned leaves still on and most of the bark stripped off, sometimes from ground level to the top. Some of the edge trees in Marleywood Plantation drive, used by the Zoology Class in 1947 and 1948 were thus dead.

The pasture field below Marley Lodge is rapidly growing into dense patches of haw and other thorn scrub. Succession can be seen extremely well here.

Marley Wood has had nearly all its unsound larger trees picked out and cut and there are not many logs.

Compartments 40 -- 41 are mostly either dense open bracken-bramble with taller scrub trees among it, scattered oaks, or patches of wood with a lot of **birch** (at these sandy spring line). There is a heavy berry crop on **hawthorn, elder, privet, buckthorn. Guelder rose** is not uncommon, in red fruit. On one bush 3-6 ft. I found ***Galerucella viburni*** (Paykull) 1106A

{reverse side}

11 SEPTEMBER 1952.

Since survey May 1945

* up to 5 ft.

11 SEPTEMBER 1952. WYTHAM WOODS *****

and kept a specimen of partially skeletonised leaves (*Viburnum opulus*).

1106B

Marsh 4 seems to have developed quite extensively and forms a uniform regiment of *Equisetum telmateia*, *Phragmites communis*, *Epilobium hirsutum*, and large *Carex* (*acutiformis* ?). The ground is squelchy and in places water was just at the surface (rains last night). One has to force a fairly destructive path into the marsh and down to the litter layer. The richest remaining litter is *Carex*; other patches do not have more than a loose cover of old plant and stems. Life swarms in this deep damp zone: spiders, springtails, froghoppers of a dozen sorts, snails, slugs, small flies of 20 or more sorts, small parasitic Hymenoptera etc. In addition to *Cepaea nemoralis*, *Arianta arbustorum*, *Oxychilus alliarius* and *cellarius*, *Goniodiscus rotundatus*, and *Trichia hispida*, I found 3 *Clausilia rolfii* Leach. This adds to previous records for Marsh 5 and Marsh 1. In Wytham its HQ is absolutely in the Marshes.

1106C

{reverse side}

11 SEPTEMBER 1952.

D. *Psammoecus bipunctatus* (Fab.) Cucujidae.

11 SEPTEMBER 1952. WYTHAM WOODS****

Also in Marsh 4 litter I kept:

1106 D

A small light brown 2-spotted sprinting beetle.

A curious small black fly larva with a fan of appendages at the tail. E

Sweeping the Marsh at 2-5 ft. produced hardly anything.

We also visited the Pasticks, which were in the undisturbed state that Rick Miller found them for work. A good many of first year **ash** seedlings (from 1951 seed) were coming up. There are no groves of ash saplings in this wood. Outside was corn stubble and new plough.

{reverse side}

3 JANUARY 1953.

3 JANUARY 1953. WYTHAM WOODS.

Went in the morning with H.N.Southern and Maxim Todorovic, to Marley Wood, where the latter put out his traps. Southern, D. Meads and I visited and put provisional boundary markers on Marshes 4 and 5, each amounting to perhaps 2½ acres. The area marked for M 4 runs from the path to the woods on a steep bank across, -- we put in a fairly wide margin on the south side containing **sycamores** and bracken, the former ferociously spoiled by **grey squirrel** damage. M 4 has very little sallow in it, not very clearly marked head spring, is rather uniform in its vegetation (see 11.9.1952). The dead plants now form a solid thick mat about a foot deep, beaten down by the December snows.

Marsh 5 is different. It faces east and is between two bits of thick woodland on the rising slopes either side. The top spring wells out vaguely a few yards below the vista path and is shaded by a thin line of trees. The vegetation has the same thick mat of dead stuff, but there is no ***Phragmites*** except a small lot at the lower edge of the patch we delimited; a good deal of **yellow iris**; and some purple **loosestrife**. Under the upper dead vegetation is a fine layer of moss and hepatics with large numbers of snails.

The reason I missed this marsh in September was partly that there used to be a tub at the head spring, full of water with *Limnaea truncatula* in. There is now a tub-spring lower down, on the south side by trees:

{reverse side}

3 JANUARY 1953.17 FEBRUARY 1953.

Limnaea pereger, several under a piece of floating wood.

3 JANUARY 1953. WYTHAM WOODS ****

John Gibb informs us that he moved it to make the present bird-drinking live trap (which we have included in the reserved area) about three years ago.

17 FEBRUARY 1953. WYTHAM WOODS.

Walked, with Brenda Macpherson, from the Chalet down to Radbrook Common and Ponds 1 and 2; and along the outside fringes of Lord's Copse, Hill Copse, Great Plain, Further Clay Hill and up past S 35 to the Chalet. The object was to look at three of the Reserves, and to see what the practical effects of the forestry plan have been on the west part of the Woods. It was misty at times, and turned to heavy rain by midday. Not cold. 10 a.m.-- noon G.M.T.

Pond 1. This was ice-covered, beginning to melt. At least two kinds of chironomid flies were flying or dancing at 3 -- 6 ft. over the turf and stone bank near the outlet. Small species in copulation were sitting on the ice. (See W 580 for specimens)

Dung of small ? **water vole** in and on the ice.

The pond has some bushes in the middle and a good deal of emergent bulrush etc. The marsh at its head extends a bit above the boundary fence of the reserve, into the open young plantings, but the marshy bit is unplanted.

There is a small clump of impenetrable privet thicket at one place on the west edge, which rather well illustrates the claim of foresters that root competition (and I would add shade) from privet is a serious thing. I do not think this applies to such shrubs as guelder rose, wayfaring tree, spindle, or even alder, in moderation.

{reverse side}

17 FEBRUARY 1953.

There is a very great deal of gorse (*U. europaeus*) less than 2 ft. high, spreading in patches over the Radbrook Common plantations.

17 FEBRUARY 1953. WYTHAM WOODS****

The streams above and below Pond 1 (10 B, 10 C) were running merrily.

Pond 2. I remember this as a pure *Equisetum limosum* pond-marsh. Now it is still wet marsh with no open water, but has ***Typha latifolia*** (a few flower heads standing), *Carex*, and perhaps *Scirpus lacustris*. Needs a summer survey. The bank is sound except at the broken outlet, which has no sluice boards or fauna at all. It could fairly easily be brought under water level control, but the results would need careful forethought. Marsh here adds variety, as we have a good open pond below.

We did some mapping of the rabbit fences on the compartments recently and now under treatment.

Microtus are quite abundant among the solid (though not now high) grass tussocks and mat on Compartments 29 and 33, which are open fence slope under very young plantings. Many fresh grass-cutting middens, and runways. It bears all the usual signs of a building up population well on its way to a peak.

Great clearances have been made in parts of Lord's and Hill Copses (19-21) but they have not yet begun on 17 and 15, though we saw trees marked with red blazes for felling this season, in 17. The pattern is now fairly plain and is immediately ruinous to many ecological interests, though opening out certain new values:

{reverse side}

17 FEBRUARY, 1953.

17 FEBRUARY 1953. WYTHAM WOODS***

The immediate and sweeping changes are that instead of a moderately thick scrub-tree canopy over much of the ground (not, admittedly, high forest canopy) you have:

- (1) Anything from almost clear-felling of everything except scattered seed/timber oaks and ashes and sycamores, to a less drastic pattern, with e.g. groves of young ash or sycamores left to develop.
- (2) From a dullish ground flora of, say, mercury with a few other species, an outburst may be expected of (a) spring flowers like bluebell and primrose (b) grass tussocks, especially *Holcus* and *Deschampsia* (c) bracken or bramble. The results may blend into a typical oak wood seasonal cycle, or the grass or bracken may dominate. This is partly deduction and speculation. Bracken will be one huge trouble of the foresters when they thus remove canopy in some areas. Also bramble.
- (3) All scrub is cut away, which of it will come back, and from roots or new seed? Will it be cut away on every 3-5 year thinning blitz?
- (4) All dead and decaying timber, all logs, are whisked away. There are still good specimens of both in Compartment 17. Here also is a much smaller maple which may be removed. No dead wood is left except what may remain on reprieved seed/timber trees, and a good many stumps, some of which will die quite, other coppice. No dead wood could arrive for 20 years except by decay and windfall of the reprieved trees, which would then be exploited

{reverse side}

17 FEBRUARY 1953.

17 FEBRUARY 1953. WYTHAM WOODS***

anyway.

- (5) The Compartment spaces are planted at about 5 ft. intervals with young oak, ash etc., and spruce, larch, *Thuja*, etc. It is intended to use the conifers mainly as fairly long-term nurses only, leaving a mixed but utterly healthy deciduous forest at the end.
- (6) Small spring flushes with *Carex* e.g. *acutiformis* or hollows with *Juncus inflexus* etc. Will remain and cannot be eliminated, except by eventually heavy canopy.
- (7) (5) requires rabbit fencing (lasting 8-10 years) which the badgers pushed through. If they do not, their territory gets restricted. I think visitors will be discouraged from hopping these fences.
- (8) After the first drastic reorganisation there will be a long stage up to the cutting of the mature timber, when the compartments will not be ever so suddenly changed, though there will be periodic thinning etc. The field layer will be very varied and beautiful, scrub may infiltrate again, but DD/wood will have to be provided deliberately.

{reverse side}

7 APRIL 1953.

Aubrey Manning, who is working on bumble-bee behaviour confirms that ***Bombylius (major)*** L.) visits primroses in Wytham for nectar, also ***Osmia bicolor*** does so.

7 APRIL 1953. WYTHAM WOODS.

With John Brereton, to the "3 Pines" area and the "Ridge", 2.30 -- 4 p.m. G.M.T., sun, cool temperate.

Put out some hanging jam-jar traps for ash bark beetles (see separate notes). In the upper parts of Compartments 5 and 9 (Holly Hill Copse) and in 7 (Little Ash Hill) a great many societies of **primrose** are in flower and can be seen to be spreading to the edges with small seedling plants carrying one or a few flowers. Bee-flies (*Bombylius major*) cruising among primrose flowers which have colonised a trap-grid path in 7. The plants are multiplying wherever there has been thinning or other opening. Much ***Viola riviniana*** in flower in similar places, and a great deal of ***Arum*** in leaf. The road strip in 5, below three Pines has not only these but a few ***Anemone nemorosa***, which Southern says is extremely fine in flower on the largely cleared areas of Compartments 19-21.

Lower Seeds has "sheets" i.e. numerous large clumps of violets in flower on the upper knolls just outside "the Ridge". (***Viola hirta hirta*** -- see notes for Upper Seeds, April 11th)

{reverse side}

7 APRIL 1953.11 APRIL

7 APRIL 1953. WYTHAM WOODS****

Sycamores are in bud but not breaking yet; **ashes** heavily in flower.

I have organised 6 "Depts." to combine in paying for air photographing of the whole "Wytham Area" -- 3200 acres between "Eynsham" water reservoir, Botley and the King's Weir loop of the Thames. It will give a mosaic and a set of stereoscopic prints. (This was very successfully carried out at a good stage of changing canopy, on May 3rd.)

11 APRIL. WYTHAM WOODS.

Walked from "Three Pines", through the Chalet Woods, round Upper Seeds and back, 3.15-4.30 pm GMT, sun with cool wind.

At the Chalet a medium-sized **grass snake** went across the road into the thinned Chalet Woods, moving slowly in the open so that we could see the brilliantly painted markings of brown on the sleek olive sides, and a splash of yellow on the head. It went to refuge in leaf litter among brambles, under the oak-sycamores.

The **wayfaring trees**, some very large and old, and **spindles** by the end of the Chalet Wood path to Upper Seeds have not been touched, as this section is still to be thinned.

Upper Seeds, especially near Brogden's Belt and the "Snakepit", has a brilliant light purple sheen of violets; when one looks close, they are seen as very large clumps, individual plants with up to 40 or more flowers. They are *Viola hirta hirta* -- 1109 being scentless, rhizomatous, hairy in the right way, and a lightish but not lilac purple. They are remarkably abundant, on a fallow field after lucerne in 1952.

{reverse side}

13 APRIL 1953.

1111B *Staphylinus globulifer* Geoffroy in Fourcroy P.J. Osborne det. 1956.

C. *Lathrobium elongatum* (L.) P.J. Osborne det. 1956.

13 APRIL 1953. WYTHAM WOODS.

From Botley Lodge to the Pasticks wood, in sun but cold wind, 3.15-4.25 pm. GMT.

The **elder** is half in leaf; **spindle**, **hawthorn**, **elm**, sprouting buds. **Dog's mercury** in flower and some going over to green seed. 1110 A

A very great deal of luxuriant **Adoxa** (moschatel) in flower under bushes and trees on margin of the coach-road path. B

No **primroses** or **anemones** here, but a good deal of **lesser celandine** in flower.

In the Pasticks wood, which is predominantly mixed deciduous (with a few pines) at the south end, I stripped a very far gone oak log -- a straight medium-old trunk -- of several yards of its quite loose bark, under which was a great deal of woodlouse and other frass. It was quite wet after rains. I saw at least 25 species of animals: 1111

Snails: **Goniodiscus rotundatus** abundant

Oxychilus alliarius common

1 **Marpessa laminata**

2 **Clausilia rugosa**

Slugs = 2 **Limax**

Beetles = 1 dead **Phosphuga atrata**

1 **Cychrus rostratus**

1 small carabid **Stomis pumicatus** (Panzer)

1 large staphylinid

1 medium staphylinid with reddish-brown hind half of elytra.

Several larvae of **Melanotus rufipes** (these were under the bark over rotting wood)

A
B
C

{reverse side}

13 APRIL 1953.

1111D **Hoploderma magna** Nic. A. Macfadyen det. 1953.

(Michael says: "a wood-boring species, but may be found in moss on the wood.")

A. ♂ **Andrena pubescens** Olivier

I.H.H. Yarrow det. 1960

B. ♀ **Halictus fulvicornis** (Kirby)

I.H.H. Yarrow det. 1960.

13 APRIL 1953. WYTHAM WOODS***

Log in Pasticks wood (continued)

<u>Myriapods.</u>	<i>Lithobius</i> , probably 2 spp. Black millipedes ? <i>Glomeris</i>	
<u>Woodlice:</u>	<i>Oniscus asellus</i> abundant <i>Porcellio scaber</i> frequent ? <i>Trichoniscus</i> frequent	1111 E
<u>Earthworms:</u>	Small species common	
<u>Collembola:</u>	Several species abundant	
<u>Mites:</u>	A peculiar large pinkish one abundant	D
<u>Spiders:</u>	1 <i>Amaurobius</i> 1 small spider.	

One got the impression that this old log was very soon going to disintegrate and was already being visited by some litter forms.

21 APRIL 1953. WYTHAM WOODS.

Went up to the Chalet area and Lord's Common, 2-3.30 p.m. GMT.

Just to the south side of Lord's Common but not in it are two wild **cherry trees** in full flower (in deciduous wood). The larger is one of the biggest I have ever seen; parts of it are dying. There were large numbers of honey bees (*Apis*) and a good many wild bees and flies visiting the flowers.

Collected an orange thorax *Andrena* and a small bee.

1112A B

These cherries stand at the edge of the recently thinned sycamore-oak-ash, and Probitts says they will be left. There is also a walnut close by.

{reverse side}

21 APRIL 1953.

1112 C ♀ *Osmia bicolor* (Schrank). I. H.H. Yarrow det. 1960.
? or nest materials.

21 APRIL 1953. WYTHAM WOODS***

On Lord's Common but there is a scattering of daisies (*Bellis perennis*) in the shallow open ground zone.

On the margin of the open ground zone and the field layer of bramble etc. several brilliant red-orange tailed small bees (*Andrena*) were cruising -- not visiting flowers but apparently hunting for nest sites? One kept. 1112 C

Viola hirta still abundant in flower on the stony fallow of Upper Seeds, near the Chalet Woods.

Inside the woods by Three Pines etc. **primroses** are just beginning to go over. *Viola riviniana* and *Anemone* in flower. **Bluebell** flowers in bud.

Probitts agreed to leave a strip of scrub with spindle and several very large **wayfaring trees**, at the end of the path from the Chalet to Upper Seeds (by the beech wood). The thinning of the Chalet Woods has not yet extended to this area.

A new small Forest Nursery has been made this year in the paddock of Probitts' house.

{reverse side}

4 MAY 1953.

4 MAY 1953. WYTHAM WOODS.

Went to Marleywood Plantation with the University Land Agent, N.D. James to discuss ways of keeping the verges of scrub and tree invasion, so as to preserve the interesting and rather rich meadow flora and insects. Since I took the first Zoology Field Class here in 1946, there has been very rapid succession, owing to the lack of any regular annual cutting. There are now solid bramble thickets over most of the open space about 100 yd. down the drive towards Marley Lodge. We agreed nothing could be done usefully to this until (if ever) it is properly afforested. The narrow verge between woods for the first 100 yd., and to a lesser degree further on, has much bramble, rose, blackthorn and hawthorn springing up (rabbit grazing being probably light) and there are **twayblades**. In spite of this there are **twayblades**.

Agreed to try and arrange labour to (a) keep a clear herb-grass verge from 2-10 yd. -- wider in the open space (b) start by slashing the scrub and then employ a mechanical cutter machine annually (c) to keep the herb component, do the cutting between August and October -- not earlier. This will at any rate provide an experiment in management.

{reverse side}

26 JUNE 1953.

26 JUNE 1953. WYTHAM WOODS.

Visited the "Bowling Alley", with B. Schjotz-Christensen, coleopterist from Aarhus Museum, Denmark. He found egg cluster of *Cassida fastuosa* under rosette leaf, near the base of midrib, of *Inula conyza*, on ground layer in open on Lord's Common. Both here and on Bowling Alley a good few rosette leaves had several holes in, but no beetles seen, only one larva just hatched by the egg cluster.

On Rough Common several **bee orchids** in flower on the margins of the thick *Brachypodium*, north side of road (noted by B. Macpherson earlier this week).

No **tiger-beetles** on quarry slopes, which have much thicker grass than two years ago, with abundance of *Lotus corniculatus* in flower.

{reverse side}

26 JUNE 1953.

1114 A ♀ *Sphecodes ephippius* (L.). I.H.H. Yarrow det. 1960.

1114 B Det. by G.H. Thompson as almost certainly *Myelophilus piniperda* (L.). Vertical parent galleries on wood, with hook at atrium, would confirm this. (Confirmed, mainly on bark, but wood also in one instance, 25.7.53)

D. 12 *Chernes cimicoides* (Fab.) M. Vachon det. 1956.
(See letter, O. Gilbert, 2 October 1956 and earlier ones).

26 JUNE 1953. WYTHAM WOODS****

The Bowling Alley. He collected various beetles. I found in a very old birch stump, 1½ ft., in the oak-ash-birch belts south of Bowling Alley (1 pm. GMT).

1st stage and perhaps 2 yr. larva *Melanotus rufipes* in red-rot soft wood.
Amaurobius (atropes) with webs. The species found in Wytham 1114S
 Brown shining pupa, emerged as brown cryptic banded moth, in lab. *Cosmia affinis* (L.). (Larva comes on elm).

A very young **grass snake** circa 7 in. long was wending on the ground vegetation in the open. What do they eat at this stage? Sun, 11.15 am. GMT. 1114A

Took a small reddish bee flying and settling, 1 in. in the hot sun, over a ground zone in open, 11.10 am. GMT.

Noticed a *Thanasimus formicarius* (L.) alight 5 ft. on dead pine in pine belt at margin of Bowling Alley. Found complete large tree with all bark on but a number of holes through and galleries under the loosish bark full partly of frass, but no bark-beetles left. Took gallery samples to name. B

Under this bark, varying from damp to dry and with only local mould or sheet fungus visible were (taken between 6 in. and 6 ft., 2-3 pm GMT):

100s of a thin millipede (Iulid) in galleries	C
scores of pale brown pseudoscorpions	D
small white tiny myriapods = young <i>Lithobius</i> , H. Roberts det. 1953 n.k.	
A few medium <i>Lithobius</i>	
6 <i>Baptolinus affinis</i> (2 k.)	F
1 large <i>Melanotus rufipes</i> larva and a pupa skin	G
1 <i>Athous villosus</i> larva	H

(Nothing had bored far into the wood itself)

{reverse side}

26 JUNE 1953.

E.	2 <i>Cerylon histeroides</i> (Fab.) Confirmed A.A. Allen 1954	
K.	<i>Micromalus flavicornis</i> (Herbst)	
H.	<i>Harpactea hombergi</i> (Scopoli) ♂ immature	E. Duffey det. 1953
J.	<i>Philodromus aureolus</i> Clerck ♂	E. Duffey det. 1953
	(Both are tree spiders, <i>aureolus</i> especially on Scots pine. E. D.)	
L.	<i>Polyxenus lagurus</i> L. C. Elton collected eggs, emerged young det. 1953.	

26 JUNE 1953. WYTHAM WOODS****

Dead pine, Bowling Alley****

1114

Several singles or small groups of *Cerylon* (blackish) (2 k.)

E

Several small shining black clavicornes (1 k.)

K

Small grey beetle larva

n.k. or lost

Black tubular thrips

n.k. or lost

Collembola white egg clusters (see 25 July C.E. 1120H)

n.k. or lost

Several small spiders (1 k.)

H

Also a spider on outside of bark of this tree, 2 ft.

J

In an ancient rotting birch stump and, 1½ ft., in deciduous wood south of Bowling Alley, a brown shining pupa from which a brown cryptic-banded moth emerged in lab. *Cosmia affinis* (L.) (C.E.det.)

1114S

(Larvae said to come on elm)

Collected some quite dry hard small birch bracket fungi (*Polyporus betulinus*) from dead standing birch at 4 ft., mixed pine-deciduous Bowling Alley Plantation. 1114S

A good many tiny Ciid beetles 5 *Cis bilamellatus* Fowler (2 k.) A.A. Allen det. 1955.

T

Fungus kept.

U

{reverse side}

6 JULY 1953.

F. *Theridium ovatum* (Clerck) (= *redimitum* L.) ♀ E. Duffey det. 1953.
(Most abundant on deciduous trees and scrub, also often occurs in field layer, especially on woodier forms. Catches more beetles and bugs in web than flies. E.D.)

6 JULY 1953. WYTHAM WOODS.

With Amyan Macfadyen and B. Schjotz-Christensen to the Singing Way, the "Dell", and the "Bowling Alley".

On the Singing Way north of My Lady Seat a young **stoat** ran away from a fresh-killed young **rabbit**, which it left on the track with a hole in the back of the head.

Saw A.M.'s microclimate temperature integrators in the thick *Brachypodium* of the Dell.

On the Bowling Alley, Schjotz-Christensen found 3 *Carabus problematicus* in jam-jar traps.

Also here we searched *Hypericum perforatum* (non-flower or bud) and *H. hirsutum* (flower and bud) for larvae of *Chrysolina varians* (Schaller); 1118 C, D

growing close together in herb-grass margins of deciduous wood. Very small, and also full-size brown larvae were present, on both species, in one or two (or none) per plant stem. They were concentrated on the top of the stem, among tender flower buds and leaves, which they were damaging. The damaged *perforatum* were young plants 9 in.-1 ft. , the *hirsutum* 1-2 ft. A,B

Feeding heights were roughly those ranges. Found one dead adult *variens* in the grasp of a whitish long-legged spider on the stem of *hirsutum* 1 ft. E
F

Schjotz-Christensen says that at Mols in Denmark, *variens* occurs on dry ground, *brunsvicensis* on damp ground only -- near springs. We have latter in Wytham from dampish Middle Ride, where *H. tetrangulum* grows. But he did find *brunsvicensis* on Newhill Plain edge, Wychwood Forest, 2.7.1953, not especially damp.

{reverse side}

1119A Shaded broad-bar (*Ortholitha limitata* (Scopoli))
(a meadow species: eat legumes and grass)

2-2.15 p.m. GMT

B. ♂ *Halictus calceatus* (Scopoli). I.H.H. Yarrow det. 1960.

25 JULY 1953. WYTHAM WOODS.

Went up through Lower Seeds and Brogden's Belt to the "Bowling Alley", it being a cool cloudy afternoon turn into heavy showers later.

Lower Seeds has a light wire-netting round the lower two-thirds of the north part, as grazed pasture with a lot of *Cirsium eriophorum* scattered in flower (no stock). The upper part is rough meadow, grass for hay, with a riot of flowers like field scabious, ladies' bedstraw, rest-harrow, red and white clover, *Hypericum perforatum* (swept for *Chrysomela* with no result), agrimony, etc. Flying over it 3 ft. I took a banded brownish moth. There were *Maniola tithonus*. 1119A B

Also swept a small red and blackish wasp, 1-2 ft. in meadow. The fields south of the path have wheat below, oats or oats/wheat in the middle, and barley above. Much *Cirsium eriophorum* (flower) on the grass edge, the whole way up.

In the beech wood south of the path (above the swimming bath, where *Cephalanthera damasonium* site is) was a great outburst of the birdsnest (*Monotropa hypopithys*) growing in scores under the beeches, on the barish-ground or litter, parasitizing the roots. Never seen such a sight before, though we have a specimen previously from this Belt (H.N.S.). The plants were fruiting stage.

Marbled whites flying on the Dell grassland. 2.15-2.30 p.m. GMT.

{reverse side}

25 JULY 1953.

G	2 <i>Isotomurus palustris</i> (Mueller)	C.A. Elbourn det. 1967
	9 <i>Orchesella cincta</i> (L.)	C.A. Elbourn det. 1967
	16 <i>Mydonius albocinctus</i> (Templeton) (as <i>Entomobrya ana</i>)	C.A. Elbourn det. 1967

H	= <i>Polyxenus lagurus</i> L. (Several white egg clusters with light silk threads holding them in <i>piniperda</i> galleries taken here 26 June, hatched out to be young <i>Polyxenus</i> on 29 July

= CE 1114 L (slide))
& egg cluster on bark (tube)

25 JULY 1953. WYTHAM WOODS

"The Bowling Alley".

In a very flowery state. The growth of young birches is powerful and need checking. In taking up Schjotz-Christensen's jam-jar traps, I found several drowned, **common shrews** right out in the open of the Alley.

Further searched the same dead pine as on 26 June, at heights (unless mentioned) of 6 in.-6 ft., pulling off most of the bark remaining. Confirmed the long vertical galleries resemble *M. piniperda*. 1120

Beetles: 1 *Cerylon histeroides* (Fab.) A.A. Allen confirm 1954. [A]

1 long-oval hister-like shining small black beetle about same size.

(lost in setting) = *Micromalus flavicornis* (Herbst)

1 roundish shiny brown small clavicorn *Plegaderus dissectus* Erichson C.E. det. 1955. [B]

1 Pselaphid (at 4 inches, under damp bark on tree) ♂ *Bryaxis curtisii* (Leach). E.J. Pearce det. 1954 [D]

2 small yellow-white larvae n.k.

Others: 2 Fat large springtails (on or in bark brought back) *Allacma fusca* (L.) [F]

Springtails, abundant (ditto -- not seen under bark in field) [G]

2 Small woolly millipedes *Polyxenus lagurus* L. [H]

Small black thrips (shaken out of bark) [J]

False scorpions, *Lithobius*, millipedes, etc. Few mites. No woodlice. [K]

Spiders (L), unwinged psocids (M) L-[M]

M. 1 *Pseudopsocus* ? *fuscipes* (Reuter) nymph. ♀ (Slide) W.S. Richards det. 1960.

{reverse side}

13 AUGUST 1953.

1121 1 ♂ *Metacrabro lituratus* (Panzer) I.H.H. Yarrow det. 1960. (as *Ecternnius* (M.) l.)

1 ♂ *Blepharipus confusus* (Schulz) I.H.H. Yarrow det. 1960 (as *Crossocerus* (*Cuphopterus*) c.). KEPT BY BRITISH MUSEUM.

13 AUGUST 1953. WYTHAM WOODS.

Visited Brogden's Belt, 5.30 -- 6.30 p.m. GMT, to select logs (and label them permanently) for the Autumn Course. Use the blue labels 1 & 3-8 (see LOG CATALOGUE). The old big fallen beeches are remarkably durable. One, (No. 7) very near its end, in the most southerly bramble patch of the class area (where the parent bole still stands) has now an enormous *Myrmica* colony in its red rotten wood.

The dead hard standing bole (No. 8) has a few very old *Sinodendron* holes in the bare wood (c. 2-5 ft.) and in each of three of them there was a yellow and black small wasp, of which I caught two, which had presumably just completed development. 1121

On the road to the Chalet a very large ash had blown down opposite the Jones Experimental Enclosure below "3 Pines", and been partly cut away by Probitts. This was in a big wind on 9 July. The cut butts, though without any heavy sap flow, had several small insects on: "Glade in mixed deciduous wood" 1122

1 *Lathridius nodifer* Westwood A

2 other Lathridiids 2 *Enicmus minutus* (L.) P.J. Osborne det. 1956 B

Several Sepsid flies. (1 k.) (*Chymomyza distincta* [= *fuscimana* Zett.] K.G.V. Smith det. 1958 C

Numerous black Anthocorid heteropterons, small, mainly about ½ in. from bark.

Temnostethus gracilis Horv. G.G.E. Scudder det. 1956 Confirmed W.J. Le Quesne 1956 1 k. D

Some smaller heteropterans 1 *T. pusillus* (Herrich. Schaeffer) W.J. Le Quesne det. 1956.

Brought in from Brogden's Belt some usually soft galleried and decayed sycamore wood, smelling of fungus, from a very old damp bole lying on the ground and no doubt originally killed by rabbit ringing. It had one or two *Melanotus* larvae, and old *Ptilinus* holes, with many small deep galleries also, right to the middle. 1123

{reverse side}

14 AUGUST 1953.18 AUGUST 1953.

* (Attributed to this species, as *P. coccinea* not recorded from Wytham.)

14 AUGUST 1953. WYTHAM WOODS.

Explored Great Ash Hill area, for sites the Autumn Class could use for mapping habitats, with H.N. Southern. The coppiced area of 1946 has grown up very densely, with sycamore and bracken and rosebay, and the bank near 3 Pines that was an easy track 4 years ago, is dense with ash saplings. Deer Pond Ride is being kept fairly open by light cutting by Meads.

Also visited Pond 1, which is 2-3 feet below the dam level and giving only a shallow trickle out. It is much invaded by *Scirpus lacustris* on northwest side, and *Carex*, and the open area is a great deal reduced since Mary Laurie surveyed it about 1946. The "shooters" have cut some of the dry *Carex* marsh and seemed to threaten to place decoy ducks -- which we shall stop, as it is a scientific reserve.

H.N.S. showed me a narrow and short strip below the sand belt below Five Sisters on Radbrook Common, where bogbean (*Menyanthes*) survives in a marshy seep -- though young spruce is planted around it. With it was *Mentha* and *Caltha*, but all almost choked by dense high grass, thistles etc.

18 AUGUST. WYTHAM WOODS.

Went to the Jew's Harp strip to choose 'under bark' logs for the autumn course. This shelter belt is in a wrecked state, but useful to us, except that the wind and the fact that many of the fallen branches are held up off the ground makes the logs a bit too dry. Put metal flag labels 12-14, on a good fruity ash log and some fallen beech branches. Noted a *Pyrochroa* large larva under the ash bark.

Sheep and cattle now roam through this belt, as the fences are done for, and there is little ground vegetation except nettles here and there and traces of other. This rather increases the aridity.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 8.

20 August 1953- 18 June 1954.

C.E. 1132-1172.

Red ticks¹⁵ mean ready to be indexed. Crossed red ticks mean indexed.

Circles¹⁶ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept

¹⁵ Shown as **bold** in edited version.

¹⁶ Edited to A or 00

20 AUGUST 1953. WYTHAM WOODS.

There was, after a week or two of sun, about an inch of rain last night, yet the wet had mostly dried off in the wind by afternoon, which I spent with Mick Southern marking out habitat interspersed areas for class work, in the region of deer pond ride.

{reverse side}

8 SEPTEMBER 1953.

There is a large clump of **guelder rose** on the edge of the wood by the lane to the Abbey, parts of it heavily skeletonised by *Galerucella viburni* (beetles present). The skeletonised parts had very poor berry crop, the unattacked parts a good one.

In oak-ash-sycamore wood.

1133

A *Quedius picipes* (Mannerheim) P.J. Osborne det. 1956.

1133

B *Patrobis atrofus* (Stroem) P.J. Osborne det. 1955.

1133

C *Anacaena globulus* (Paykull) P.J. Osborne det. 1956.

8 SEPTEMBER 1953. WYTHAM WOODS.

Today Autumn Ecology Course began, with work by day on litter, this time in Marleywood Plantation (near Stream 4, about half-way along, by a group of very large beeches).

I collected a small caddis by beating oak-ash-hawthorn, 12 ft., near Stream 4, edge of mixed deciduous wood, 9 a.m. GMT. 1132

As the class found one *Tetrix subulata* in beech litter, I searched carefully for some time on the mossy damp earth on the banks of Stream 5's lower stretches, not far off, but found no grasshoppers. There were very small *Bembidion* running. Under some small soggy branches on damp soil near the stream were a staphylinid beetle, a 1133 small black "Pterostichus", and a small hemispherical palpicorn (*Liodes?*). A B C

Freeman noticed that some of the *Rhytisma acerinum* black fungus spots on coppiced sycamore were partly skeletonised while still on the tree (6½ -8 ft.) and I kept two such leaves. He noted one instance of the globular springtail *Allacma fusca* (L.) sitting on such a spot, under side of the leaf. 1134

I saw no others doing it, though the beast seems common in this wood. This in sycamore coppice mixed with tall oak, ash, etc. The specimen leaves also have eriophyid (phytoptid) mite galls.

{reverse side}

8 SEPTEMBER 1953

In oak-ash-sycamore wood

1135

B *Patrobis atrorufus* (Stroem) P.J. Osborne det. 1956.

1136 *Aphrodius rufipes* (L.) P.J. Osborne det. 1956

9-11 SEPTEMBER

8 SEPTEMBER 1953. WYTHAM WOODS ***

Went out at dark and watched the quite thronging life on some huge beech trunks the students were studying. A concourse of large slugs, black millipedes, woodlice, harvestmen, etc. and a few green grasshoppers.

Between 7.30 and 8 p.m. GMT I watched the night life in and near Stream 5, with an electric torch. In the shallow stream a great many *Gammarus pulex*, some in couples, and a few planarians (*Polycelis cornuta* ?) and larvae of *Helodes*, some active on the open surface of the bottom mud.

On the damp clay-mud of the stream bank I caught, running on it:

2 *Agonum ruficorne* (Goeze) M.J. Davies det. 1953 one kept

1 "Pterostichus", as CE. 1133 B = *Patrobus atrofusus*

1 *Leistus ferrugineus* (L.) P.J. Osborne det. 1955

1135

A

B

C

While watching a beech trunk with torch in this mixed deciduous wood, at 7.15 GMT (just dark), a large *Aphodius* flew on, 2 ft.

1136

9-11 SEPTEMBER. WYTHAM WOODS.

Spent half each day with the Class in the woods either side of Deer Pond Ride, mapping habitats and developing ways of exploring the field layer and canopy. For the first time we used jam-jar ground traps, went up oak trees, and took thermocouple readings in the scrub and tree zones. The days were fine and dry.

{reverse side}

14 & 15 SEPTEMBER 1953.16 SEPTEMBER

Field layer on edge of scrub, Coral Rag.

A Kept in alcohol

B. > 11 small flies emerged 24-27 September

Phytomyza ramosa Hendel. L.W. Grensted det. 1954.

A leaf-miner, making small blotches along midrib, on teasel, so probably emerged from bracts included with the flower heads. 4 ♀♀, 7 ♂♂ (of which 2 ♀♀, 5 ♂♂ presented to Hope Department).

14 & 15 SEPTEMBER 1953. WYTHAM WOODS.

Did “under bark” logs on ash and elm in the Jew's Harp, and very old beech logs in Brogden's Belt.

16 SEPTEMBER. WYTHAM WOODS.

While the four class groups did transects from the Chalet Road to the woodland edge (towards the Thames and the Experimental Farm), I wandered on the Ridge and the Singing Way between 9.30 a.m. and 12.15 p.m. GMT.

The Ridge needs some slashing of small hawthorns; and brambles spreading in at the edges. Also cutting down of some young and coppiced sycamores, though not all the central ones, which form a partial windbreak.

There is a great deal of *Gentiana amarella* (now in seed) there and on the turfier bits of Rough Common. On the Ridge it seemed to have colonised especially the main path, which is largely disused since Meads was asked by us to do so last year. Indeed the exit into Lower Seeds is completely blocked this autumn by elder and bracken and bramble!

Splitting open a large teasel (*Dipsacus fullonum*) flower-seed head disclosed a vertical gallery at the core, containing a very active grey caterpillar with a shiny black head, and a much smaller yellow-white fly larva. 1137 A [B]

I have put a large number of heads from this area on the northwest end of the Ridge into four ‘bark-beetle’ tins with tube exits and keeping them in my room at the B.A.P. for emergencies. (No moths emerged by May 1954. scrapped).

{reverse side}

16 SEPTEMBER 1953

16 SEPTEMBER 1933. WYTHAM WOODS****

In Bowling Alley Plantation, close to the Singing Way several dead birches have a crop of white, smooth-contoured, bracket fungi (*Polyporus betulinus* see C.E. 7, page 75). One or two were quite fresh young ones. On the under side of some others, that had collapsed and were dirty whitish brown, were a good many snails feeding on it (mainly *Goniodiscus rotundatus*, one *Oxychilus alliarius*), some young woodlice, collembola, and a few Ciid beetles (1 kept) lost? 1138

{reverse side}

30 DECEMBER 1953.

- A *Polystictus versicolor* J.L. Harley det. 1954 (Says this genus is distinguishable from *Polyporus* etc. by the gill-layer not stripping away in the fingers. Commented on poor gill development of these winter-grown specimens.)
- B *Bulgaria inquinans* J.L. Harley det. 1954. In advanced stage of growth.

30 DECEMBER 1953. WYTHAM WOODS.

The winter so far has been one of the mildest I remember, not only at Oxford, but all over Western Europe. Snow fell in central European winter sports resorts for the first time a few days since. We have had no snow in the South, and practically no frosts. White tobacco flowers remained in our garden on Christmas Day -- half-hardies that the frosts usually cut at once. It has been damp and mild, with few heavy rain-storms. Grass keeps growing.

With Bill (i.e. E.W.) Fager, I rambled from Brogden's Belt to the Dell, Spring 2, Bowling Alley and a beech woods on the Singing Way, chiefly to find fungi. It was hanging mist with a short visibility, very damp, and very quiet. Hardly any toadstools were seen, except some greyish ones under the Bowling Alley pines. We saw a group of *Polyxenus* (apparently adults, some of them) under the bark of the dead pine examined there on 25 July, at height of 6½ ft.

Brogden's Belt beech wood, just above the Swimming Bath ("Pond 3"): 1140
raw beech humus and bare soil. A standing dead medium beech trunk, with fallen part at base. Former had striking growth of a flat concentrically ringed grey and white and brownish fungus all up but not all round. A

It tended to be on the southwest quadrant. All stages from small spots to colonies a foot across. This also on the fallen log, on one half. The other end had close bunches and lines of a strange rubbery black fungus up to an inch or two across, single



rather angular, or in groups stuck together. B

{reverse side}

30 DECEMBER 1953

= *Polystictus versicolor* (see previous page)

30 DECEMBER 1953. WYTHAM WOODS ***

I took some rather decayed parts of the oyster-grey-zoned fungus from the base of the standing dead beech tree, in ground zone (and indeed in contact with litter). This and at least 5 staphylinids and several kinds of fly larvae, though noticeably in the more decayed parts within my sample. Kept in tin to breed out. 1141

1 *Bolitobius trinotatus* (Erichson) C.E. det. 1954

2 *Autalia longicornis* Scheerpeltz P.J. Osborne det. 1957.

1 *Omalius rivulare* (Paykull) P.J. Osborne det. 1956.

4 *Proteinus* 2 *P. brachypterus* (Fab.) P.J. Osborne det. 1956 (1 k.)

1 Gall-fly *Sciara* species K.G.V. Smith det. 1958.

A
C
D
B
E

4 Mycetophilid flies bred out emerged last week January (2 more seen, probably same species, not examined closely), small, blunt abdomen, spotted smoky wings. F

Mycetophila trinotata Staeger. B.K. Macpherson det. 1954

(Edwards notes it comes mainly in *Polystictus versicolor*.)

{reverse side}

30 DECEMBER 1953.

Polystictus versicolor

J.L. Harley det. 1954

Peziza sp.

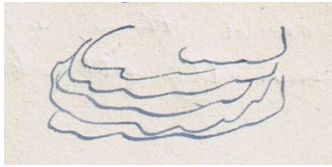
J.L. Harley det. 1954

A. Probably pre--fruiting growth of a dry-rot type of fungus. J.L. Harley 1954.

B. A Myxomycete. J.L.H.

30 DECEMBER 1953. WYTHAM WOODS***

On another dying beech tree in the same area some of the 'oyster' had apparently developed into a sharp-edged yellowish crusty colony, 3-4 in. across. 1142 A



On the bare ground among beech litter were a few cup-shaped smooth brown gelatinous fungi; about these sizes: B



The same extraordinary outburst of actively growing 1140A was to be seen everywhere on dead or dying beeches by the Singing Way, streaking up to considerable heights (say 0-40 feet) and being very conspicuous. Much of it was towards the southwest quadrant. We looked at a rotten beech branch with it, lying broken on the ground. The wood, about 9 in. across, was firm yet quite white-rotted. The hyphae of oyster could be seen penetrating bark, and also the wood to several inches. These beeches all had a rich *Pleurococcus* growth on parts.

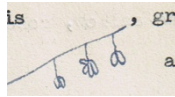
The butt of a very large old beech log had a different granular yellowish and white crust of fungus; 1143 A
hanging from the overhanging side on bark, was an extraordinary colony of very small organisms, B

{reverse side}

30 DECEMBER 1953

- C. = *Badhamia utricularis* (Bull.) Berk.
B. Ing det. 1969, who said this is a fungus-eating myxomycete, usually attacking *Stereum* or *Phlelia*.

30 DECEMBER 1953. WYTHAM WOODS ***

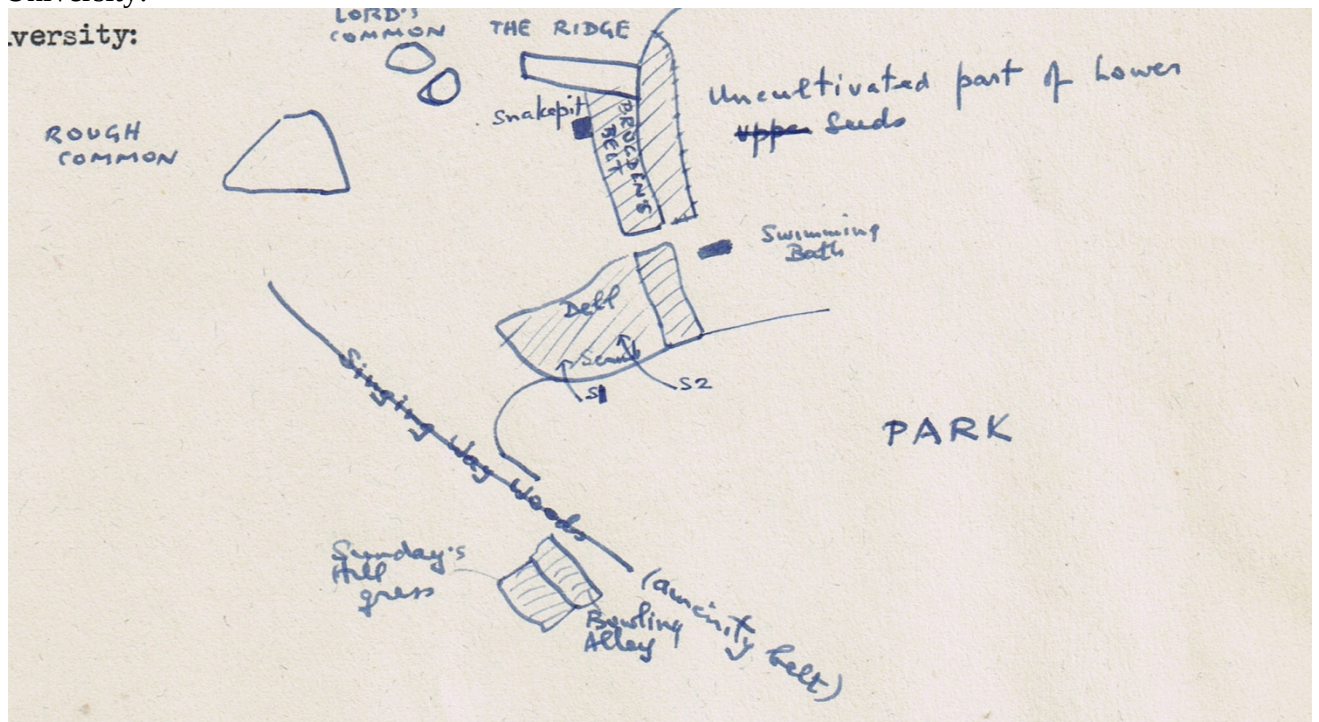


perhaps Mycetozoa like this, grey, with an internal white honeycomb structure. The bark was covered with a dark brown spore-like dust as well. This whole colony was a few inches across. 1143 B

Spring 2 was as usual, running fast but only an inch or two deep. The grey poplar leaves were abundant and partly skeletonised. Many *Gammarus* and one or two rather dark planarians, seemingly *Pl. alpina*.

Plan for nature reserves when Mrs. ffennell dies and her land reverts to the University:

iversity:



There are scattered plants and one or two patches of *Daphne laureola* along the Sing Sing Way, under beech.

{reverse side}

22 MARCH 1954

Hazel coppiced will usually regenerate; some sallow, rose, viburnum, spindle, dogwood; will be spared at my request (23.3.54).

22 MARCH 1954. WYTHAM WOODS, BERKS.

Visited Marleywood Plantation to observe the unexpectedly drastic clearing and coppicing. The woods from Stream 4 as far as the edge of Marley Wood, below and above the drive are now open and bare mostly of scrub. The big trees are mostly left, and sycamore has been coppice-selected, so it is still a wood though the canopy is much thinner especially in the scrub zone. The marshes and streams cannot otherwise be much

{reverse side}

22 MARCH 1954.

1148 ♂ *Megaselia ciliata* (Zetterstedt).
C.N. Colyer det. 1959.

23 MARCH 1954.

22 MARCH 1954. WYTHAM WOODS ****

affected. A little thinning has also been done near Botley Lodge. The central part below the drive, including most of the main sites of past work by field classes is still to be tackled. It will certainly have the ash thinned.

The verges of the drive had not been cut to clear scrub and bramble, as the Land Agent promised last year, and are now almost unredeemable.

On a dead beech tree were some small black flies (*Megaselia*) running up the dry wood surface of the big trunk. (1 k.)

1148

23 MARCH. WYTHAM WOODS.

To follow on, my first afternoon visit with Probitts to Marleywood Plantation, with very good results:

(1) Dead beeches. Agree to leave the six large ones (to be mapped later exactly)

No. 23. Huge fallen trunk and main branches, at Marley Lodge end above road, fell in 1952. In a rather open patch among coppiced high sycamore, and covered partly by coarse bramble. Bramble to be left to improve microclimate, and tree cut so as to lower it into full contact with ground. The broken bole still stands. (Not far away is a standing dead beech of some size, not numbered.)

Nos. 28 -- 29. (Labels not yet put on). Two standing dead beeches, the larger nearer the drive and with extensive remains of a red cheesy log from it: examined in Zoology Class work

{reverse side}

23 MARCH 1954.

23 MARCH 1954. WYTHAM WOOD ***

in May 1949 (see B...). The larger to be felled across the glade so as to miss the ash saplings. The other dry bole, some 25 ft. high to be left standing.

No. 24. Large limb broken off fairly recently (1-2 years and partly removed by Veale) from circa 18 ft. One to two feet thick. Will be lowered to touch ground. In heavy shade now, and parent tree will continue much.

No. 25. Towards outer lane from last, a standing broken bole in fairly the wood, with 4 very old red rotted top bits radiating from it on the ground.

No. 26. Still further, large tall dying beech with long horizontal branch, and an owl-box on trunk high. Some very old rotten bits on ground below. In fairly thick wood.

No. 27. The main fork of big beech cut and left in situ as it fell in 1950. About 10 ft. long. In thick wood and field layer. Stump near, covered with growth. By lower ride, outside Nos. 28-29.

(2) Scrub. Agree to do his best to leave some of *Viburnum*, rose, spindle, dogwood, and sallow, and generally not clear all scrub at margins. But agreed that hazel to be coppiced and that blackthorn, hawthorn, bramble and privet have to be cut as "weeds"; unless there are especially fine specimens.

(3) Verges. Will go right down all Marleywood Plantation

{reverse side}

25 MARCH 1954.

When was it last ploughed? -- 1947

23 MARCH 1954. WYTHAM WOODS ***

with a mechanical cutter, soon. Agreed that future maintenance should be late in the season, say about October.

In the morning 10.30 -- 1.15 GMT I reconnoitred The Ridge, on which I mean to concentrate for the next few years for research and management (by myself), partly as a springboard for the acquisition of the Brogden's Belt- Dell nature reserve chain later, and partly because here one has all four Terrestrial Formation-Types, as well as rotting wood, but without any complications from A-T and A. There is Arable adjacent.

The top zone of Lower Seeds, with its coral knolls, is undergoing very swift succession which can probably only be checked by reploughing (H.N.S. will ask Mr. Wise if he will do this). The chief invader is ***Brachypodium pinnatum*** both from the edge and especially opposite "Pond 3 Sycamores", and in jumps like Mols heather. It has replaced part of the *Dactylis* etc. mat that covers all the north half of the field and has been sheep grazed all over. The extent of shallow rocky turf or "fjaeldmark" on the knolls is shrinking and with this the area of ploughman's spikenard, *Viola hirta*, bugloss etc. A few young brambles have made a start, also one or two seedling hawthorns.

Under a Coral lying on bare turf on the strip was a huge predacious larva, of ***Staphylinus olens*** Mueller

1149

M.J. Davies provided det. 1954.

{reverse side}

23 MARCH 1954.

23 MARCH 1954. WYTHAM WOODS***

The north slope down from the Ridge has a slice of the deciduous woods of Little Ash Hill within the Reserve -- very suitable name just now, as there are several remarkable societies of tall ash saplings, that are being carefully nursed for timber. There is a line of good big oaks, with useful bits of fallen decayed branch. No big ashes or sycamores in this slice. The open bits have heavy bracken-bramble-rosebay the more shaded parts litter with *Arum*, bluebell, dog's mercury (or primrose -- intermediate as to shade).

Under bark of the very rotten oak branch on the ground under oak in this reserve, many molluscs and one hibernating *Chrysolina polita*. n.k.

A new event on the Ridge is the spreading of a colony of **primroses** in the turf-edge of bracken-bramble belt opposite the side path to the "Snake Pit". About a dozen flowering clumps, and seedlings around.

In the oak belt there are elders and some very large old hawthorns, partly prostrate, though alive. A tawny owl flew from <6 ft. up in bracken-scrub in this wood. Also a **woodcock**.

In the Brogden's Belt I "felled" a very old Scots pine bole that had got propped against an oak. It had an inch or two deep of woodpeckered rotten wood, but still a firm core.

{reverse side}

23 MARCH 1954.

1150 *Leptosciara* species P. Freeman det. 1955.

*(After careful analysis it was decided this name is not sufficiently reliable, and instead reference is "small bracket fungus")

1151

C 9 *Bradysia* (subgenus of *Sciara*) species P. Freeman det. 1955.

1 *Amatella setigera* Edwards. L.W. Grensted confirmed B. Macpherson det. 1955.

B. *Orchesella cincta* (L.) A. Macfadyen det. 1954 (Handschin says it occurs under leaves and boards, on ground, tending to dry places.)

E. *Pergamasus crassipes* (L.) var. *longicornis* Berlese. A. Macfadyen det. 1954. (occurs in mosses, under stones, in decaying vegetation detritus etc.)

23 MARCH 1954. WYTHAM WOODS

Under loose bark of a rotten oak branch hanging on a tree on the outer edge of mixed deciduous wood Little Ash Hill, height 5 ft., I found two black 'gall-flies' in copulation. 1150

Visited the same fungus standing in dead beech tree in Brogden's Belt as on 30.12.53 (C.E. 1141) and found a lot of leathery and partly rotten but not squashy*.

From a few handfuls of the base of the tree, <6 in. from the ground I got by search and keeping to breed out: 1151

Many large (½ in. black headed, white) Mycetophilid grubs. Kept a few in alcohol and the rest to breed out. A

Other, smaller Mycetophilid grubs. Ditto.

Black adults 'Cecidomyiidae sp. indet.' K.G.V. Smith 1958 (see across for others).

Collembola, mainly larger brown one D

Mites, mainly larger brown active one, abundant E

1 *Tetratoma fungorum* Fab. J

1 *Lathridius nodifer* Westwood K

5 predatory staphylinids (*Lordithon trinotatus* (Erichson). 2 k. C.Elton det. 1955 L

Several small toothed Ciids. (1 k.) ♂ *Cis bilamellatus* Fowler A.A.Allen det..1955. M

2 Tiny clavicorns: 1 *Atomaria ruficornis* (Marsham) A.Allen det. 1955 (see his letter 3.11.55) N

Now det. by O. Sjöberg, 1956, as *A. nigriventris* Stephens.

Specimen presented to Hope Dept.

{reverse side}

23 MARCH 1954.

1151

Q. 3 *Mycetophila trinotata* Staeger. L.W. Grensted confirmed B. Macpherson det. 1955 (emerged 3 April)

*2 *M. cingulum* Meigen L.W. Grensted det. 1955

T. 1 *Mycomyia winnertzii* (Dziedzicki) L.W. Grensted confirmed B. Macpherson det. 1955

23 MARCH 1954. WYTHAM WOODS****

In small bracket fungus

1151

5 *Proteinus* 2 *P. ovalis* Stephens, 3 *P. brachypterus* (Fab.) P.J. Osborne det. 1956

P

Mycetophila 2 spp. 1 emerged 1.4.54 (abdomen lost)

Q

5 more emerged (2 on 3 April, 3 about same time)

1 *Mycetophagus multipunctatus* Fab. P.J. Osborne det. 1956

R

2 small staphylinids 1 *Atheta* species C.E. Tottenham det. 1956

S

1 *Leptusa fumida* (Erichson) C.E. Tottenham det. 1956

("not examined critically for *norvegica*")

1 Another, larger Mycetophilid fly, pale brownish and with much black hair on top of thorax and abdomen.

T

2 *Dacne bipustulata* (Thunberg)

U

1 small staphylinids *Autalia* species

n.k.

1 *Plegaderus dissectus* Erichson (a very local species and all books say under bark, etc.)

V

3 *Cerylon histeroides* (Fab.) A.A. Allen det. 1954; 2 more det. C.E. but n.k.

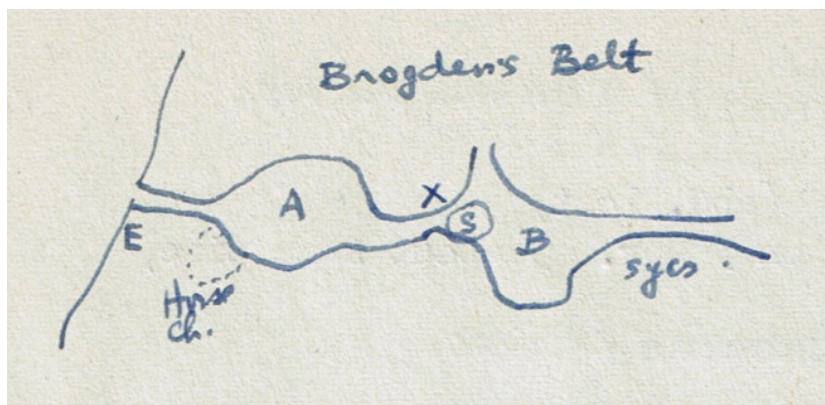
Small predacious fly, holding dead gall-fly (Y). Emerged 17 April

W

Tachypeza nubila (Meigen) K.G.V. Smith det. 1958.

X

{reverse side}

31 MARCH 1954.

1152 A. *Rhytidadelphus triquestrus* (Hedw.) Warnst. A.R. Perry det. 1962

1152 B. *Hylocomium splendens* (Hedw.) B. & S. A.R. Perry det. 1962

31 MARCH 1954. WYTHAM WOODS.

Went to the Ridge, 2.30-4.30, mainly to do thorn slashing. It was sunny with a cold west wind, after heavy showers.

Succeeded in clearing most of the bramble and small (mostly < 2 ft.) hawthorn colonisers in grassland area B, in which only one patch ((S)) had really taken hold, with a 6 ft. sycamore young coppice in the centre, which I also cut. It was notable that:

- (1) Apart from some almost bare patches or the trampled or rabbit-grazed areas of the turf, the *Brachypodium* here and also in area A is mixed with a high proportion of moss (A very abundant, also *Hypnum* (B) and others), often 6 in. deep. Many of the young **hawthorns** were growing out of coral rag with little soil covering, through this cushion. 1152A-B

Could they possibly have germinated under such conditions, or has the plant carpet increased e.g. more moss with revival of rabbit grazing. There is a live rabbit bury at East.

- (2) Some of the young hawthorns had very a distorted lower stems.

{reverse side}

31 MARCH 1954.

31 MARCH 1954. WYTHAM WOODS. ***

The Ridge***

No doubt once a reasonable-sized scrub or young tree has established in the open, it may accelerate succession by giving a perch from birds, whose excreta with seeds will fall below.

At A there is an area of quite severe rabbit grazing on the precarious turf, perhaps assisted by sheep (none about in Lower Seeds now).

Shrubs. A patch of dogwood at x; several spindles, at least one rose, a good deal of hawthorn, and masses of elder -- a typical rabbit-affected picture.

Flowers. *Viola* species coming into flower on Ridge and Lower Seeds.

Moss A small tinful of the deep pure moss had at least 16 species of animals in it: 1153

Collembola	n.k.
Small " <i>Atheta</i> "	n.k.
Black shining staphylinids <i>Xantholinus longiventris</i> Heer. P.J. Osborne det. 1956	A B C
<i>Tachyporus chrysomelinus</i> (L.) About six (1 k.)	
<i>T. hypnorum</i> (Fab.) About six (2 k.)	
Weevil (lost)	

{reverse side}

31 MARCH 1954.

31 MARCH 1954. WYTHAM WOODS***

In moss on The Ridge***

1153

1 other weevil ***Stenocarus umbrinus*** (Gyllenhal) P.J. Osborne det. 1955. D
 Small ? Sphaerocerid fly n.k.
 Small fly n.k.
 1 Ichneumonid ♀ ***Ichneumon memorator*** Wesmael. J.L.Perkins X.1960. [G]
 Woodlice; young *Armadillidium*; *Trichoniscus*;
 1 ***Philoscia muscorum*** (Scopoli)
 Crab spider H
 Lycosid spider J
 Small black spider K
Cochlicopa L
 1 white cocoon emerged as ♀ ***Mastrus inimicus*** Gravenhorst.
 J.L.Perkins det. 1960.
 [= *Isadelphus i.* in K. & H.) [M]

{reverse side}

26 APRIL 1954.

26 APRIL 1954. WYTHAM WOODS.

Visited the Ridge, 1.40-3.15 p.m. GMT. East wind cold, but very clear and warm in shelter. Most scrub, and the horse chestnut, half in leaf. Oaks just sprouting, ash bare but in flower. There has been two weeks almost complete drought, with cold winds, and this spring is a little late.

Did some more bramble-haw clearance with bagging hook and slasher, on the area A and by the dogwood patch. Bramble is only

{reverse side}

26 APRIL 1954.

- B. ♂ *Andrena jacobii* Perkins I.H.H. Yarrow det. 1960
♂ *A. pubescens* Olivier I.H.H. Yarrow det. 1960

- C. Common heath (*Ematurga atomaria* (L.)) ♂
Rather dark, and strong yellow. C. Elton det. 1954.

28 APRIL 1954.

26 APRIL 1954. WYTHAM WOODS ****

just showing leaf sprouts on a few stems.

There is a clump of buckthorn about 2 ft. high. A brimstone was patrolling the Ridge.

I made three animal notes:

1154

Inside the 6 ft. clump of dogwood, which is the edge of grass and of scrub zones, was a small glacial quartzite stone 2 x 2¼ in. There were marks of snail smashing on it, and a mixed vintage of *Cepaea nemoralis* broken shells lying round. Kept the whole outfit for display. Could not see a **song-thrush** or find its nest in the scrub. A

On the half-open horse-chestnut leaves, at 2-4 ft., were about 10 smallish hairy bees sitting quite sluggishly, and when touched fell to the ground instead of flying, though they were partly sheltered from the wind. Kept two. B

While clearing bramble from the *Brachypodium* grass edge near scrub a moth was disturbed -- a handsome dark yellow and brownish black geometrid, with darker borders and the pattern running onto both wings. C

28 APRIL 1954. WYTHAM WOODS.

Visited the Ridge, 1.35 -- 3 p.m. GMT. to continue the bramble-haw clearing on area A. In one place the thick tussocks of *Brachypodium* were heavily tunnelled with old vole (*Microtus*) workings, now quite dry and deserted.

A score of **horse chestnut** seedlings were

{reverse side}

28 APRIL 1954.

8 MAY. WYTHAM WOODS.

1156

A *Curculio pyrrhoceras*. Marsham. P.J. Osborne det. 1955.

2.30-3.30 p.m. GMT

28 APRIL 1954. WYTHAM WOODS****

growing scattered in the grassland of area A. These I slashed.

There is a good clump of blackthorn flowering in the oak wood strip.

Drought and cold east winds continue still. *Polystictus [versicolor]* at the base (< 6 in.) of the dead standing beech in Brogden's Belt (see 30.12.53 & 23.3.54) is now quite bone-dry and brittle. A tin-full contained no beetles, only a very few mites and collembola (n.k.) and are very few small white immobile larvae or pupae of flies (kept to breed out). failed

8 MAY. WYTHAM WOODS.

Went to the west-facing escarpment of Sunday's Hill, where a steep slope topped with sand carriers oak-ash-elm wood (wych elm, I think). The oaks were only 1/3-way into leaf and some had catkin. Sweeping the edge of this bare, budding canopy 4 -6 ft. produced: 1156

1 earwig (<i>Forficula auricularia</i> L.)	n.k.
Many nymphal young heteroptera	
A black globular weevil with white striped flanks.	A

{reverse side}

8 MAY 1954.

1156 B *Rhynchaenus quercus* (L). P. J. Osborne det. 1955.

Very large numbers of small flies of several kinds went on emerging into the end of June (n.k.)

8 MAY 1954. WYTHAM WOODS ***

Swept from oak.....

1156

Some brown jumping weevils with turned-down rostra. (1 k.)

B

A small black 'soldier-beetle' (on catkin-bearing branches). ♂ *Dasytes aerosus* Kiesenwetter.

C

Otherwise mainly spiders and flies.

Brought back a circa 3 foot length, 5 in. wide, of rotten birch bough off a tree at 4 ft. on margin of mixed deciduous wood at Sunday's Hill, to let animals emerge (Divided into 4 tins). The whole bark still on, but very rotten inside.

1157

2+ *Oniscus asellus*

A

5 *Porcellio scaber*

B

3 Tiny beetle larvae

C

Tiny beetle pupa (k. to breed out)

failed

2 Pselaphid beetles ♀♂ *Biblioporous bicolor* (Denny) E.J.Pearce det. 1954

E

Minute +ve phototropic flies 2 *Sciara* species K.G.V. Smith det. 1958

F

Dark 'gall-fly' 1 K.G.V. Smith det. 1958

G

2 Medium centipedes 1 *Lithobius variegatus* (Leach) M. Lloyd det. 1959

H

1 ♂ *L. melanops* Newport M. Lloyd det. 1959

{reverse side}

8 MAY 1954.

8 MAY 1954. WYTHAM WOODS****

Rotten birch branch (see previous page)

1157

Medium black fly *Lonchaea zetterstedti* Becker K.G.V. Smith det. 1958 J
very small springtail K
1 very small pale brown elongate Lathridiid (teneral) *Cartodere filum* (Aubé)
P.J. Osborne det. 1956 L
4 adult *Melandrya caraboides* (L.) (1 k.) M
Specimen of wood galleries k. in cellophane box.

3 parasitic Hymenoptera Orange anterior with end joints black-tipped N

{reverse side}

8 MAY 1954.

8 MAY 1954. WYTHAM WOODS ****

Rotten birch branch: (see previous pages)

1157

Small fly with pale bronze-green thorax ♀ *Medeterus apicalis* (Zetterstedt).

K.G.V. Smith det. 1958

P

Small brown and black staphylinid

Q

Large Ciid beetle *Cis boleti* (Scopoli) A.A. Allen det. 1955.

R

On 31 May I opened Tin 1 (from which 3 *Melandrya* and at least 1 of the parasites N (marked N*) had previously emerged. Under the fairly close-fitting bark when stripped was 1 *Limax marginatus*. Split the wood and found large irregular galleries in damp white-rotted wood, that must be *Melandrya*. The only *Melandrya* was a medium larva on the floor of the tin that corresponds to Boving and Craighead's pictures of an American species. Wrapped all but one gallery sample (k.) back in the bark and replaced in tin.

S

2 minute flies

T

1 larger fly black-legged

U

1 banded (light) copper-bronze micro-moth. *Argyresthia*

V

{reverse side}

21 MAY 1954

(2) This isn't true, see p. 52 +

21 MAY 1954. WYTHAM WOODS.

With Thomas, the Nature Conservancy's senior grassland botanist, visited Lord's Common, Rough Common, The Dell, The Bowling Alley and The Ridge. His strong points are intimate knowledge of chalk grassland ecology, agriculture, and human influences generally on vegetation (he was some years in Africa). He noticed the highly dynamic state of Wytham with changing woodland, scrub growth, edges of invasion of grass held by rabbit pressure; and thought the whole grassland complex would be strongly endangered if the rabbits go out with myxo, and that the Bowling Alley and Lord's Common are not now holding their own. Made the following suggestions about succession and management:

- (1) Firing thick *Brachypodium* areas (like the Snakepit or on parts of Lower Seeds) would not in itself check invasion of it or scrub. But if grazed e.g. by sheep, this would attract them to graze more, by creating new growth. (This may not be a popular idea with the Foresters).
- (2) Sheep (plus some hand-cutting of scrub pioneers) could keep back grass dominating on the upper part of Lower Seeds, where *Brachypodium* is now jumping in. Thinks comparative lack of grazing up there is simply because the farmer can't drive stakes into the rock to carry the

{reverse side}

21 MAY 1954

Varley's knapweed enclosure provides experience of doing (2)

21 MAY 1954. WYTHAM WOODS ***

wire netting used for temporary enclosures lower down. This could be met if the University put in some permanent stakes or steel posts along the top.

- (3) Ploughing this strip would be very destructive to the ploughs. Grazing would maintain a natural low varied vegetation (cf. at Mols).
- (4) On Lord's Common etc. recommends experiment with tethered goats.
(Meads now possesses two but says they dislike *Brachypodium*).
- (5) For the Bowling Alley, fence it round and take sheep in at intervals.
- (6) Get help from the agricultural botanists in Oxford, to make transect records.

He pointed out that the extremely shallow basin of Spring 2 appears to be the remnants of a rather larger hollow shaped like a rounded pond, evidently cut out of the ground before the trees grew up and presumably used for stock before the present Park was fenced. This means that it may have for perhaps many earlier years have been a pond with deeper but still spring water. This may explain the mystery of their being very old shells of *Succinea* (see C.E. 546 T), as there could have been marsh by the pond in the open, though a cold spring and water depth would prevent quick heating up in the sun and so preserve *P. alpina*. The trees and scrub on My Lady's Seat must have grown up since the Seat was started, as it almost certainly gave a view down the Park that is now blocked. S 2 could have had human settlement too. Ideally placed.

{reverse side}

21 MAY 1954.

21 MAY 1954. WYTHAM WOODS ***

We ascertained that there is a distinct fringe of *Brachypodium sylvaticum* (shown by yellower, broad, more flaccid bent over leaves, with soft hairy not spiny edges) at the top of the Dell, in the lee of the beeches on the west side. There is a mixed zone with *B. pinnatum* (whose leaves cannot be pulled through the closed hand) and he said Wylie Fenton has found apparent hybrids between these two species. But out in the open, on all the large areas we examined here and elsewhere, the grass is *pinnatum*.

He confirmed that the very fine rabbit-nibbled tufts of *Festuca* on the Ridge are *ovina* (non hairy leaf sheaths and split one side), whereas *Festuca* on Lord's Common we looked at was *rubra*. He also named *Briza media* (non-flowering) on the Ridge.

Thought the sharply defined line of colonising birches on the Bowling Alley is odd. The soil on it looks a bit more rich and ant-worked (*flavus*), yet birches also colonise bare rock on Rough Common. He has seen **birches** colonise on abandoned gravel road and suggested that this might have been an old diversion track of the Singing Way.

He said some low-branching **oaks** would be ones formerly pollarded for timber, and multi-stem wide branching **ashes** like those of First Fork, would have grown up in an open habitat.

{reverse side}

5 JUNE 1954.

5 JUNE 1954. WYTHAM WOODS.

Visited the Ridge but had little chance of work because the east wind and faint haze broke into continued violent thunder and rain.

The white **horse chestnut**, now in full leaf, with grape-size young conkers, had a wet patch on a big limb that is due to some leak of sap. No slime flux or animal seen, and the bark looks sound.

The one young **buckthorn** has been entirely defoliated of its sprouting leaves. One large brown patterned stick geometric caterpillar was hanging by a thread! Brought it in to keep. Failed

The **oaks** show some signs of damage by caterpillars. Canopy thin and ragged. Defoliation is reported this year in patches of Wytham.

A few young **oaks** have sprouted among *Brachypodium*, and Southern says there are more near the Snakepit. I shall leave them for a bit to see if they survive.

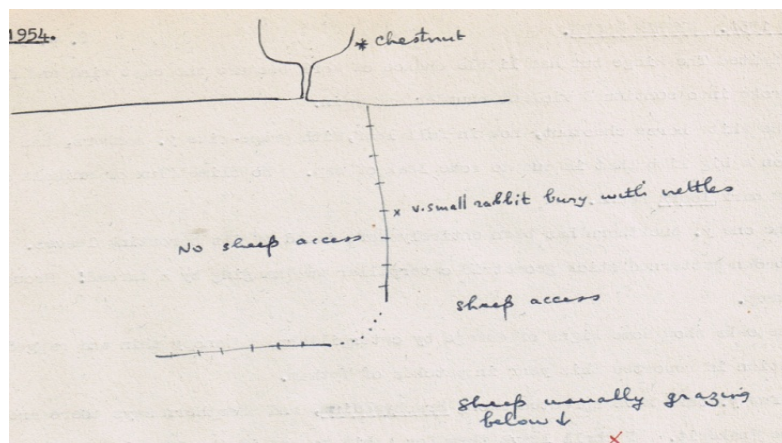
Small heaths and **common blue** flying over the open Ridge parts (T/2 + T/3).

Flowers out on T/2 are rockrose, *Veronica chamaedrys*, wild strawberry.

Mr. Wise the farm-tenant has just set up a wonderful experiment (by accident) that will test Thomas' sheep-grazing theories. A 4 ft. wire netting fence has been run up Lower Seeds

{reverse side}

5 JUNE 1954.



D. Meads confirmed by test offers (September 1954) that his white **goats** refused to eat **ploughman's spikenard**.

10 JUNE.

5 JUNE 1954. WYTHAM WOODS ***

dividing the upper belt into ungrazed and grazed. The latter has only been opened since 21 May or later and grazing, though considerable, is no doubt incomplete. In spite of local rabbit pressure, there is no question that the sheep have transformed things in a week or two. The *Dactylis*, still the commonest grass, though not continuous dominant, rather in numerous clumps, has all been half or right eaten down. All ploughman's spikenard stalks (up to 6-12 in. high on protected side of wire) have been cropped off, leaving only rosette leaves. The patches of *Brachypodium pinnatum* are entirely ungrazed -- so far.

The ungrazed side has a meadow of cocksfoot tussocks plus growing spikenard, and clumps of *Brachypodium*. Interspaces among tussocks have a nice ground zone flora of flowering *Sherardia*, wild strawberry, *Ranunculus parviflorus*, ground ivy, and a pink *Polygala* with prostrate stems several in., radiating from a tap root centre (k.). 1162

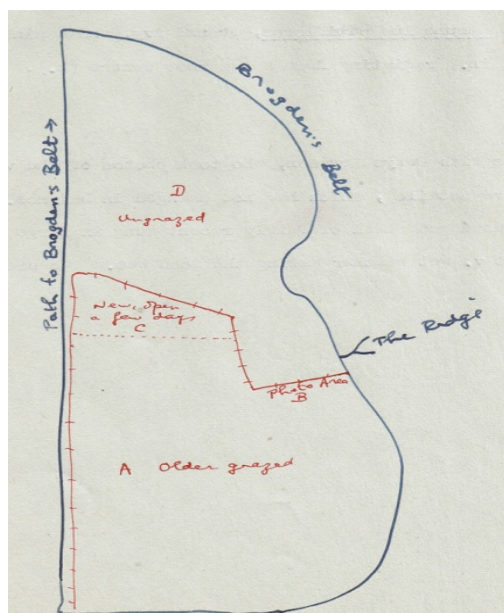
10 JUNE. WYTHAM WOODS.

Went to the Ridge and Lower Seeds with Denys Kempson, who took photos of the vegetation described above (negatives have details), which had not changed in balance. The sheep were far below, but there was a good deal of fairly recent dung in large units (not pellets) perhaps helped by recent very wet weather making the food wet. We used for illustration an

{reverse side}

10 JUNE 1954

1163B *Sitona humeralis* Stephens. P.J. Osborne det. 1955

14 JUNE 1954

10 JUNE 1954. WYTHAM WOODS ***

artificial sheep, life-size, cut out of soft-board, I noticed that clumps of *Festuca* had often been left by the sheep untouched (some in flower).

Sheep dung, when the sun was out, was completely covered with blueish and black speckled flies, hundreds about, apparently *Polietes*. Also took 1 ♂ *Aphodius luridus* (Fab.) under a sheep-pat. 1163 A

Also a small weevil (*Sitona*) with white spots on shoulders, walking on ground vegetation on grazed shallow soil area of Coral Rag. B

14 JUNE. WYTHAM WOODS.

Went to Lower Seeds and the Ridge. It was the first warm fine day after a series of torrential rains, and cold weather since May. The air was moist and in sheltered places still, and insect life was in an upsurge of activity.

LOWER SEEDS.

A, where sheep have been some time (since at least March ?) is mostly well grazed pasture, though shaggy. But there are quite large patches and tussocks of *Brachypodium pinnatum*, only slightly nibbled (I saw a lamb -- ? inexperienced in silica -- doing this).

B had no sheep on and shows no change from the 10th.

{reverse side}

14 JUNE 1954.

1165G 2 *Oxytelus sculpturatus* Gravenhorst P.J. Osborne det. 1956. (1 ♂ kept).

1165H *O. lacqueatus* (Marshall) P.J. Osborne det. 1956.

14 JUNE 1954. WYTHAM WOODS ***

C has been opened to sheep since the 10th and is well on the way to the state of B -- concentration on the *Dactylis*, *Festuca* little grazed. A lot of a fat-flowered small grass all over, also on A -- ***Bromus mollis*** L. sec. Holmbg. W.J.L. Sladen det. 1954. 1164

There is a tremendous amount of sheep dung on A, swarming with small beetles. 1165
There are some fly larvae and I kept one apparently going into pupation. No
“*Polietes*” seen on dung today, no flies except 1 *Scopeuma*. Failed
But “*Polietes*” very abundant on vegetation on the Ridge, ground, field layer, scrub.
Beetles in or under, all 2-2.30 p.m. GMT except

- 1 Black ***Aphodius luridus*** (Fab.) -- 4.15 p.m. confirm P.J. Osborne B
- 2 small black ***Aphodius ater*** (Degeer) P.J. Osborne det. 1955 C
- 3 very small black and dark brown ***Aphodius pusillus*** (Herbst) P.J. Osborne det. 1955 D
- 1 small dark convex palpicorn ***Cercyon atomarius*** (Fab.) P.J. Osborne det. 1956 E
- 2 smaller, bright-brown-elytra ditto. ***Cercyon melanocephalus*** (L.) P.J. Osborne det. 1956 F
- 2 black smallish staphylinids with huge jaws, sculpture & yellow tibiae-tarsae G
- 1 smaller black staphylinid, with all yellow legs and brown elytra H
- 2 staphylinids like G but smaller *Oxytelus inustus* Gravenhorst 1 ♀ *O. sculpturatus* Gravenhorst P.J. Osborne det. 1956. J
- 1 very small, very broad black staphylinids *Megarthus depressus* (Paykull) P.J. Osborne det. 1956 K
- 1 very small globular beetle ***Megasternum obscurum*** (Marsham) P.J. Osborne det. 1956 L

{reverse side}

14 JUNE 1954.

(Scrub edge)

Specimens from field layer, but beetles occurred also in ‘shrub layer’ above 6 ft.

1166 B ***Anaspis frontalis*** (L.) P.J. Osborne det. 1955. Confirm C. Elton 1962

(Scrub edge)

5-6 ft.

1166 D ***Podabrus alpinus*** (Paykull) C.E. det. 1955

1167 A ***Bruchidius fasciatus*** (Olivier) C.E. provide det. 1954

14 JUNE 1954. WYTHAM WOODS ***

On the Ridge (2.40-4.10 p.m. GMT):

On the dogwood clump some copulating pairs of a small black longicorn (*Grammoptera ruficornis* (Fab.)) were hanging below the unopened flower cymes at 5-6 ft. (etc.), which have a curious white mealy stuff thinly on the buds & peduncles. Were they waiting for the buds to open, or eating the 'meal'? 2 pairs kept, 1166A
I took a black pointed flower beetle there also. B

On flowering spindle (field layer), a good many large brown *Empis* (*Empis tessellata* Fab. B. Macpherson det. 1954.) were hanging (1 k.), also some large blue-bodied "*Cantharis*" (1 k.) C
I thought the latter might be eating the small black aphids infesting the shrubs, but it showed no sign of doing so in the lab. D

The rock-rose abundant in flower all along the open part of the Ridge where rabbits or shallow soil have checked the false brome, has some of the rock-rose. Bruchid (Lariid) beetle in the flowers probably eating pollen (1 k.). 1167 A

The **rock-rose** is extensively infested with a small active pale olive green grub, which devours the flower buds from the inside. Kept a quantity to breed out, also 1 alcohol specimen of the grub. Failed to emerge.



Among this rockrose was a pink shaped young. ?Delphacid bug
1167F F

The **ploughman's spikenard** (*Inula conyza*) shows three or four kinds of damage.

(1) A ? fungus affecting developing flower spikes

{reverse side}

14 JUNE 1954.

They pupated fairly soon (< week) into hard oval black puparia outside the leaf -- nearly all were on bottom of tin and in nature presumably fall to the ground. (These were all hymenopteran parasites, 2 emerged, n.k.).

F. 1 golden & dark brown micromoth emerged from pupa on underside leaf.
Xenolechia sequax (Haworth).
L.R. Cole det. 1958
(Lives on rock-rose)

14 JUNE 1954. WYTHAM WOODS ***

and giving a mouldy texture, though without white mould.

1167

(2) Large holes in leaves, but no insect about. Maybe a moth.

(3) Small holes in leaves that may be *Cassida fastuosa* (not seen)

(4) Large numbers of Agromyzid fly mines both on radical and stem leaves.

Kept a lot to breed out.

Failed F

This *Inula* was on the Ridge on the non-*Brachypodium* Coral Rag vegetation.

Several moths were caught flying in *Brachypodium*-mixed vegetation

1168 A

1 ♀ common heath (*Ematurga atomaria* (L.)) A.J. Pontin det. 1958

B

1 Black-white banded geometrid

1 ♂ **common heath** (as above)? Common carpet Bedstraw

C

Butterflies flying over ditto:

1 *Argynnis euphrosyne*

Small heaths

1 **Common blue**

1 **Grizzled skipper** on wild strawberry flower

{reverse side}

14 JUNE 1954.

1169 2 ♀♀ *Tabanus micans* Meigen K.G.V. Smith det. 1958.

18 JUNE

i.e. within 100 yd. of fence between D and B

1170 A *Polygala vulgaris* (pink flower, one kept). W.J.L. Sladen det. 1954.

* grow in tall coarser herbage in hollow between rocky knolls.

14 JUNE 1954. WYTHAM WOODS ***

Half a dozen large black *Tabanus* went for my legs 6 in.-2 ft. 2 k. 1169
They must have come from some distance, or ? from the sheep flock in Lower Seeds.

18 JUNE. WYTHAM WOODS.

I worked on Lower Seeds and the Ridge.

In Lower Seeds I tried to list all the recognisable plants on Area D, still ungrazed by sheep. The nipping of some clumps of *Festuca* makes me think this on B must have been rabbit, not sheep. It suggests, with the Ridge evidence too, that rabbits, unlike sheep, do not eat ploughman's spikenard. Check from pressed specimens. 1170

<i>Ranunculus parviflorus</i>	flower	
<i>R. species</i> (small 'ordinary')	flower	
<i>Viola hirta</i>		
<i>Polygala vulgaris</i> (separate pink and blue forms)	flower	A
Rock-rose <i>Helicanthemum chamaecistus</i>	flower	
<i>Melandrium album</i>	flower	
<i>Linum catharticum</i>	flower	
<i>Geranium dissectum</i> (very starred specimen)	flower W.J.L.Sladen det. 1955.	B
<i>Medicago lupinula</i>	flower W.J.L. Sladen det. 1955	C
<i>Lotus corniculatus</i>	flower	

{reverse side}

18 JUNE 1954.

1170

F	<i>Festuca rubra</i>	tall flowers
G	<i>Agrostis</i>	tall flowers

18 JUNE 1954. WYTHAM WOODS ***

Plants on Lower Seeds. Area D....

1170

Potentilla spp.*Fragaria vesca* flower fruit (just)*Rubus fruticosus**Young *Crataegus***Poterium sanguisorba* flower*Heracleum sphondylium***Urtica dioica** flower*Echium vulgare* flower bud*Convolvulus arvensis***Myosotis arvensis* flower W.J.L. Sladen det. 1955.*Veronica officinalis* flower W.J.L. Sladen det. 1955*V. chamaedrys* (plain blue) flower W.J.L. Sladen det. 1955*Clinopodium** *vulgare**Thymus serpyllum* flower patches*Glechoma hederacea* flower over*Sherardia arvensis* flower*Galium verum**G. pumilum* flower*Senecio jacobaea**Inula conyza* abundant 1-2 ft. flower buds*Hieracium pilosella* (large + stolons) flower*Cirsium eriophorum**C. vulgare**Dactylis glomerata* large dense flower*Brachypodium pinnatum* large tussocks invading. flower buds

{reverse side}

18 JUNE 1954.1171 1 ♀ *Tabanus bisignatus* Jaennike

1172 2 ♂♂ *Brachypodia insensilis* Collin. K.G.V. Smith det. 1958.
 "One is without pre-sutural acrostichal bristles: an interesting aberration as this is a key character."

18 JUNE 1954. WYTHAM WOODS ***

The Ridge:

Grammoptera ruficornis were very abundant (scores in copulation) on the dogwood below unopened flowers, but not seen elsewhere, though elder and nettle flowers examined. Elder is half in flower.

Bruchidius very abundant in rock rose flowers, also a few small bees (*Halictus*).

Carex flacca abundant in flower among *Brachypodium*.

Again attacked by *Tabanus*, one of which certainly had red legs, though otherwise black. (1 k.)

1171

The leaking horse-chestnut branch (see page 52) was still wet. It is horizontal, and about 1-2 ft. thick, at c. 5 ft. high. A few inches away were two pale brown Syrphid flies hovering, so fixed in the air that I collected them in the air with a tube -- a unique experience with hovering flies. There is still no visible slime or fungus.

1172

Fresh **rabbit** dung is widespread though not thick, on many of the very large ant-hills along the Ridge. The biggest are under part shade at scrub edge, and one is 2 ft. long and nearly a foot high. The rabbits disturb the turf

{reverse side}

18 JUNE 1954

18 JUNE 1954. WYTHAM WOODS ***

quite a lot here and there. Thus they had uprooted a large St Johnswort.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 9.

6 July 1954-2 December 1955.

C.E. 1185-1219.

Red ticks¹⁷ mean ready to be indexed. Crossed red ticks mean indexed.

Circles¹⁸ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

¹⁷ Shown as **bold** in edited version.

¹⁸ Edited to A or 00

6 JULY 1954. WYTHAM WOODS.

Visited the Coral Rag top with H.N. Southern, E.F. Warburg and J. Fryer (son of the late Sir John Fryer, working in the A.R.C. plant hormone research unit at Oxford). Main aim was to arrange trials of a special herbicide on the **bramble** that is spreading among the main *Brachypodium pinnatum* area of Rough Common.

There is a greater variety of limestone flora among the *Brachypodium* than I used to remember. The only thinning agents on the grass can be (1) trampling (2) rabbits – there is one really bare turf area on the south edge (3) *Microtus agrestis*, whose runs are widespread, some with “grass” cuttings in, and in one area of a few square yards patches were practically killed – a sight not seen by me on Wytham before, the runways being very thick. Possibly (1) and (3) from Gill Godfrey’s work. One gets the impression *Brachypodium* is fairly sensitive to trampling, and this could be because of the silica-stiff leaves. Sheep hooves might also have this effect.

Bee orchids in flower – about six on road edge turf of Rough Common, where *Brachypodium* not in force (a dozen more taken from here lately by some visitor); one in thin short *Brachypodium* also on Lord’s Common.

Viper’s bugloss flowers two feet high in dense clumps in various places on grassland.

{reverse side}

6 JULY 1954.

**Rubus fuscus* Weihr (Sect. Apiculati).
E.F. Warburg det. 1954.

6 JULY 1954. WYTHAM WOODS ***

Saw 1 *Chrysopa perla* on leaf of bramble in Rough Common grassland (Warburg says it is all a common species *Rubus vestitus*, distinguished by very tormentose under sides of rather blunt leaves, flowers still in bud, long prickles on stem. This *Rubus* is also a common constituent of the scrub edge on the Ridge, which we visited. There is another species* mixed with it on the Ridge, whose white flowers were out, and which has smooth undersides of the more pointed leaves, and pink pistil stems, and different stem prickles, (stems very red).

We also found small plants of *Galium pumilum* on the Ridge turf (E.F.W. det.), which is the calcicole analogue of the calciphobe *G. saxatile*.

The 'meadow' Area D (14.6.54) of Lower Seeds is still ungrazed except for traces of the odd sheep interloper. The Ridge has its entrance well fenced against sheep.

Fryer says W.L.M. by ploughing is somewhat chancy as various unexpected seed crops colonise (a) from the soil itself, after years of dormancy (b) from without.

{reverse side}

20 AUGUST 1954.

20 AUGUST 1954. WYTHAM WOODS.

Drove to the Chalet. This is the wettest summer in my memory, and vegetation is very rank. Noted that ***Campanula trachelium*** has become common, and is more robust than usual, on the roadside up through the woods. **Oaks** now have full leafage, but much of it looks of recent replacement after the caterpillar damage. Fruiting of **privet** hardly begun, **spindle** and **elder** fruits still green: this also a backward tendency from lack of sun. (The pears in our garden are small this year).

Sheep now grazing all over the N. half of Lower Seeds, where also half-a-dozen tents of a boys' camp are set.

Meads says **grey squirrels** are now quite scarce, but there are young rabbits about. Probits mentioned a curious tall pink composite down in the plantations near where we went on 8 May, which he has never seen before. Says vegetation almost impossible to clear in the young plantings this summer, and that ground wasp nests are frequent there. He has as yet done nothing about the dead beeches in Marleywood Plantation.

The **bramble** on Rough Common that has been hormone-sprayed by the A.R.C. unit's research man Fryer, looks dead.

{reverse side}

26 AUGUST 1954.

1185

A ***Lasius niger*** (L.) 2 queens. A.J. Pontin det. 1954.

B ***Plagiognathus arbustorum*** (Fab.) G.G.E. Scudder det. 1957.

26 AUGUST 1954. WYTHAM WOODS, BERKS.

This was the first quite fine, hot still day for weeks, marking a change from the appalling run of wet weather all over England this summer. Spent the day 11 a.m.-3.30 GMT marking out habitat-mapping areas for the Autumn Course. Along Upper Ride, from 3 Pines along the vegetation is rapidly closing in, though the track is mown and not tractor-damaged. Some **teasels** in flower supported half-a-dozen peacocks, one brimstone, 1 (large) skipper and bumble bees. They were growing on "woodland edge".

There is some fauna on the oaks, some aphids but few predators on the sycamore. I swept one ***Leptophyes punctatissima*** ♂ from young ash, dense growth 3-6 ft. in woodland glade on Coral Rag terrace of oak-ash-sycamore, below Chalet. n.k.

Sweeping ***Malva moschata*** (in flower) and *Hypericum hirsutum* in glade here 1185
produced some very small fast-running black *Lasius* with no nest findable, A
and several small brownish (2 k.) black two-spotted heteroptera. 2 k. B

On an oak branch at 3 ft. a dark Hemerobiid.* C

The Deer Pond is quite overfull, perhaps 10 inches higher than usual, and the marsh vegetation unusually lush. I took specimens of:

****Boriomyia betulina*** (Stroem) var. *melancholica*. C.A. Elbourn det. 1963

{reverse side}

26 AUGUST 1954.

3 SEPTEMBER 1954.

26 AUGUST 1954. WYTHAM WOODS ***Deer Pond:

1186

Scirpus (finished flowering) *Eleocharis palustris* (L.). Roem. & Schult. W.J.L.
Sladen det. 1954 ("Not very typical")

Juncus bufonius L. "not very typical"

Carex remota W.J.L. Sladen det. 1954

A
B
C

3 SEPTEMBER 1954. WYTHAM WOODS.

Went to the Jew's Harp to look at logs for the Field Class next week. This wet summer seems to have speeded up decay, and some logs that are big boughs touching the ground only at one end, our damp and with good fauna under loosening bark, e.g. 4 *Pyrochroa* full-grown larvae under elm bark at 3 ft.

In the pasture between The Jew's Harp and the Singing Way a lot of ragwort was flowering scattered among large *Cirsium eriophorum*, in sun and shelter from the wind. On the **ragwort** flowers were large **cabbage whites**, **peacocks**, etc. and one white-letter hairstreak ♀ (*Strymon w-album* (Koch)) which is perhaps our first record for Wytham. Its larvae eat wych (also common) elm, both of which grow near here. It was at 2½ ft. 1187A

On the grass turf and on ragwort flowers 2-3 ft. were some **wall butterflies**. Also sitting on turf was a wave moth with blood-red line across wings – the **blood-vein** *Calothysanis* (*Timandra*) *amata* (L.), collected by Robert A. Elton B

R. saw a coiled-up **grass-snake** in Upper Ride, near the Deer Pond.

In the Bowling Alley, apart from the strong belt of young birches, there is still mainly

{reverse side}

3 SEPTEMBER 1954.5 SEPTEMBER 1954.6 SEPTEMBER 1954.

3 SEPTEMBER 1954. WYTHAM WOODS ***

open low vegetation like thyme, eyebright, and so on, but there is a strong scattering of **ploughman's spikenard** in flower, some *Brachypodium* and a big edge patch of bracken. Only on the small bramble bushes scattered in the open parts did we see ripe blackberries. In upper ride there were only very few yet. **Spindle** only with traces of pink, and **privet** berries green, **elder** only beginning to have some ripe bunches.

5 SEPTEMBER. WYTHAM WOODS.

Went out to inspect Brogden's Belt old logs and The Ridge. Was astonished to find not only the path through the central sycamores on the Ridge, but also the part from the Ridge to the Snakepit almost impassable with rank growth of bracken etc.

The **teasel** flowers in group at the road end of the Ridge had brimstone, red admiral, peacocks, large white. There is great abundance of eyebright in flower along the path here, and a big colony of ***Gentiana amarella*** in the turf beyond the sycamores.

6 SEPTEMBER. WYTHAM WOODS.

In torrential rain (on first day of St. Giles Fair) to Marleywood Plantation, to peg out litter quadrats for the class and choose big beech trees for night work.

One very large solitary shaggy inkcap (***Coprinus comatus*** Fr.) growing in the oak-ash-beech-sycamore thinned last winter.

{reverse side}

7 SEPTEMBER 1954.

This may be one of the few Berkshire colonies (Druce).

7 SEPTEMBER 1954. WYTHAM WOODS.

While the class was doing litter searching, I made a few notes on the area of thinned sycamore coppice (which has a few beeches and ashes etc.) between Streams 4 and 5 in the outer zone of Marleywood Plantation.

Elders, growing up after last year's cutting, had many flies on their leaves, including numerous scattered individuals of a delicate pale brown gnat. Three, taken from 2-4 ft., were kept, one having two similar-coloured mites on the abdomen. These gnats sit with splayed out legs. n.k. 1188

On elders 1-5 ft. were a good many emerald dull green sawfly larvae, that seemed to have been almost defoliating some leaves, and the leaf petiole surface. K. to breed out failed n.k.

Finlaya geniculata was not seen in this more open wood, but 50 yd. away was abundant in the unthinned version, attacking man, mostly at 0-3 ft. Very humid here. n.k.

The flourishing belt-colony of **Sambucus ebulus** – Danewort – on this wood-field margin is about 3-5 ft. high, in flower and fruit (few left, though green). D

At circa 8 p.m. G.M.T. took a moth sitting on oak trunk + lichen at 3 ft. in thinned part.

Depressaria arenella (Schiffermueller) L.R. Cole det. 1958.

E

{reverse side}

8 SEPTEMBER 1954.

1189A ♀ **Hemerobius micans** Olivier

C.A. Elbourn det. 1963.

B ♀ **Boriomyia betulina** (Stroem) var. *melancholica*

C.A. Elbourn det. 1963.

C. ♀ **Hemerobius humulinus** L.

C.A. Elbourn det. 1963.

1189D. ♀ **Syrphella tricineta** (Fallén) K.G.V. Smith det. 1958, as **Syrphus tricineta** Fallén

E. 2 ♂ (1 k.) 1 queen **Vespula sylvestris** (Scopoli). Kept.
1 queen "V. vulgaris/germanica intermediate" not k.

F. ♀ **Symmorphus elegans** (Wesmael). J.H.H. Yarrow det. 1960

G. Mr. G.H. Ashe confirms these are larvae of *Cionus*. One bred out from C
brown thin chitinous cocoon is **Cleopus** (*Cionus*) **pulchellus** (Herbst). C.E. det.



8 SEPTEMBER 1954. WYTHAM WOODS.

We were doing class mapping of habitats on the slopes below the Chalet, 12.30-3 p.m. G.M.T.

On sycamore leaves 4-6 ft. I beat 3 species of Hemerobiid adults (one of each). There are some aphids. No *Chrysopa* seen. 1189 A-C

On ground ivy leaves (on ground in oak-ash-sycamore wood) in sun, a black and white syrphid fly. D

Below here the ground is partly cleared and planted with oak and ash, though various of the oak, ash and sycamores have been left.

In a very open glade in ash-oak-sycamore wood in hill copse there is quite a lot of ***Scrophularia nodosa*** in flower 1-3 ft. and fruit, the flowers visited by *Vespula* (4 k.) and a small slender black and yellow wasp (1 seen and kept). Leaves heavily damaged. Many small delicate slug-like fawn-coloured larvae on under sides. Kept three pupae on these leaves to breed. E
F
G

There was a large colony of ripe toadstools, brown with a ring and sinuous stems on some large oak logs that had been several years (bark mostly off) in a glade in oak-ash-sycamore wood on lower slope of Great Ash Hill. J.L. Harley det. (1954) as honey fungus, ***Armillaria mellea*** (Vahl.) Quél., which is

{reverse side}

8 SEPTEMBER 1954.

1190 3 *Proteinus brachypterus* (Fab.) K. Paviour-Smith., confirmed P.J. Osborne, 1956. (1 kept).

Other beetles indetermined, kept in alcohol.

9 SEPTEMBER 1954

1191 1 ♂, 1 ♀ ***Melanostoma scalare*** (Fab.)
B. Macpherson det. 1954.

8 SEPTEMBER 1954. WYTHAM WOODS ***

a species of some importance in destroying live trees in Europe, though we have not any previous notes of it for Wytham Area. There were very large numbers of small beetles in the gills, and 200 or so were collected from one tin-full of fungus, all of which was ripe or over-ripe. Except for 2 *Catops* they were all staphs. including *Proteinus*, *Lordithon* etc. One *Oniscus*, and some signs of slug damage. Kept for later analysis. 1190

9 SEPTEMBER. WYTHAM WOODS.

Collected black syrphid flies dead on drooping flower heads of *Brachypodium sylvaticum* in small rocky limestone glade in oak-ash-sycamore wood, Great Ash Hill. They were also on a clump of *Arrhenatherum elatius* (det. W.J.L. Sladen 1954) there. 1191

The flies partly had signs of fungus in abdomen (see W 691).

Wasps (*Vespula* species) are quite abundant this year (does the killing of badgers help? Relative numbers of tree and ground wasps would test this), and are visiting blackberry fruits a lot. I have seen no **hornets** this year.

10 SEPTEMBER. WYTHAM WOODS.

Mr. G.H. Ashe, a distinguished amateur beetle expert from Devon, came out. He collected a small marsh staph. *Myllaena* species from the deep wet moss round the Deer Pond. (See also W 298).

(Probably *M. gracilis* (Matthews): see TAX letter 27.10.54)

{reverse side}

20 SEPTEMBER 1954.

20 SEPTEMBER 1954. WYTHAM WOODS.

Spent several hours on the Dell, Singing Way, Bowling Alley and Ridge, with Thomas Park discussing ecology. High wind with hot sun in shelter.

We saw and I killed the first definite myxomatosis-infected **rabbit** for Wytham. It was on the Singing Way near Rough Common, and sat still and comatose in the open, having swollen and closed eyes, swollen head and ears and testes.

{reverse side}

14 APRIL 1955.

- J. 4 ♂ 2 ♀ (of which 2 ♂ 1 ♀ presented to Hope Department)
Megaselia armata (Wood) partum Schmitz.
(= *riedeli* Schmitz). C.N. Colyer det. 1959.

14 APRIL 1955. WYTHAM WOODS.

Visited Marleywood Plantation to mark and map dead beech trees and logs; notes elsewhere. The spring is rather late and dry and there is only a sprouting of a few shrubs.

On one large old dead beech stump near Log 32, in good woodland coppice (sycamore, with scattered large beech, oak etc.) were some very large old bracket fungi. They could only just to be kicked off. Brought two in, measuring each about a foot across, from about 1-2 ft. on the stump. They have three main growth zones and part is quite alive, though the bark-like upper surface looks dead and has some moss-covering. Cut each in half, to keep 4 creamery tins for emergence of animals.

Week ending 22 April: 1197

Porcellio scaber one immature 3 very young n.k.
 1 ***Scaphidium quadrimaculatum*** Olivier B
 1 small Cisitid (living in holes which are fairly **numerous** on under side). (see p. 28) C
 3 newly hatched *Leiobunum* species n.k.

Week ending 29 April:

5 very young hatched harvestmen? *Oligolophus* n.k.
 1 adult ***Porcellio scaber*** n.k.
 1 ***Scaphidium quadrimaculatum*** Olivier n.k.
 Several collembola G
 2 Sciarid flies H
 6 Phorid flies J

Week ending 6 May:

4 young harvestmen, very small n.k.
 1 Dolichopodid fly. ***Medeterus apicalis*** (Zetterstedt) K.G.V. Smith det. 1958. (see K
 over)

{reverse side}

14 APRIL 1955.

1197 L ***Ganoderma applanatus*** {= ? ***applanatum***} Karst [used to be confused as *Fomes fomentarius* Karst in older records of literature]. J.L. Harley det. 1955.

14 APRIL 1955 WYTHAM WOODS ***

On 4 May I found the four bits were becoming heavily overgrown with sheet and button mould. Cleaned and dried two halves (= 1) for naming fungus, and kept cleaned up bits of the other (incomplete) in creamery tin with 2 but with muslin top instead of lid with small gauze circle. 1197 L

Tore and cut up some of the extremely tough material, in which I found Ciid (apparently young **Cis nitidus**) larvae (kept.3 in alcohol), one pupa (kept alive), several adults, = C mostly very pale teneral and at base of gill layer where much hollowing out on larger cavity scale – from here one half-grown **Oniscus asellus** (n.k.). Also kept bits of under gill layer to show Ciid galleries and exit holes.

7 May-mid June

3 young **Oniscus asellus** J. Le Gay Brereton det. 1955 n.k.
 2 small staphs. **Hapalaraea** (*Phyllodrepa* in K & H) *ioptera* (Stephens) C.E.
 Tottenham det. 1956. N
 About 50 small Ciid beetles emerged, as C. = **Cis nitidus** (Fab.) A.A. Allen det.
 1955. (2 k.) = C

In a lump of wet very old white-rotted beech on the ground (several cubic feet) were **Sinodendron** adult and a rather slow moving light brown ant, smaller, slower and lighter than **Myrmica ruginodis**. 1198

= 3 queens (two light, 1 dark) **Myrmica laevinodis** Nylander
 C.E., & C. Overgaard Nielsen det. 1955.

{reverse side}

16 APRIL 1955.

16 APRIL 1955. WYTHAM WOODS.

Visited slopes below the Chalet and Further Clay Hill. The latter has been (except for reserve below) absolutely desolated by this winter's forestry. It is practically bare, only scattered young trees, thickening as you go upwards. Planted with oak, beech, and some spruce etc.

The slopes above this have been a good deal thinned for coppice. All the hill from the Chalet down to Further Clay Hill reserve is much more open than it was, and the increase in primroses is quite general and rapid, astonishing. There are one or two springs that need re-mapping, – one with a single clump of **marsh marigold**. The springs are less shaded than they were. I think the **anemone** may be spreading as well.

{reverse side}

9 SEPTEMBER 1955.

9 SEPTEMBER 1955. WYTHAM WOODS.

Marked and described some large dead beeches in Marleywood Plantation in the afternoon, with Miss K. Paviour-Smith (just arrived from New Zealand to do a research project on tree fungus fauna). Log number 23, a very old fallen rotten damp beech branch among fairly good ground and field vegetation had a *Melanotus rufipes* larva (in white to pale pinkish rot-wood); n.k.
while on the top walked a *Platycis minuta* adult. n.k.
Logs number 22, 23, 28, 33. had no new tree fungi on, no doubt owing to the dry summer.
But "Log" number 29, 15 year-old standing tall dead beech, had some small white brackets 6 in. – 6 ft. – this was under dense cover of ash saplings etc. Bramble and *Deschampsia caespitosa* growth very rampant. The small streams running, though low

{reverse side}

Bromus (Zerna) ramosus W.J.L. Sladen det. 1955.

13 SEPTEMBER 1955. WYTHAM WOODS.

Did some more log mapping in Marleywood Plantation, with Joy, in the afternoon. In the part thinned rather drastically in 1953-1954 i.e. between about Marley Lodge and Stream 4, there has been a startling increase in *Deschampsia caespitosa* as field layer. Parts of this area, especially below the drive are a sea of brown *D. c.* flowers up to 5 ft. or more. The tussocks are large and luxuriant. A minor element is *Carex pendula* (even away from the streams) and a huge brome of which I brought back a three-stemmed plant 7 ft. high, and pressed it in bits! Other parts have dense and very strong brambles, societies of enchanter's nightshade in seed, wood avens; plants of glade like figwort (*nodosa*), burdock, etc. Not much nettle. n.k.

"Log. 32" (actually a live beech with the trunk badly scarred open by rot) has huge bracket fungi similar to those on the Marleywood Plantation beech stump, collected on 14.4.55. Some of these have new growth zones of pure white below, while on various parts of both the scar and bark new small similar white brackets are growing, 6 in.-12 ft., – they are tough, and no insects were seen. They are probably the same as those seen on 9 September on the trunk of "Log" 29.

Baptolinus affinis and a hibernating queen *Vespula sylvestris*, were found in old rotten beech lump on ground at "Log 31". n.k.

On road verge, margin of mixed deciduous wood a large patch of dewberry (*Rubus caesius*) in fruit, tasting and colour like bilberry.

{reverse side}

15 SEPTEMBER 1955.

15 SEPTEMBER 1955. WYTHAM WOODS

Visited the Singing Way (all), the Bowling Alley and Brogden's Belt, with Miss Paviour-Smith.

A good deal of forestry clearance is beginning north of the Bowling Alley and will extend along the slopes outside a certain width from the Singing Way this winter.

The birches are now a prominent feature of the Bowling Alley, following the limited strip inside from the pines on the east side. Small plants of *Brachypodium* and *Festuca* ? *rubra* are invading in many places in the open.

Under large beeches at My Lady's Seat ("Woodland edge") an angleshades moth *Phlogophora meticulosa* (L.) flew into car, 3 ft.

In Brogden's Belt, where path from the Swimming Bath passes through to the Dell there are two conspicuous dead beech boles.

{reverse side}

15 SEPTEMBER 1955.

17 SEPTEMBER 1955

6 in.-4 ft. off ground----

A Unable to get details: not seen again at Wytham up (to 1962 K. Paviour-Smith).

1211B *Polystictus hirsutum* Fr. J.L. Harley det. Surfaces much eaten (? mollusca); but better specimens from same log taken by K. Paviour-Smith in October, and also seen by Harley.

♂ *Ceroplatus testaceus* Dalman. B. Sladen det. 1955.

15 SEPTEMBER 1955. WYTHAM WOODS ***

- (b) One from which a large live branch had broken off since May (leaves dead on it). The wood seemed white-rotted through at the basal end (1-2 ft. thick). Dug a few inches into the damp top of this (no bark on it) and found:

1 *Cerylon ferrugineum*

n.k.

5 adult *Sinodendron cylindricum* and
only 1 larva, very small, this year's.

n.k.

1210

1 large *Athous villosus* larva

n.k.

17 SEPTEMBER 1955. WYTHAM WOODS.

In afternoon continued log-marking in Marleywood Plantation, in the thick wood at the Botley Lodge end. In places it is almost impenetrable with bramble etc. There is no bracken to speak of down on this damp clay.

On the underside of a fallen beech branch with bark on, fallen 1954, was a lot of brilliant orange delicate hanging clusters ½-¾ in. long, with very variable structure in detail, but giving a dry, fluffy mossy effect. This was part of Log 20. On some older dead branch in full ground contact, were cream-coloured foliose small fungi on the top and sides. 1211

The centre of this 6-7 in. log was hard and unrotted, but there was an outer cylinder (under the bark) of ½ in. white rotted. n.k.

On one bit of fungus was a rather shiny mycetophilid larva under a sort of 'cellophane' case. It was active. (Within a day or two it pupated in a thin 'candyfloss' case under the fungus, and soon emerged as an adult *Ceroplatus*.) C

{reverse side}

17 SEPTEMBER 1955.18 SEPTEMBER 1955.

- 1214 *Trametes rubescens* Fr. J.H. Harley det. 1955.
(Occurs willow and alder, Ramsbottom, J.- 1948.)

17 SEPTEMBER 1955. WYTHAM WOODS ***

At about 2 p.m. (GMT) I watched a huge grey and crimson red underwing (*Catocala nupta* (L.)) flying fast at 1-20 feet up and down the lane in Marleywood Plantation (opposite Log 20 point) (i.e. in 'woodland glade'). It looked like a gigantic greyish red admiral; probably disturbed by an entomologist beating near. There are some black poplars in this area. The moth, although in broad daylight, was attracted to my car, and I then found the side-lights had been left on.

Under a plank on wet silt by Stream along the lower ride in Marleywood Plantation were many *Agonum ruficorne*, some *Velia*, and a black staphylinid I had not seen. 1212

I collected flowers, fruits and leaves of *Rubus caesius* from the spot noted on 13 Sept. 1213

18 SEPTEMBER. WYTHAM WOODS.

Went out at 6.30 (5.30 GMT) a.m. on Sunday with Robert to look for birds. It was dead still, fine and cloudy-cool. The heavy growth everywhere this year is notable.

Found some solid plate-like bracket fungi 1-3 ft. on a dead stem of a live *Salix cf. atrocinerea* at the edge of Marsh 3. Fresh and undecayed. On the forest path, shady, in the north slope of oak-ash-sycamore wood several of the light greyish brown n.k.

{reverse side}

18 SEPTEMBER 1955.8 OCTOBER 1955.

18 SEPTEMBER 1955. WYTHAM WOODS***

delicate toadstools 1-2 in. wide that show the gill structure on top of the cap as well as below. It resembles *Coprinus plicatilis*. n.k.

The Ridge has an alarming amount of first-year plants of tor-grass and *Festuca* coming up all over what was rabbit-grazed rock-rose, thyme etc. and the latter seem doomed.

8 OCTOBER 1955. WYTHAM WOODS.

Took a graduate just arrived from Northern Rhodesia, to Marleywood Plantation, where we looked at stream faunas (D. Eccles, come to do research in the B.A.P.).

Stream 3A (which starts below the drive, just south of Marley Wood Lodge) is quite dry and has ground ivy growing on part of its bed; though there is *Carex pendula* along its banks thickly, this sedge also grows quite a lot away from the streams themselves, in Marleywood Plantation (though it is denser near them).

Stream 3 was flowing well, though only an inch or so deep, in a cutting (above the drive where we looked) several feet deep, overhung by *Carex pendula*. The first plate-full of bottom material brought up many *Gammarus pulex*, also a *Helodes* larvae, tiny sand caddis larvae (on edge of recently gnawed hole in the fresh-fallen sycamore leaf), *Pisidium personatum*, but no *Nemoura* nymphs. We also saw planarians. No Dytiscid beetles, though there was a beetle larva, not *Helodes*. No bugs.

{reverse side}

8 OCTOBER 1955.

8 OCTOBER 1955. WYTHAM WOODS ***

Stream 5, examined just below the drive is still under pretty dense canopy that will be thinned this winter. It produced ***Gammarus***, *Helodes* larvae, tiny sand caddis, many planarians, and a *Simulium* larva. It is wider and not in such a cutting, and like the last has a sandy-silt bottom with no sign of any living alga or other plant. And 3 is under thinned canopy. In both streams are great quantities of small twigs and sticks, heavily encrusted with calcium carbonate. This has the effect of fossilizing them and taking at any rate the bark out of circulation as a food resource. Some twigs were just empty calcified bark cylinders from which the wood had disappeared. There were none of last year's soft tree leaves left, only a few skeleton sycamore. But the good many oak leaves lay in the water, undecomposed. A few fresh (1955) sycamore and ash leaves lay in the water, and the former especially had already been attacked by aquatic animals (tiny caddis for certain, almost certainly *Gammarus*), and been locally skeletonized or completely holed. On land, the litter situation was similar, as usual.

A sample of planarians from Stream 5 (where some were cruising on the open silt, but most were on the under side of green leaves), taken back to the lab., contained both ***Polycelis cornuta*** and ***Planaria alpina***.

[Eccles has agreed to do a 2-year research thesis on this stream fauna. 12 October.]

{reverse side}

12 OCTOBER 1955.

Confirmed by J.L. Harley 1955.

12 OCTOBER 1955. WYTHAM WOODS ***

12.15 to 4 p.m. Visited The Ridge, Brogden's Belt, Marleywood Plantation, (with K. Paviour-Smith).

The white **horse chestnut** on the Ridge had very few nuts below it, and a few conkers were ribbled at the surface. A large bare soil patch about the size of a deer, under the trees; a large pile of fresh (fallow) **deer dung** (there are no sheep up on Lower Seeds just now); and a fallow deer recently seen near here by Pat Lowe, which Probits states had a fawn around here this year; show that deer have probably been eating the nuts. E. Step, "Wayside and Woodland Trees", states that horses avoid them, but cattle, deer and sheep eat them readily; and war-time instructions allowed 1/5 ration of them in pig food. They are not mentioned in any of the poisonous plants books, but they taste bitter.

Big old rotten beech Log 4 in Brogden's Belt (under canopy of its own tree) has large fairly dry growth of *Polystictus versicolor* on damp sides and top, with a large *Cis* in. This was not present during 1954 Autumn Course and is therefore <1 year old.

{reverse side}

12 OCTOBER 1955.

*Young honey fungus, *Armillaria mellea* Quél. J.L. Harley det. 1955.

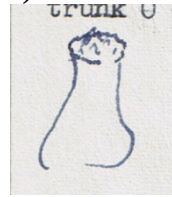
12 OCTOBER 1955. WYTHAM WOODS ***

Spoke to Probitts: he will not be cutting round the Bowling Alley and will leave the row of pines.

There is an almost completely dead wych elm, with a few live twigs, standing near Log 4.

By the haystacks between the Snake-Pit and the Dell, on Upper Seeds field – wood edge, a large patch of Dyer's Rocket (*Reseda luteola*) in seed and a few terminal flowers.

Finished cataloguing all but one dead tree in Marleywood Plantation. Saw a ♂ *Leptophyes punctatissima* on trunk of dying beech No. 26, in the thick oak-ash-beech-sycamore shade. This beech has enormous *Ganoderma applanatum* (fresh white plate below) on the trunk 0-



15 feet, and old ones higher. Also small yellow "puffballs" about ¼- ½ in. wide at top, in clusters on base 0 in.-1 ft.

{reverse side}

29 OCTOBER 1955.

1215 *Hypholomma fascicularis* {sic ? = *Hypholoma fasciculare*}

J.L. Harley det. 1955 (says this was fertile, there being a non-sporing form with yellow gills).

29 OCTOBER 1955. WYTHAM WOODS.

Walked with Joy in Common Piece, Thorny Croft, 10-Acre Copse and up to Great Ash Hill, 3 Pines and the Ridge and down Lower Seeds on the edge of Little Ash Hill. It was calm and cool. The **elm**, **oak**, **hornbeam** and **maple** were in leaf still, the latter blazing conspicuously in pale gold. **Sycamore** more than half leaf-fallen; **ash** mostly dropped; **buckthorn** (1 shrub in 10-Acre Copse) and **dogwood** (turned wine-purple) still in leaf, also **salows**, but **hazel** mainly fallen. The **spindles** in very fine showers of fruit, but some fully leaved, others bare. They are very good either side of Upper Ride.

Some of the springs have suffered from the excessive summer drought. S 32, the source of Marsh, was quite dry. Stream 7 A had some damp seepage among dead leaves, but no flow at the source. The source and upper few yards (rest not seen) of Stream 8 quite dry.

The totally defoliated small **buckthorn** plant on the Ridge (see 5 June 1954) has this year grown in full leaf again.

Collected sample of *Hypholomma* growing on the butt end of a very old dry decayed oak bole (with gall bumps) on edge of West Heronry Plantation and Comp. 13. It is bright bright yellow with a brown top-knob, turned under a bit and with puce-brown gills, and very tufted in colonies.

1215

Probitts now states that the thinning of "Fager's patch" in Marleywood Plantation (Comp. 45) and 46 above the drive there will start next week; and thinning in Comp. 9 and 11 is postponed till next winter, to suit Southern's trapping work.

{reverse side}

9 NOVEMBER 1955.

9 NOVEMBER 1955. WYTHAM WOODS.

Met Probitts and arranged the safeguarding and future treatment of the major dying and dead trees, and logs in Marleywood Plantation; also the conservation of streams for Eccles' work. There has been a striking outburst of tree fungi in the last few weeks, certainly since 12 October, my last visit here. Several species have appeared, including a colony of *Armillaria mucida* on one dead beech (Log 22) at some 15 ft. up. Signs of *Polystictus* beginning on some logs. The general agreement with Probitts is:

- 1) Leave all labelled trees unexploited, including all lying branches and old decayed logs near them.
- 2) So far as possible do this with any other (unmarked) DD/Wood.
- 3) However, immediately fell dead and dangerous dead beech (Log 22), and later on the dead standing beeches of Logs 29 and 30. Agreed that with these, and also on the fallen Logs 28 and 20, the smaller branches could be cut and cleared if desired for tidiness and silviculture, but roughly leaving all stuff more than 6 in. diameter.
- 4) Bramble (and for Log. 29) scrub cover to be left.

Much of this was never actually seen to

{reverse side}

9 NOVEMBER 1955.

9 NOVEMBER 1955. WYTHAM WOODS ***

Details agreed were:

Log 22. Dangerous now. Fell at crack height, leaving short bole standing.

Log 23. Leave bramble cover (and elsewhere on logs)

Log 28. Trim off small branches but leave rest.

Logs 29 and 30. Fell trees, leaving high stumps, some time this winter, leave all all lying logs and their bramble-scrub cover.

Log 32. Cut splintered branch hanging from tree, and cut and remove smaller branches. Leave both main branches lying.

Log 20. Lower big newer branch by cutting stub; left open whether he cuts away small branches.

{reverse side}

2 DECEMBER 1955.

Two fallen bits of trunk by it, also with bark, circa 20 and 12 ft.

Pleurotus sapidus Sacc. J.L. Harley det. 1955.

2 DECEMBER 1955. WYTHAM WOODS.

Walked in the woods along the Singing Way between My Lady's Seat and level with the Pasticks, to note the dead tree and logs situation. There are several score of boles, dead branches and logs, and one or two dead trees. Some are very old, others fresh. Decided that it would be simplest to ask for a blanket order to the Forester to leave all standing dead boles of all species, all rotting logs and stumps, and not at present label or map them. This could be done later if necessary. There are beech and some birch etc. The latter have good old and fresh white birch bracket fungi (*Polyporus betulinus*) on some dead boles. Most of this bit of wood is free of undergrowth, on account of the abundance of fairly large beeches. A good deal of fresh tree fungus is beginning now on the dead beech logs.

One standing 12 ft. bole of Wych elm with its bark on, a little way south of the Way among beech etc. nearly opposite the beginning of The Jew's Harp, had half a dozen far-decayed clumps of toadstools on the trunk. Although this tree has some galled lumps, the fungi were not on these. They were 0-7 ft. and I took them from 1-7 ft. n.k. The toadstools had a rather tapering-down shape, with slit, not pore, gills, and were now leathery, dirty fawn, and a bit scaly on top. Because I saw a *Tetratoma fungorum* sitting on one (3 p.m. G.M.T.) I was attracted to look further. Banging into a tray at the lab. produced abundant insects: The fungus has a very penetrating and unpleasant smell like drains or farmyard manure. The main outstanding thing was absence of staphylinid beetles.

{reverse side}

2 DECEMBER 1955.

E. G.E. Woodroffe det. 1957.

F. *Pseudotriphyllus suturalis* (Fab.) G.E. Woodroffe det. 1957.

2 DECEMBER 1955. WYTHAM WOODS ***

- 2 smallish marbled spiders, one of which ate the other in the tube. 1219 [A]
- 10 ♂♀ *Tetratoma fungorum* Fab. Very active, even spreading wings; some trying to copulate n. k.
- 11 *Lathridius nodifer* Westw. Slow-moving and bad at turning upside up. When touched or grasped with forceps they feign dead for some seconds. When not moving they could be mistaken for a bit of debris. But when the tube they are in is banged they do not feign dead. (This was not found consistently K.P.S. Also in *Enicmus*) [B]
- 8 'Enicmus'. These feign dead when touched or grasped, but only for a second. Active-running. 2 *Enicmus minutus* (L.). K. Paviour-Smith det. confirmed J. Balfour-Browne 1960 – as *Lathridius minutus* (L.). [C]
- 1 bright brown *Enicmus*-sized clavicorn beetle. Lost
- 12 *Cryptophagus dentatus* (Herbst) Narrower, pure bright brown, active-running. Try to fly in bright light. (2 kept) [E]
- Another small beetle. Rounder, darker brown and black. [F]
- 1 *Mycetophagus quadripustulatus* (L.) n.k.
- Collembola
- very small white bristly beetle larva (? Lathridiid) quite abundant and active. J
- Large beetle larva n. k.
- tiny bright pink-orange larvae that move actively.
- ♂ *Lestodiplosis* sp. Reared from larva by K. Paviour-Smith, det. by H.F. Barnes 1956 and K.M. Harris 1965 (Cecidomyiidae) slide [L]

{reverse side}

2 DECEMBER 1955.

2 DECEMBER 1955. WYTHAM WOODS ***

The Bowling Alley has many small plants of ***Brachypodium*** establishing, that may become a serious dominant in a few years. They can easily be pulled up by hand, without too much soil disturbance. There is a narrow belt of small mature **birches** just behind the fringe of mature planted pines, that grows (rather poorly) of the same rocky ridge as the Alley. This might well be included in the Reserve. (Beyond, in Bowling Alley Plantation proper, there are also a good many poor birches, some dying and dead). In the fringe of birch there was a big flock of titmice (**great, blue, long-tailed** etc.) hunting in the canopy and twigs at 15-25 feet.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 10.

21 March 1956-24 September 1956.

C.E. 1225-1274.

Red ticks¹⁹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles²⁰ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

¹⁹ Shown as **bold** in edited version.

²⁰ Edited to A or 00

21 MARCH 1956. CHALET WOODS.

With Denys Kempson and Kitty Paviour-Smith, to photograph (D.K.) a fine colony of ***Polystictus versicolor*** on the old branch-scar of a live beech ("Log 17"). Not far away, in the mixed deciduous wood part of Blenheim is a very remarkable dead standing forked birch covered with large mature or rotted ***Polyporus betulinus*** from over 6 ft. to over 15 ft. up. The tree indeed stands among its own ruins, consisting of rotten branch lengths, bark covered, with some *P. betulinus* on, one with a small *Trametes*. (This was also photographed).

Three small dark **fallow deer** broke away in this wood – a horned stag, a doe, and a smallish 1955 fawn i.e. a family party. At the end of the path in these woods, leading past the Tank to Upper Seeds, very near "Log 17", there is a good patch of mixed scrub, with dogwood, privet, wayfaring tree, young birch etc. The wood on its southeast side, abutting on Upper Seeds has an old hedgebank on which is an extremely ancient straggly tall line of scrub, chiefly hawthorn, beyond which saplings and scrub have advanced some yards to the present field edge.

Dog's mercury shoots are just pushing a few inches out of the ground. Some **snowdrop** clumps, still in flower. I broke off two feet of a very white-rotted oak 3 in. diameter branch at 9 ft. on a small oak in the mixed wood. Stripped the outer fairly loose partly mossy bark into one creamery tin, and divided the rotten wood, which still has some solid core, into two others. Kept in my room (> 65 °F), the tins having metal gauze vent in lid and exit tube below. Nothing

{reverse side}

21 MARCH 1956.

1225 ***Dromius agilis*** (Fab.) Logged as 11.30 a.m. GMT.

Plus 4 ♂♂ 2 ♀♀ *E. cornutum* not kept (K. P.-S. det.)

1226 G ***Cis vestitus*** Mellie J.F. Lawrence det. 1966 2 kept

21 MARCH 1956. CHALET WOODS, WYTHAM.

emerged in the first 30 hours, though I caught a small active brownish carabid under the bark while stripping it. 1225

(a) Under and in bark: 1226

13 very young just hatched harvestmen. 26 March 23 more on 27th. 28th, 33 more. No more on 29th. Total 3 days: 69. n. k.

Small beetle larva (< 28 March) A

ditto, different (< 28 March) B

Mites

Very small spider, which killed several young harvestmen (n. k.) C

Very small light brown and dark squarish angled staph. *Phyllodrepa ioptera* (Stephens) P.J. Osborne det. 1956 D

3 young, 1 adult *Loricula elegantula* (Baerensprung) G.G.E. Scudder det. 1956. H

3 *Ennearthron cornutum* (Gyllenhal) ♂♂ (2 k.) K.Paviour-Smith det. 1956 emerged in lab. E

3 *Cis bilamellatus* Fowler ♀♀ emerged in lab. F

(b) Rotten wood: 29th 1 young harvestmen (not new hatched). n. k. 1227

Small beetle larva (< 28 March) A

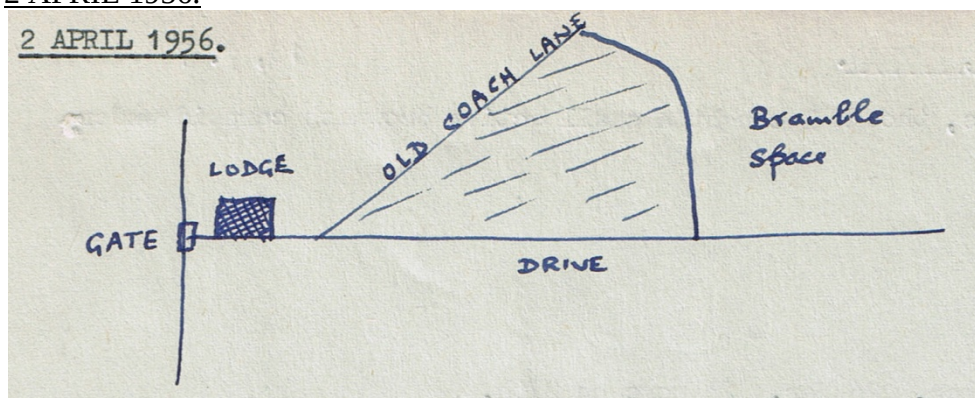
♀ *Raphidia cognata* + pupal skin Rambur C.A. Elbourn det. 1963 B

Very small narrow brown clavicorn *Cartodere filum* (Aubé) P.J. Osborne det. 1956 C

1 ♂, 1 ♀ *Ennearthron cornutum* (Gyllenhal) K. Paviour-Smith det. 1956 D n. k.

{reverse side}

2 APRIL 1956.



9 APRIL 1956.

See CN 202/3/1 – end of book

2 APRIL 1956. WYTHAM WOODS.

Walked in Marleywood plantation and Marley Wood. The triangle or block of the former at the Lodge end, north of the drive, has now been drastically thinned, and one or two glade-sized patches clear-felled. It is mainly sycamore coppice of fair height, and on those trees not removed one large leader trunk has been left. There are also some other deciduous trees. Every bit of scrub, mainly old elders, has been razed, I think. Two dead trees still stand, and could be marked?

The thick wood below the drive, including "Fager's Area" is still untouched.

A very large proportion of Marley Wood is untidy and ragged overgrown hazel coppice, others are birch patches or open scrub or vague mixed wood or marsh, and a little is thick youngish sycamore. A demarcation between forestry and science looks very difficult, and the ideal (science) answer is probably to leave the open parts as they are at present (they will change quickly, expect {sic ? = except} in the marshes), and cut some glades or racks in the old hazel.

9 APRIL. WYTHAM WOODS.

In the early afternoon Soper, of the University's Experimental Farm, accidentally dropped a lighted match on the towpath just by Clap Gate in Wytham Mead, inside the rough patch left as a "reserve". The fire caught the grass, which in the south of England is as dry as tinder this spring, and got into the Wood before he could stop it. A strong west wind drove it into Hither Clay Hill, all except the outer fringe of which was burned to the ground (though the scattered trees, mainly oaks, which caught fire, may have been only partially hurt) – much thick scrub and the bracken areas. It was fought by the Fire Brigade and the foresters etc., and Soper for some hours, and just checked along the line of Lower Ride. Southern and Lowe have made a detailed map of the burn. The trap grid has some 10 acres burned off, and the Reserve as a whole has had some ? 20-30 acres go. The

{reverse side}

9 APRIL 1956.18 APRIL 1956.

9 APRIL 1956. WYTHAM WOODS ***

total area is about 30 acres. It did not reach Varley's oak acre. The eventual effect may however be partially beneficial, as the area has become over-solid with thorn scrub and bracken.

18 APRIL. WYTHAM WOODS.

Visited Common Piece, Thorny Croft and Ten Acre Piece to look at streams, with David Eccles, who kept full notes with specimens, so only main points noted here.

In Common Piece, near the Spruces in the centre, is a very active occupied **badger** earth in the sand, besides a small hole near to First Fork.

The season is extraordinarily late, and **blackthorn** is in full flower still, as well as ***Salix caprea*** and ***atrocinerea***. The woodland ground zone has few flowers – **ground ivy**, **dandelion** and violet being visible.

Stream 7A was choked with unskeletonised leaves of sycamores etc. unlike Streams 7B and 8. This coincided with apparent absence of *Gammarus* and other leaf-eaters, though the stream was wet below the leaves. The head spring of Marsh 1 (S 32) was quite dry. Stream 7B, where it emerges gradually from below, from a thicket of scrub, was running quite well with an inch or two of water in many places, which continues (with one or two disappearances into the ground for short distances of a few yards) to the edge of the wood, where it descends a foot or two into a clear-dug stream ditch; the latter was running shallowly from the slight col to the north, (field/wood edge) and continues deviously down the field/hedge edge towards Northfield Farm. 7B had no ***Gammarus*** or tiny caddis, but many large caddis larvae in calcareous grit cases, Nemourid nymphs, ***Pisidium*** (? ***personatum***), worms, a leech etc. There was also a huge green ***Haemopis*** leech. D. Eccles collected/det. 1956

{reverse side}

18 APRIL 1956.

2 MAY 1956

Cool, cloudy after sunny morning.

18 APRIL 1956 . WYTHAM WOODS***

A small blackish *Agabus guttatus* with red legs was seen several times and seemed to be among the leaf packets (much skeletonized, except oak). The history of this stream and its present fauna may be affected by droughts. However, the stone-flies were of more than one size: very small, and nearly mature. (Sweeping *Carex pendula* etc. on banks and overhanging did not produce any adults). This does not fit in with a complete wipe-out in last summer's drought.

Stream 8 was running quite well, 1-2 in. mostly, from source to edge of wood, where it peters out in an alluvial marsh. There can be no connection with the river system by any surface channel. It also has no *Gammarus*, but had large grit case caddis, Nemourid nymphs, *Pisidium* etc. and skeletonised leaves. No *Agabus* seen here, but some palpicorn beetles under sticks in the water.

2 MAY. WYTHAM WOODS.

Visited the Chalet Woods to mark and describe some "Logs", and to collect insect visitors on wild cherry (*Prunus avium*). There are two mature trees just outside the Lords Common reserve, with over a dozen young ones growing up round: all in full flower. 1228

In layer 6-9 ft.: 1 *Epuraea unicolor* (Olivier) P.J. Osborne det. 1956

A

In layer 3-6 ft.: 1 *Meligethes aeneus* (Fab.) P.J. Osborne det. 195

B

3 2 *Epuraea unicolor* (Olivier) P.J. Osborne det. 1956

C

1 *E. melanocephala* (Marsham) P.J. Osborne det. 1956

1 small black staph. *Phyllodrepa floralis* (Paykull) P.J. Osborne det. 1956

D

1 *Anthocoris nemorum* (L.) G.G.E. Scudder det. 1957 P.J. Osborne det. 1956

E

Bees were very scarce, only one or two *Apis* and *Andrena*. No flies.

The lateness of the season is impressive. **Sycamore** flowers not yet open – no insect visitors, **elder** and **hawthorn** only in half leaf. **Oak** practically and **ash** entirely unopened leaf buds.

2 MAY 1956. WYTHAM WOODS

Dog's mercury makes a dominant sheet on the ground of the thinned parts of this wood, i.e. where there is not bramble. It was in full flower. ***Hermaeophaga mercurialis*** – fresh adults, by sweeping. Little else in the net.

A fawn brown plume moth in the flowering cherry canopy, 5 ft.

1229

{reverse side}

1 JULY 1956.

{Pages 12-39 are missing}

1 JULY 1956. WYTHAM WOODS.

Visited Lord's Common and the Ridge. It was warm and sunny with a strong breeze. **Brachypodium** and also finer grasses are rapidly taking hold of these limestone flower areas, since the rabbits went. There seems no effective way of stopping it except a controlled succession that would create bare areas deliberately (how ? with a hand-fork or a plough or what? a grass-killing chemical?). I also noticed that the barer areas of rock or turf look as if they had been almost sterilised in places, perhaps by last year's and this spring's drought. There are thyme, *Lotus*, rock-rose viper's bugloss, etc. in flower on the recently cut roadside grass, within Lord's Common, one rather small **bee orchid** in flower. On both sides of this reserve, on the grassy open bits, **large skippers** were persistently visiting flowers of **viper's bugloss** and **birdsfoot trefoil** (i.e. both in ground and field layers of this mixed T/2 and T/3). I also saw on the open area one **dingy skipper** on low vegetation, one very worn and one **small green hairstreak** on a low plant, kept to the ground zone by the wind. Also flying were **meadow browns**, **small heaths** and a **common blue**.

These formally rather bare limestone flower areas of Lord's Common have changed a great deal in ten years. The south one used to have a lot of bare Coral Rag rubble, but is now nearly matted with vegetation, including large societies of non-flowering ***Hieracium pilosella***. Small plants of whitethorn are moving in, and there are seedling **oak**, ash, sycamore, and one **hornbeam** plant.

On this southern patch there were several patches of ***Galium pumilum*** in flower, and we saw one also on the Ridge. 1257

At the latter, the **rock rose** is being conspicuously invaded by grasses.

{reverse side}

29 AUGUST 1956.

Pontin says the ants (***Lasius niger***, ***flavus*** etc.) farm aphids on roots of plants there. There are different species on *Brachypodium*, *Hypericum*, etc. He and Dixon are making a collection from Wytham, confirmed by Stroyan. Without help of ants the aphids could not live underground. A few are eaten by the ants. *Brachypodium* aphids live also, commonly at base of tussocks but would probably die *in situ* in Tullgren funnel, and not come out. (N.B. A. Macfadyen got aphids to come out more from Cothill grass by using chemical repellents).

29 AUGUST 1956. WYTHAM WOODS.

Went up in the afternoon, but sustained thunder showers prevented much that I needed to do for the Autumn Course.

The Jew's Harp shelter belt, though much mired and trampled by cattle passing to and fro between the Park and the field above, is in a good 'fruity' condition for under-bark log work. Log 12 (ash) has a good deal of bark left on the lower parts, log 13 (beech) continues to rot nicely, also log 14 (beech). The big common elm (Log 15) still has a big attached fallen branch, with some bark still on. The whole of the top has crashed off, leaving a large standing bole. The fallen part is fairly rotten, with some loosening bark.

The Bowling Alley is very flowery with thyme, eyebright etc. But less invaded by taller plants and *Brachypodium* than I had feared. It is still essentially a ground layer of vegetation, some still as mat, on very shallow limestone soil. A.J. Pontin's ant competition experiments are scattered over the centre, as small squares of tile etc.

Rough Common, on the other hand, has completely lost any smooth turf that the **rabbits** used to maintain in the quarry bottom, though there is a narrow strip at the edge of the road, through cars and walkers. The latter proves that *Brachypodium* can be kept down by pressure breaking the stiff silicified leaves. Here and at other

{reverse side}

29 AUGUST 1956.

29 AUGUST 1956. WYTHAM WOODS***

open edges and a little in the taller grass on the Common, **white yarrow** (*Achillea millefolium*) has grown up (9 in.-1 ft. or so) a good deal in patches and is flowering: a thing seldom seen before the rabbits went.

The small area of large **gorse** bushes at the head of Radbrook Common by My Lady's Seat has been razed, to extend forest plantings there and below. This was one of the first bits of conservation I managed to get done when the estate was taken over by the University. But now there are acres of young gorse in the forest plantings on the lower part of Radbrook Common!

The Singing Way is now coming under forestry attention. It was stated that a 15 yd. strip would be left untouched either side. But they are in fact clearing and burning underbrush and singling old coppice stems very near to the track. This has been an exceptionally wet August (in London possibly the wettest on record), and tracks are very sodden.

There is a heavy crop of **sycamore** and common **maple** fruits this summer, and a good deal of mast on the **beeches**.

Hedgerows around Oxford have a good crop of **haws**.

{reverse side}

31 AUGUST 1956.

3 SEPTEMBER 1956.

31 AUGUST 1956. WYTHAM WOODS.

Visited the Chalet Woods to choose places for the Autumn Course litter collecting. It was very thin on the ground except under dense stands of young sycamore with oak standards etc., and, of course under beech. The section thinned in 1953-4 is already showing marked changes in the field layer, which had been mainly *Mercurialis*. Increase of bramble, bracken, some rosebay willow-herb, wood avens, burdock and other 'glade' forms. Also a bit of *Deschampsia caespitosa*. *Mercurialis* is still in solid green 'canopy'. The **sycamores** and **wild cherries** are locally badly eaten by caterpillars (earlier in the summer). I am told that while there was some damage to oak this spring, there was not complete defoliation.

3 SEPTEMBER 1956. WYTHAM WOODS.

This afternoon I marked out four areas on the steep slopes of woodland by the big badger earths below the Chalet and along to the rocky escarpment north-east of them, in Comp. 18. The **badgers** had been destroyed in the interests of forestry, but their huge sandy mansions all show signs of slight reoccupation, and the roadways through the dog's mercury are still well-marked. The large patch of *Atropa belladonna* near them, is flourishing and had small black fruits. *Campanula trachelium* is abundant, as never before, even forming small societies here and there.

Visited Upper Ride, Deer Pond end, where the usual society of **teasels** (and a lot of *Epilobium hirsutum*) are in flower. On the former I saw, in the sun and fairly calm air, 7 **peacocks**, 7 new **commas**, 3 **brimstones** (2 bright ♂♂, 1 pale ♀), and 1 **silver-washed fritillary**. **Ringlets** were flying in the ride, but not visiting teasel.

{reverse side}

3 SEPTEMBER. 1956.

Lasius flavus

6 SEPTEMBER7 SEPTEMBER

Adult *Dicyphus* (? *stachydis*) on willow-herb.

3 SEPTEMBER 1956. WYTHAM WOODS ***

Also visited Marleywood Plantation to choose large beeches for night class work. At this spot, by the drive, at the edge of mixed deciduous wood, where it is damp (the old line of diverted Stream 5), were patches of *Angelica sylvestris* in flower and fruit.

Flies were especially numerous and persistent in the wooded shelf below the Chalet, not only ones the size of *Hydrotæa* but many smaller ones, possibly *Morellia*.

Pasture fields in both the Lower Follies, above Marleywood Plantation are plastered with rather hummocky yellow ant nests, which do not assume this shape in large numbers in other parts of Wytham Woods. These fields are full of fresh cowpats.

6 SEPTEMBER. WYTHAM WOODS.

During the Autumn Course habitat mapping on the steep slopes below the Chalet I collected some fairly large *Euphrasia* in flower on the bare mud/turf ride in oak-sycamore wood, near the columbine patch. They have a candelabra shape and large flowers. 1269 B

7 SEPTEMBER. WYTHAM WOODS.

While the class was climbing oak trees near Upper Ride, I looked at the marshy edge of The Deer Pond, which is now rather less shaded than it used to be, though there is a very large spreading oak on one side. The outer A-T ring of *Epilobium hirsutum* is exceptionally high this year – one measured 6½ ft. On water surface at the edge, among various reed-swamp plants some small spiders were skating – like wolf-spiders but hour-glass-shaped and grey/brown pattern. I dissected some of the deep marsh moss, which form a submerged bog on the other side of the pond: 1270 (3 k.)

{reverse side}

7 SEPTEMBER. 1956.

1270 B 1 alate ♀ 1 queen *Myrmica laevinodis* Nylander A.J. Pontin det. 1958

C. *Pirata hygrophilus* Thorall. One immature ♂, 4 immature ♀. E. Duffey det. 1959.
“All are immature, but I do not think there is any doubt about that identity.”

G. *Acrocladium cuspidatum* (Hedw.) Lindb. A.R. Perry det. 1962

12 SEPTEMBER 1956.

7 SEPTEMBER 1956. WYTHAM WOODS ***

In this sopping wet moss, which is almost submerged, so that the ants were at the water level, was a nest of queen *Myrmica* (1 k.) with some winged individuals (1 k.) queens also wandering near. 1270 B

Running on and living among the moss were more of the same but rather smaller spiders (5 k.). They are active but do not seem to be able to get out if submerged in water for long. C

In the moss were also:

Black hydrophilid beetle *Hydrobius fuscipes* (L.). P.J. Osborne det. 1956 D

Small dark brown ditto. *Enochrus ? ochropterus* (Marsham) P.J. Osborne det. 1956 E

Brown *Trechus obtusus* Erichson P.J. Osborne det. 1956 W.W. Murdoch confirmed 1962. F

Specimen of moss kept for naming. G

12 SEPTEMBER 1956. WYTHAM WOODS.

On this day the Field Class did various projects, and I took I.E. Efford down to Pond 1, to looked at the fauna there, with B. Heighton. Efford caught over 160 water mites there today, and has agreed to look at Mary Laurie's 1948 list. Daphnids were extremely abundant. The pond has far less open water and a great deal more *Scirpus lacustris* reed-swamp than in 1948, though the *Potamogeton natans* area is still well-marked on the dam side, and the leaves show chironomid larva mines. 10 ♂ ♀ mallard flew off. (We no longer have a shooting tenant on Wytham). Presumably ducks have some limiting influence on the growth of submerged water-plants?

The open field layer mixed with scrub is very dense on this reserve, and is indeed in young plantation outside it. There is a fine enclave of damp meadow near the north-west side of the Pond, which looked extremely decorative, with flowers of **devil's-bit scabious**, a ragwort species, fleabane, marsh thistle, and angelica. On the scabious

{reverse side}

12 SEPTEMBER. 1956.

1271 2 *Crepidodera transversa* (Marsham). P.J. Osborne det. 1957

1272 B 2 *Longitarsus rubiginosus* (Foudras) P.J. Osborne det. 1957. (Very teneral)

12 SEPTEMBER 1956. WYTHAM WOODS.***

flowers were **peacock**, **tortoiseshell**, **comma** and **brimstone** butterflies. R.B. Freeman noted that here, and in the rides on Radbrook Common where there are also scabious and teasels the **small heath**, **common blue** and **small copper** never visited flowers of scabious or teasel.

I took two orange-brown small chrysomelids in copulation on the devil's-bit scabious in the enclave – the only ones of this sort seen. 1271

At the edge of a meadow ride in the young scrub-plantation (mixed deciduous-conifer) above Pond 1 an isolated clump of white comfrey (*Symphytum officinale*) had its leaves extensively perforated (1 k.) by small *Longitarsus* that were seen nibbling at the holes. I kept two: they are translucent light brown. A 1272B

At present none of these plantations between Pond 1 and Rough Common are above scrub limit (15 ft.). They are extremely varied in composition. The rides form fine lush meadow with a lot of flowers.

{reverse side}

24 SEPTEMBER. 1956.

We found a large patch of the tiny purplish-grey toadstool *Psathyrella disseminata* Qué! on dead fallen wych-elm bark; and the flattish gelatinous *Auricularia mesentarica* Pers. J.L. Harley det. 1956.

24 SEPTEMBER 1956. WYTHAM WOODS.

In the afternoon I chose, marked and described logs on both sides of the Singing Way, between Bowling Alley Plantation and about opposite the Pasticks, with the help of Kitty Paviour-Smith. We marked 13 logs (Nos. 50-62), including beech and wych elm. There were no large fungi on any of them, and very few ground toadstools on the litter. Big beeches predominate, but these are ash, sycamore, oak, wych elm and a few others like birch and lime and hornbeam. At the end of our 'beat', near where the outer woodland edge has a sharp angle and near the pylons, is a large patch of young **hornbeams**. These had their leaves almost destroyed, presumably by a caterpillar. Specimens kept. 1274A

Beech, sycamore, etc. close round had leaves intact. Not far along from here is a very old hornbeam that was mainly unattacked, though some bits were in rags. Specimen of mainly intact leaves kept. B

The foresters are going right through this part of the Singing Way Woodland strip, cutting some poles down, singling coppice poles (often tall spindly trees), burning top and cutting and burning brush. But in two places they have left thick bramble over big fallen logs – a lesson explained to Probits in Marleywood Plantation, the bramble helping to keep a favourable micro-climate. The effect is of a general thinning of these woods, but apart from the tidying up the habitat may recover in due course. The main ground cover is beech or beech-mixed litter, with or without stretches or patches of *Mercurialis* and locally *Circaea*.

We also marked two dead standing birches that have ***Polyporus belutinus***: No. 100 at the top of Woodcroft Copse by the road, No. 99 by the *Calamagrostis* on the west side of Rough Common.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 11.

25 February 1957-4 April 1958

C.E. 1278-1321.

Red ticks²¹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles²² round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

²¹ Shown as **bold** in edited version.

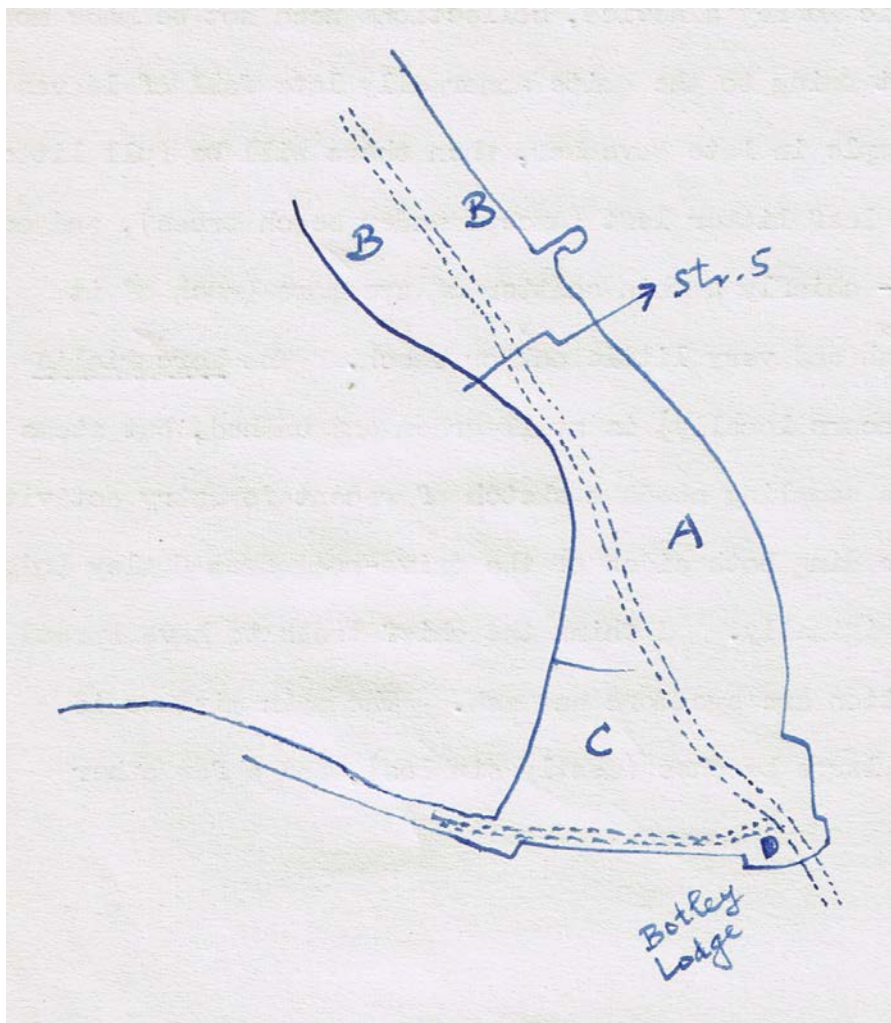
²² Edited to A or 00

29 OCTOBER 1956. WYTHAM WOODS.

This afternoon I visited Marleywood Plantation to collect ground zone spiders for Monte Lloyd, who is coming in September 1957 from the University of Chicago to do one year's work on this. On Eric Duffey's advice, collections need not be made more than about every two months; but owing to the quite abnormally late fall of leaves this year I shall do another sample in late November, when there will be full litter. Today there was very little 1955 and leaf litter left (except under **beech** trees), and only a fraction of the new leaf fall – chiefly a thin scatter of **sycamore** (much of it spotted with *Rhytisma* fungus), **ash** and very little **oak** or **beech**. The *Mercurialis perennis* field layer (where it occurs locally) is still green and unshed, but stems break easily. To understand the sampling needs a sketch of recent forestry activities. Marleywood Plantation extending both sides of the drive-road from Botley Lodge to Marley Wood, is all planted originally. I think the chief trees to have spread and be spreading by natural regeneration are sycamore and ash. The main mixture is coppiced sycamore with ash, oak, large beeches (mostly singles), and a few other species in small numbers (sweet

{reverse side}

29 OCTOBER 1956.



29 OCTOBER 1956. WYTHAM WOODS ***

chestnut etc.). Marley Wood is, however, a piece of much-altered primaeval forest, present on 18th Century maps. The presence of such local species as the ant *Lasius brunneus* in dead wood in Marleywood Plantation (this species occurs in Windsor Forest), suggest spread from an ancient fauna in Marley Wood. Marley Wood has such local and slow-moving woodland plants as *Colchicum* and *Paris*, which have not moved into the Plantation.

This mixed deciduous wood was extremely densely grown in 1948, having been neglected for many years. It was, in fact, the most 'natural' climax canopy to be found at Wytham, and in some parts, where young sycamores and hazel coppice were thick, there was little under-vegetation. Part of this (A on map) is still untouched, but becomes due for thinning this winter, 1956-57. The south end of A was the site of E.W. Fager's work on small oak logs in 1954-56. The north boundary of A is Stream 5, where David Eccles is working on aquatic leaf litter faunas; as he is making measurements of leaf fall by quadrats outside and inside the stream (starting last week), some picture of the conditions in (i) in thick woodland A (ii) in less thick woodland on the other bank, will be available. The latter comprises a long stretch, B, that was rather drastically thinned in 1954-55, especially by singling the tall-grown sycamore coppice. The first summer the floor of B was cleared of scrub, but since then cut stools of elder etc. have come up again. The first marked stage was a tremendous growth and flowering of tufted aira grass

{reverse side}

29 OCTOBER 1956.

29 OCTOBER 1956. WYTHAM WOODS ***

(*Deschampsia caespitosa*). This makes large tussocks a foot or more across, much patronised by *Microtus*, and with flowers on stems up to several feet. It is a glade or open ground species, and grew up when thinning increased the light. By the present date it would seem to have been a good deal crowded out by considerable areas of bramble. There is also a lot of *Carex pendula*. This tall sedge is chiefly a stream margin species in Wytham Woods. It indicates the damp and sheltered clay nature of Marleywood Plantation that this *Carex* is a conspicuous field layer component. It is perhaps a good augury that it carries on its leaves and stems a characteristic water-margin spider called *Tetragnatha montana*. But the Plantation is otherwise a wood, only locally affected by stream and swamp. It has many of the ordinary dry woodland litter species and soil earthworms. (Some data are available from May and September field classes). But the tendency to greater dampness than in woods higher on the hill is perhaps also shown by the abundance of tree macrofungi (on dying and dead wood), which K. Paviour-Smith is studying the fauna of.

There is a small area, C, near the entrance gates, that was the end in 1955-56. This is on a slope. It has a good deal of *D. caespitosa* in patches, and bramble.

Two problems were posed about qualitative sampling of litter spiders now: (a) there is practically no litter at the moment, but patches of shallow moss, a great many fallen sticks of all sizes (b) much of area B has

{reverse side}

29 OCTOBER 1956.

29 OCTOBER 1956. WYTHAM WOODS ***

now got rather dense low **bramble** invading. (It is no use sampling A, as that will be different after thinning. Of course B and C are also changing on the cycle after thinning). The bramble offers excellent though prickly habitat for studying web spiders, but systematic litter is hard to take without considerable disturbance and effort.

To make a start, I did the following:

The collecting unit is a creamery tin of capacity 10 litres. Three of these were filled with "litter" scraped up unsystematically with a trowel and piece of board and lightly packed in, from a place in B about 40 yards north of the boundary of A (Stream 5) but south of Stream 4. It is under oak-ash-sycamore, but has not got beech leaf drift though there are beeches not far off. It has mainly *Mercurialis*, with thin patches of other plants like bramble. The day was sunny but with a cold north wind, and no spiders were seen during collection. While putting material into the Tullgren funnels some flies flew out. The three tins-full were extracted in three large T. F. and the extracts pooled. In this work I am finding it convenient to use my own collector's code serial numbers, as they will happen to come in my journal.

I took another tin of litter at Area C, and in the same patch of ground pulled up several *D. caespitosa* non-flowering tussocks and these were extracted separately (upside down) in two T.F. The tussocks come up without much root or earth if grasped by the leaves > 6 in. up. Attached roots and earth were roughly but not completely dipped away before the tussocks was tinned. The object

{reverse side}

29 OCTOBER 1956.

8 NOVEMBER 1956.

Note. February 1957. Plan approved by Professor Champion and confirmed in these terms by Committees. Mapped onto Wytham hanging map.

29 OCTOBER 1956. WYTHAM WOODS ***

of doing tussocks was to see if they were important refuges during the time of scarce litter. The first results suggest that they are indeed. Pearce found grass tussocks to be an important winter cover for beetles and other insects. It is likely that there may be thus an annual expansion and contraction of the ranges of certain populations with changes of cover – just as there is with partridges in farm crops.

8 NOVEMBER 1956. WYTHAM WOODS.

This afternoon F.C. Osmaston (the Forestry School's silviculture planner in Wytham), accompanied by Probitts, and I provisionally agreed upon suitable boundaries for a nature reserve on the Bowling Alley, area circa 2 acres. It will be marked with blue-topped posts like the other scientific reserves (other than Rough Common); but as it lies within the area dedicated with the Forestry Commission, it cannot be designated as a reserve, only as an 'un-plantable area within shelter belts'. The proposed reserve includes all the open ground on rubbly Coral Rag, where augur borings by Probitts show a "soil" depth of about 4-6 in.; the complete belt of pines; a line from the northernmost pine across to a big gap in the west hedge; this hedge south to the hut; a scrub belt (say 12 ft.) across to near the southern-most pine. The belt of scraggy mature birches east of the pines i.e. into Bowling Alley Plantation, is excluded, because the "soil" is up to about a foot over rubble limestone and carries bramble etc., and is officially plantable. But some birch may be grown here anyway. This reservation gives us a fine shallow limestone T/2 with scattered plants of T/3 in the form of *Brachypodium* tussocks and *Pastinaca* plants (Eric Duffey's thesis

{reverse side}

8 NOVEMBER, 1956.

= 59 plus 2 woody species + 1 moss = 62

8 NOVEMBER 1956. WYTHAM WOODS ***

lists {= 59 plus 2 woody species + 1 moss = 62} species of herbs and grasses, 4 mosses and 1 lichen). The scrub includes spindle, hawthorn, rose, privet, **maple** (two young trees coming up among the bramble – bracken-scrub on north-west part); there is the line of young birches on the Alley west of and parallel to the pines. The northwest bit has a dense bracken patch. The extreme north and north-west parts were excluded, at my suggestion, as the ground here dips off the narrow ridge of shallow soil, and might be debated as “plantable” on deeper soil, where indeed young ash is coming up at one point, among hawthorns.

The chief management questions will be

- a) *Brachypodium*: not spreading as fast as I had expected, in spite of no rabbit pressure. The soil may be too shallow and the place too sheltered by trees?
- b) Young birches: Osmaston would be quite glad to have them left to increase shelter belt effects; but will not oppose their limitation.
- c) Pines: Dead pines, except those already past the bark-beetle stage, might have to be felled and removed. No very strong forestry feelings, and only one or two are likely to come in question.

To summarise scientific work on the Bowling Alley:

- (1) Eric Duffey’s thesis on spiders, including also the adjoining grassland of Sunday’s Hill (which will no doubt be planted). Contains detailed description of plant life as well.
- (2) His collections, in the B.A.P., mostly unnamed except for spiders, contain other animal groups extracted from turf in some areas; also from jam-jar traps (not all kept).

{reverse side}

8 NOVEMBER 1956.

8 NOVEMBER 1956. WYTHAM WOODS ***

- (3) Some casual records by myself and other people include *Osmia bicolor*, the haystack bee that nests in snail shells.
- (4) Current research by A.J. Pontin, Hope Department, on ecology of ants, including their root-aphid hosts.
- (5) Eric Duffey's discovery of the Loch Rannoch local spider (*Zygiella stroemii*) on trunks of these pines and also on larch there.
- (6) My collections under bark of a dead pine, which include the small millipede *Polyxenus lagurus*.

The name 'Bowling Ally {sic = Alley}' occurs on the 1814 Enclosure Map here.

Other notes today. The lateness of leaf-fall is quite remarkable. Probitts cannot remember a year like it and says **beech mast** is also late and continues to fall. The individual trees vary greatly, but there are some of practically all species with a lot of leaf. Beeches are in wonderful yellow and brown colours.

Osmaston says that all the old (and gorgeous low spreading and beautiful) beeches along the Singing Way (which is included in dedication agreement) will gradually be removed and replaced by groups of (mainly) other deciduous species. This policy needs some attention.

{All material on reverse side shown as Page 8A}

5 DECEMBER 1956.

Area C. Litter extracts.

1282 A. All det.E. Duffey, 1962.

- 1 ♂ *Lepthyphantes tenuis* (Blackwall)
- 1 ♀ *Bathyphantes gracilis* (Blackwall)
- 1 immature ♂, 2 immature ♀ *Linyphia* species (n.k.)
- 2 unidentified juvenile Linyphiid (n.k.)

Area C. Tussock extracts

1283 A All det. E. Duffey, 1962.

- 1 ♂ *Lepthyphantes cristatus* (Menge) (n.k.)
- 1 ♂, 5 immature?, *Lepthyphantes flavipes* (Blackwall) (n.k.)
- 1 immature ♀ *Lepthyphantes* species (n.k.)
- 2 immature ♀ *Zygiella ?atrica* (Koch) (n.k.)
- 1 unidentified juvenile (n.k.)

Area B. Litter extracts

1281 A All det. E. Duffey, 1962

- 1 ♂ 4 ♀ *Helophora insignis* (Blackwall) (n.k.)
- 1 sub-adult ♀ *Xysticus* species (n.k.)
- 1 juvenile *Tetragnatha* species (n.k.)
- 1 ♀ *Macroargus rufus* (Wider) (n.k.)
- 1 ♂ *Lepthyphantes cristatus* (Menge) (n.k.)
- 12 unidentified immature (n.k.)

Area B. Litter extracts

1281 B All det. P.J. Osborne, 1958.

- 1 *Barynotus moerens* Fab. n.k.
- 1 *Ceuthorynchus contractus* (Marsham) n.k.
- 1 *Tachinus rufipes* (Degeer) n.k.
- 1 *Philonthus fuscipennis* (Mannerheim) n.k.
- 1 *Cephennium thoracicum* Mueller B 2
- 1 *Hermaeophaga mercurialis* (Fab.) n.k.
- 2 *Notiophilus biguttatus* (Fab.) n.k.
- 1 *Subcoccinella 24-punctata* (L.) B 4
- 1 *Nargus velox* (Spence) n.k.
- 1 *N. wilkinii* (Spence) n.k.
- 1 *Stenus brunnipes* Stephens n.k.
- 1 *Tachyporus chrysomelinus* (L.) n.k.
- 1 *T. nitidulus* (Fab.) n.k.
- 1 *Ocalea badia* Erichson n.k.
- 5 Aleocharines B 7

5 DECEMBER 1956. WYTHAM WOODS.

Went out to Marleywood Plantation to collect ground zone samples for Lloyd. By now there is a thick leaf carpet, and only a few odd **oaks** etc. retain a few leaves on the trees. Since the sampling on 29 October the cover picture has therefore entirely changed. Since then there has been one period of severe frosts in November, for a few days. But on the whole it has been mild and rather dry, but there has been no snow. (Temperature records for this and the previous few years are available for records kept at the Chalet, on the top of Wytham). Sampling was done exactly as last time:

3 tins from Area B just beyond the line of Stream 4, 1281
 1 from area C, 1282
 and six small tussocks of *Deschampsia caespitosa*. 1283

The last two were taken close together in C, for comparison. The tussocks were smaller ones, and were all extracted in one funnel, to keep them damper. No active animals were seen on the surface of the litter.

The Tullgren extractions were sorted into (a) spiders (omitting Opiliones) (b) beetles and (c) The Rest (kept only for Lloyd's use). From the tussocks, some tubular black thrips were also separated for naming: they were not seen in the litter.

Area B: 20 spiders, mostly different species and some at least adult and most of them not very small. A few small beetles. 1281 A

Quite a few small striped slugs and several large Cantharid beetle larvae not seen in tussocks). B

Otherwise the usual litter groups. 2 *Porcellio scaber* (no others seen in these extracts of 5 December). This woodlouse is rare in litter but descends to ground level by this season, off the trees (Brereton).

{reverse side}

5 DECEMBER 1956.

1282A and 1283 A are listed on previous page.

Area C. Litter extracts.

1282 B All det. P.J. Osborne, 1958.

3	<i>Anthobium atrocephalum</i> (Gyllenhal)	B 1
2	<i>Bembidion guttula</i> (Fab.)	n.k.
1	<i>Corticarina gibbosa</i> (Herbst)	B 2
1	<i>Xentholinus longiventris</i> Heer	n.k.

{The rest of the material on this reverse side shown as page 9A}

Area C. Tussock extracts.**1283 B** All det. P.J. Osborne, 1958.

1	<i>Tachyporus hypnorum</i> (Fab.)	n.k.
6	<i>T. chrysomelinus</i> (L.)	n.k.
2	<i>T. obtusus</i> (L.)	B 1
1	<i>Micorpeplus staphylinoides</i> (Marsham)	n.k.
1	<i>Oxytelus laqueatus</i> (Marsham)	B 2
6	<i>O. rugosus</i> (Fab.)	n.k.
3	<i>Stenus brunnipes</i> Stephens	n.k.
3	<i>S. fuscicornis</i> Erichson (dissected & mounted)	B 3
10	<i>Hypocyrtus longicornis</i> (Paykull)	n.k.
1	<i>Gabrius bishopi</i> Sharp ♂ (dissected & mounted)	B 4
1	<i>G. ? bishopi</i> Sharp ♀	B 4
2	<i>Tachyporus nitidulus</i> (Fab.)	n.k.
1	<i>Sphaeridium lunatum</i> Fab.	n.k.
1	<i>Ceuthorynchus contractus</i> (Marsham)	n.k.
1	<i>Cercyon atomarius</i> (Fab.)	n.k.
4	<i>Cryptopleurum minutum</i> (Fab.)	n.k.
1	<i>Apion carduorum</i> Kirby	B 5
16	<i>Lathridius lardarius</i> (Degeer)	B 6 (4 kept)
64	Misc. Aleocharines	B 27
1	<i>Aleochara lanuginosa</i> Gravenhorst	B 7
1	<i>Phyllotreta undulata</i> Kutschera	B 8
1	<i>P. consobrina</i> (Curtis)	B 9
1	<i>Chaetocnema concinna</i> (Marsham)	B 10
2	<i>Corticaria elongata</i> (Gyllenhal)	B 11
1	<i>Clambus punctulum</i> (Beck)	B 12
5	<i>Bembidion guttula</i> Fab.	B 13 (1 k.)
34	<i>Enicmus transversus</i> (Olivier)	B 14 (1 k.)
1	<i>Epurea unicolor</i> (Olivier)	B 15
1	<i>E. melanocephala</i> (Marsham)	B 16
1	<i>Meligethes erythropus</i> (Gyllenhal)	B 17
1	<i>Bryaxis curtisii</i> (Leach)	B 18
1	<i>B. burrelii</i> (Denny)	B 19
2	<i>B. validus</i> Aubé	B 20 1 k.
1	<i>Adalia 10-punctata</i> (L.)	
1	<i>Stilbus testaceus</i> (Panzer)	B 21
7	<i>Atomaria fuscata</i> (Schoenherr)	B 22 2 k.
16	<i>A. atricapilla</i> Stephens	B 23 2 k.
3	<i>A. ruficornis</i> (Marsham)	B 24 2 k.
1	<i>Corticarina fuscata</i> (Gyllenhal)	B 25
10	<i>C. gibbosa</i> (Herbst)	B 26 2 k.

5 DECEMBER 1956. WYTHAM WOODS ***

Area C. 7 spiders, same remarks as for B. Similarly a few of the same slugs and Cantharid larvae. Practically no beetles. 1282 [A] [B]

Area C, Tussocks. 10 spiders, smaller ones mostly than in litter. 1283 [A]
Very large numbers of small beetles – staphyliniids (*Tachyporus* etc.), lathridiids, and others (including several pselaphids and carabids). Black tubular thrips, mostly adult. [B] C

The following conclusions emerge (bearing in mind that the samples are not quantitative by area, though A and B are about 3:1 in volume):

(a) Spiders are not abundant in terms of the machinery for extraction (6 large funnels per week). Broken down into species or not, the numbers would not be adequate for analysis. This scarcity may be due to (i) season (ii) incomplete extraction – unlikely in such loose material and with improved funnels (iii) incomplete collection – especially from soil crevices, scattered dead wood cover etc. (iv) real “scarcity”, since they are predators. Accepting the extraction picture as true, the last conclusion seems fairly reasonable, as the numbers of litter animals suitable for prey (e.g. Collembola and small larvae) did not seem very impressive in these samples.

(b) Spiders are not highly aggregated in the grass tussocks, but beetles are. The spider picture is consistent with a fairly randomised dispersion as far as it goes – which isn’t far!

As regards (a iii) above, point (b) is relevant; and all our collecting from in and near logs suggest that, although these have several common spiders of their own, they are not important refuges for litter or soil forms.

{reverse side}

5 DECEMBER 1956.22 FEBRUARY 1957.

[1284] Spiders. E. Duffey det. 1962

1 ♂, 1 ♀	<i>Tapinocyba insecta</i> (Koch)	
2 ♀	<i>Microneta viaria</i> (Blackwall)	(n.k.)
1 ♀	<i>Savignia frontata</i> Blackwall	
1 ♀	<i>Centromerus sylvaticus</i> (Blackwall)	(n.k.)
1 ♀	<i>Macrargus rufus</i> (Wider)	(n.k.)
7 unidentified immatures		

1284. Yielded a good variety of the usual litter community, with an unusually large number of enchytraeids (but no earthworms), – n.k.
15 small spiders.

1285 A 1 small spider

[B] 3 small Heteroptera 2 larger ones ***Anthocoris nemorum*** (Fab.) 1 smaller one. “*A. sarothamni* Douglas & Scott – if not on broom then may be *nemoralis*” – so accepted as the latter. K.G.V. Smith det. 1960.

C 4 long tubular thrips
2 ladybirds, ***Calvia 14-guttata*** (L.) not kept
Collembola f. not kept

5 DECEMBER 1956. WYTHAM WOODS***

In Area B (collecting ground) I saw half-a-dozen slightly funnel-shaped near-white large toadstools growing in a line under ash-sycamore in oak-ash-sycamore-beech wood. Det. by J.L. Harley, 1956 as *Clitocybe geotropa* Quél. (This is a common open woodland and open ground species).

22 FEBRUARY 1957. WYTHAM WOODS.

On suggestions from Eric Duffey that beech or conifer litter would have richer spider populations than the oak-ash-sycamore, also that standing dead herb stems in glades might supply useful populations, I went up to the Chalet Woods. The weather has been incredibly mild since 5 December, and latterly very wet. Pontin reports that his ant nests are stirring at least a month early; and in Oxford all kinds of blossom and garden growth is equally far ahead of usual.

I took one full tin (circa 10 litres) of beech litter and raw leaf humus (more or less down to soil level) in the centre of the grove of old beeches at the end of the centre path towards Upper Seeds field. The litter was dry in the top inch, but very damp below. Total depth about 4 inches; under canopy. Put in fairly slow Tullgren funnels (in two lots). 1284

I also clipped off into short lengths that loosely filled another 10 litre tin, a number of standing dead herb flowering stems (6 in.-4 ft. layer i.e. lower 6 in. not taken as nothing would be on straight wiry stems). Species were growing in a rather open thinned oak-sycamore wood between bramble areas, between the beech wood and the Chalet. They were St. Johnswort (*Hypericum*) 1285

{reverse side}

22 FEBRUARY 1957.

22 FEBRUARY 1957. WYTHAM WOODS ***

sp. c. 15) stems; *Campanula trachelium* 3; ploughman's spikenard (*Inula conyzae*) c.12; *Epilobium montanum* 6; burdock (*Arctium lappa*) 1; mullein (*Verbascum thapsus*) 1. Put in one funnel.

This part of the woods, which lies on Coral Rag limestone with thin local patches of Plateau Drift Clay, was thinned (mainly by singling tall sycamore coppice and cutting down and burning scrub) in the winter of 1952-53, just after Rick Miller finished his mouse study there, which is described in his thesis.

This winter the southern part of the Chalet Woods is being similarly thinned, but it is believed that the beech grove (an acre or so) together with a good protective scrub margin (which is now to be left generally round the outer fringe of the afforested area of Wytham, for climatic and trespass protection) will not be thinned.

I get the impression that thinning at the top of the hill here, as in Marleywood Plantation, is followed by a rapid increase in **bramble**, but on this dry soil there is so far only a slight development of *Deschampsia caespitosa*, and there are more glade herbs.

Thinning is in progress also on the slope north-west of Lord's Common reserve.

{reverse side}

25 FEBRUARY 1957.

25 FEBRUARY 1957. WYTHAM WOODS.

Went with Prof. Champion and Col. Lloyd (Forestry Department) and David Lack to agree on a compromise plan for the future of Marley Wood. It is in the Forestry Dedication Plan; no work will be done for five years except some thick-coppice thinning; but it would then fall in for virtual extermination by clearing and replanting.

It was finally agreed to reserve for science all of it except a large patch (consisting mainly of dark overgrown hazel coppice with a few deciduous standards like oak and birch and ash) carved from Compartments 38 and 39. Lack needs this for the next 5 years or so, but his tit work can then finish on that part of the wood.

The leaving of the rest will need compensation by planting up an equivalent area of The Pasticks arable.

Champion pointed out that the southeast marginal strip (edge and inward of Compartment 42) are shown as deciduous wood on the 40-year-old 25-inch map, the rest of Marley Wood being then apparently pretty open – some is now, where it is marshy. The hazel coppice was obviously planted. The scientific reserve would have the lower bit of this old wood, two marshes, and a lot of scrubby woodland with scattered standards – warbler ground!

Champion, Lloyd and I went on to Brogden's Belt to decide some more reserve questions. It was agreed that

- (1) There should be a solid run of the Belt from The Ridge to where it turns to University non-forest-dedicated land about opposite the Snakepit. Nothing to be done to this backbone.
- (2) Two areas of sycamore coppice, about 3-4 acres, to be cashed in upon by the Forestry

{reverse side}

25 FEBRUARY 1957.

25 FEBRUARY 1957. WYTHAM WOODS ***

Dept. next winter, because they have some sale value, and do not make a very useful habitat. One of these is the area and abutting Lower Seeds in a cape of almost pure (and in the past, very rabbit-damaged) sycamore coppice, that I studied in 1948 as "Pond 3 Sycamores". I asked that a few marginal trees whose canopy comes down low should be left. This strip, from opposite the Snakepit to opposite Log 5, lies on lower ground. The slopes up to the middle beech etc. are not to be touched.

On the Upper Seeds edge there is a patch slightly larger, from the Snakepit to the beginning of the elder scrub by the Ridge. A line of beeches gives the inner edge. This sycamore would be extracted through a temporary way-through to Lower Seeds, north of our marked beech logs. The transverse can be identified by a well-grown larch near the centre of the Belt, which is to be left.

It was left open whether the Forestry would (a) clear-fell all the sycamore (b) thin it. Also whether it should be kept dedicated or not. Champion rather favoured clear-felling and handing it over for reserve. This has biological advantages in providing a lot of young coppice and opening up the field and ground layers. He also favours handing

{reverse side}

25 FEBRUARY 1957.

21 MARCH

25 FEBRUARY 1957. WYTHAM WOODS ***

over the big wedge of elder scrub forming the rest of Comp. 8, for science.

This all involves providing the compensation area on arable, for planting trees. We looked at Upper Seeds, and both Champion and Lloyd were definite that the north half is useless to agriculture or forestry, being so Coral Ragged, like the Bowling Alley. The southern half, as far as the patch above the Dell would be all right. Possibly, however, the Pasticks field would take in all these small extra areas. There is a strong amenity argument for preserving the open vista across Upper Seeds.

There was a small log lying in thick deciduous wood in Brogden's Belt, with 15-20 fresh brackets of *Trametes gibbosa* Fr., (det. K. Paviour-Smith). Apart from some nematodes near the base of attachment, the specimen taken seemed sterile of animals.

21 MARCH.

Took Dr. E.B. Worthington (Nature Conservancy) to see Wytham Area, and on 3 APRIL M.V. Brian from Furzebrook Research Station. The latter saw a caterpillar sitting on a dead *Brachypodium* stem, in the grassland of the Dell, near the beech belt. G. Varley named it as that of a drinker moth (*Philudoria potatoria* L.), not full-grown.

{reverse side}

4 JUNE 1957.

4 JUNE 1957. WYTHAM

While driving Dr. William Van Dersal, I saw a patch of flowering ***Thalictrum flavum*** in a roadside hedge-ditch by a field, between Godstow and Wytham.

{reverse side}

27 JULY 1957.

27 JULY 1957. WYTHAM WOODS.

Went with Robert Elton to The Ridge, Rough Common and down the upper part of the plantation ride below 5 Sisters. We did a good deal of sweeping limestone vegetation field layer, and beating scrub and trees at woodland edge. The fauna was quite noticeably sparse, hardly any beetles or bugs or spiders. Two ♂ *Meconema thalassina* on sycamores, 5-6 ft., The Ridge [T/5 (Edge)]. n.k.

A *Cixius* on common **elm** saplings (5-6 ft.) at 5 Sisters, where dense sucker regeneration is making a thicket below the surviving trees (no rabbits to nibble them down). 1297

One marbled white (*Agapetes galathea*) flying at 5 ft. over the grass on Rough Common. No others seen today. Also hedge browns (*Maniola tithonus*) on low vegetation at woodland edge, Rough Common.

The Ridge needs some path clearing where sycamores, bracken and bramble have blocked the centre path. The east part of grassland that I cleared of bramble and thorn patches in 1955 is in good shape, but a few young whitethorns are coming again. Although there is a general thickening of vegetation towards a thin kind of meadow with low field layer of

{reverse side}

27 JULY 1957.4 AUGUST

1957 Jackdaws, confirmed by D.F. Dorward, who was the climber from E.G.I.

27 JULY 1957. WYTHAM WOODS ***

Brachypodium pinnatum, *Festuca*, *Hypericum perforatum*, etc., with remains of rock-rose among it (replacing the mat of rabbit-grazed thyme and rock-rose etc.), it is not going so fast to a pure *Brachypodium* as I expected, probably because of the poor and shallow soil. The sycamores around the edge of all this T/3 need removing mostly.

After the severe drought this spring and early summer, there has been a lot of heavy rain in the last month and undergrowth is luxuriant, though many crops are stunted in size (e.g. oats and wheat and barley stalks) or have partially died (e.g. some roots and potatoes).

4 AUGUST. WYTHAM WOODS.

Visited the Dell and Upper Seeds, 10.30-12 a.m. (GMT). In Brogden's Belt by the Dell, the dead beech boles each had one or more nest holes at circa 15 ft., which had been visited by someone with climbing irons, which make a pretty good mess of the rotting bark.

The north half of Upper Seeds is uncultivated, the southern half just cut for hay. The north half has a gorgeous flowery limestone meadow of field scabious, *Pastinaca*, *Clinopodium vulgare*, pink clover, teasel, grasses, etc., up to about 3½ ft., but still rather thin-growing mostly.

{reverse side}

4 AUGUST 1957.

6 AUGUST

Also 1 ♀ *Meconema thalassina* on sycamore trunk moving up, and 1 *Chrysopa* species on ash trunk and flying. (n.k.)

4 AUGUST 1957. WYTHAM WOODS ***

On this meadow, sweeping at 6 in.-3½ ft. produced among other things: 1298

1 large *Trifolium* weevil, ***Phytonomus austriacus*** (Schrank) (= *punctatus* (Fab.)) C.E. det. 1957.

1 yellow-tibia black large ***Apion apricans*** Herbst, P.J. Osborne det. 1958.

1 black weevil ***Anthonomus rubi*** Herbst, P.J. Osborne det. 1958

1 ***Sitona puncticollis*** Stephens P.J. Osborne det. 1958

1 small speckled heteropteran bug ***Lygus kalmii*** (L.) G.G.E. Scudder det. 1958.

A
B
C
D
E

A number of **hive bees** were flower-visiting here.

6 AUGUST. WYTHAM WOODS.

Went out at dusk with Joy and Rob Elton, to sugar for moths in the fairly thick oak-ash-sycamore woods below Three Pines, choosing the edge of a ride and small glade, painting a large ash and a large sycamore 1-6 ft. up on trunks, with mixture made from 2 lb. Barbados dark sugar, 1 lb. black treacle, water and a little rum.

DUSK. (8.30-9 p.m. G.M.T.). Two bats were flying about low. 1299

3 copper underwings (***Amphipyra pyramidea*** (L.)) (2 k.)

1 (light-coloured) dark arches (***Xylophasia monoglypha*** (Hufnagel)). n.k.

2 (grey-marked) mother of pearl moths (***Notarcha ruralis*** (Scopoli)). Not at sugar, flying near at several feet. Food plant, nettle, grows here. C

{reverse side}

6 AUGUST 1957.7 AUGUST

6 AUGUST 1957. WYTHAM WOODS ***

DARK. (9-9.20 p.m. G.M.T.).

1299

1 large yellow underwing (*Triphaena pronuba* (L.))

D

1 **copper underwing**

n.k.

Very few moths were seen flying. It was a cool clear evening with a little moon but some thin mist over.

7 AUGUST. WYTHAM WOODS.

Repeated the mothing. The night was warmer but with thin cloud and mist over, and darker.

At dusk (8.45 p.m. G.M.T.) two bats larger than pipistrelles and smaller than noctules were flying round the Three Pines themselves, at 8-15 ft. or so. They could have been long-eared bats. They were very swift.

Mothing at the same trees as last night gave almost identical results:

DUSK (8.45-9 p.m. G.M.T.).

At 8.45 three copper underwings (*Amphipyra pyramidea* (L.)) were already sitting on the last night's sugar, which I then renewed. They remained sucking until I left, and were joined by one more, making 4 present through dusk and into dark.

DARK. (9-10 p.m. G.M.T.)

At 9, ♂ *Meconema thalassinum* on sycamore at 3 ft. Another seen on ash sapling near, 5 ft. Both on trunks. 1300 n.k.

At 9.15 A *Bembidion* moving on the large ash trunk at 2½ ft. A

At 9.25 1 large yellow underwing (*Triphaena pronuba* (L.)) at sugar.

At 9.45 1 (light-coloured) dark arches (*Xylophasia monoglypha* (Hufnagel)) at sugar. B

{reverse side}

7 AUGUST 1957.

7 AUGUST 1957. WYTHAM WOODS ***

DARK ***

At 10 p.m. (G.M.T.) 1 mother of pearl moth (*Notarcha ruralis* (Scopoli)). n.k.

A good many small moths were fluttering in the steep lane below Probitts' house. By a big sheet of flowering *Clematis vitalba* (habitat T/5 (Deciduous) (Edge)/6) I took flying a 'pretty chalk carpet' moth (*Melanthia procellata* (Schiffermueller)), which has larvae on *Clematis* and for which this appears a typical sort of habitat. 1301

{reverse side}

16 SEPTEMBER 1957.

16 SEPTEMBER 1957. WYTHAM WOODS.

Went around the top of the north hill, and to Sundays Hill, with Dr. Frank Pitelka (University of California) and Dr. Monte Lloyd (University of Chicago), who are come to the Bureau for a year.

Lord's Common still has quite a rich mixture of small flowers, *Gentiana amarella* having been very abundant this summer. *Brachypodium* spreading slowly.

On the West side of Rough Common (north of the road) where we have the tall grass grasshopper counts in the autumn course and where Fryer controlled bramble with herbicide, Meads accidentally started a fire this summer which has altered the appearance on an acre or so e.g. common thistle has come in a good deal.

Meads is going to cut most of the young birches that are invading the Bowling Alley, leaving those at the south end. The vegetation has

{reverse side}

16 SEPTEMBER 1957.

Logs Nos. 2 and 9.

1310 A. *Euphrasia officinalis* (Pers.) Loehr
E.F. Warburg det. 1958.
(The only species of *Euphrasia* at Wytham, he thinks).

16 SEPTEMBER 1957. WYTHAM WOODS ***

changed from what it was five years ago, before the rabbits died out. Then it had a great deal of Coral Rag rubble showing and much of the vegetation was thin and open. Now it is nearly closed herb-grass turf (e.g. thyme), with small islands of *Brachypodium*. Sunday's Hill where Duffey's spider work was done, has a large area of very luxuriant *Brachypodium sylvaticum* – almost pure, in which there are many signs of past, but not present, ***Microtus*** activity, including killing a few tussocks.

Here Fryer has an experimental quadrat on which a new herbicide is being tried against this grass. The turf that Duffey studied was kept so by rabbits. These patches have grown into dense *Festuca* nearly a foot high. Small thorns are invading the Sunday's Hill grass. It is not yet forest-planted. It would make an ideal additional reserve!

In the part of Brogden's Belt by the Dell, I log-labelled two historic beech boles that are rotting, with fallen logs beside them. Not many toadstools on the beech litter.

Upper Seeds, at the Chalet end is a very dense jungle of grass and herbs, with a few large bramble patches in fruit and small hawthorns invading sparsely. I collected a light purple-flowered ***Euphrasia*** that was straggling up. 1310A

Sonchus arvensis L. (5 sheets) (Mark Robinson corrected det. 1979. No long beaks on achenes! is very abundantly flowering in the uncut corn of Lower Seeds, also in field of uncut wheat between Botley-Wytham lane and Marleywood Plantation. I collected a large specimen from the latter. B

{reverse side}

18 SEPTEMBER 1957.

1311 6 ♂♂ ***Limosina sylvatica*** Mg. det. K.G.V. Smith 1958. 3 kept

1 Phoridae species

22 SEPTEMBER

18 SEPTEMBER 1957. WYTHAM WOODS.

Went to the Chalet with Monte Lloyd, and to the big badger earths below, where I collected 7 black sphaerocerid flies that were lurking in the entrances of occupied earths (sand). On 16th we had seen swarms of smaller ones, and a few larger. Today, though warm instead of cold, there were only a few, chiefly larger, of which my specimens consisted. The other day they were swarming in the open mouth. Today they were lurking under dead leaves a foot or so down, and quickly took cover when disturbed.

1311

22 SEPTEMBER. GODSTOW (Berks)

Went out early (6.15-7.45 a.m. GMT), driving in pouring rain. In the hedge between Godstow and Wolvercote, close to a corn-rick and stubble-field, half-a-dozen young **goldfinches** (5 ft.).

{reverse side}

27 OCTOBER 1957.

27 OCTOBER 1957. GODSTOW, OXON./BERKS.

With Robert Elton visited the R. Thames along the tow path towards Godstow Lock and the bend (gate) before King's Lock. Gleaming and brilliant sunny morning, cool, 7.30-8.45 a.m. G.M.T. A **kingfisher** was hovering 15-20 ft. over the River at the bend, and diving, also fishing from a fence and (by the Nunnery) from a low perch. A **heron** feeding from the marsh margin, on Pixey Mead side. 2 **Grey wagtails** ditto among *Glyceria-maxima*-grazed edge marsh by the Nunnery. **Pied wagtails** and **skylarks** in the flood-plain grass fields.

3 NOVEMBER. GODSTOW, OXON.

Again to this area with Robert, 7.30-9 a.m. GMT, on a fine Sunday morning. There is an influx of anglers, mostly after 8 o'clock, and this somewhat disturbs birds like the **heron** and **kingfisher**. A **kingfisher** was working in a shallow bend of the River just below the Bathing Place, and settling on the grass bank between dives. I had not seen one working from the ground like this. It also perches on willows overhanging the water. **Grey wagtail** on grass-mud bank, and **wren** in low scrub (1-3 ft.) on the cut bank of the River. (Bruce Campbell tells me that both wrens and blue tit frequent the riparian zone of water in winter; the **blue tit** also goes out often over water, in reed-swamp e.g. in *Phalaris arundinacea* zone, – cf. C.E. 11 p. 18)

{reverse side}

3 NOVEMBER 1957

10 NOVEMBER.

3 NOVEMBER 1957. GODSTOW, OXON.***

Yellowhammers in the hawthorn-grass (T/4, 3, 2 mixture) near the River below Godstow Lock, on the ground and in this scrub (all <15 ft.). It is a sort of scrub-savannah with every variation from open grass to local scrub clumps. It is on slightly low, sheltered ground.

There are big **lapwing** flocks on the big grass fields of Pixey Mead, as well as in more scattered groups on Port Meadow.

10 NOVEMBER. GODSTOW, OXON.

With Robert Elton 7.30-8.45 a.m. GMT., walking on the towpath from Godstow below the Lock, as far as the Poplars. On the way there, a flock of **redwings** by the Bathing Place, on the short grass (which they seem to prefer to very rough grass fields). Today there was a keen north breeze, after a frosty night. No kingfishers or herons. By the river edge one or two pied, no grey wagtails. A few **black-headed gulls** flying up the river. (There are slight floods, but far from where we went). In the T/4, 3, 2 scrub grass were some **tree sparrows**, and **yellowhammers**, in the T/4 & 3 scrub zones of hawthorn. In a hedge we saw a **bullfinch** and again one in hedge between Godstow and Wytham. A covey of **partridge** and a **hare** on the grass fields along the towpath. A big flock of **chaffinches** on stubble between Wytham and Botley.

{reverse side}

14 DECEMBER 1957.

14 DECEMBER 1957. WYTHAM WOODS & PARK.

Went to Wytham Park, through the Mount woods with Robert Elton, which are just now being thinned (oak, sycamore, ash, some spruce etc.). The hedgerow between the lane and the first field below Probitts' house has been clear-felled; but from there down to the bottom of the hill it is still untouched, and it has huge canopies of old man's beard, now silver grey.

[The Mount has passed into Forestry hands now, as part of an exchange of areas that will leave all Comp. 8, Brogden's Belt and the Dell area also 2/3 of Marley Wood as scientific reserves, while planting up the whole of the Pasticks Field (destroying the Pasticks wood itself) and Jew's Harp, and 1/3 of Marley Wood – mainly hazel scrub now.]

I had never walked from the Mount down towards the Abbey. There is Park rough pasture, cattle-grazed, with scattered large trees, mainly elms, on a south slope. Today we arrived at 3.45 p.m. GMT, and dusk began at 4 after the decline of a large orange sun. By 4.45 when we left, it was fairly dark though the sky was light. The barn owl we came to watch did not appear, but we saw many day birds flying to roost: **jackdaws**, **rooks**, **wood pigeons**, **starlings**. And a small flock of **redwings** flew very fast into the thick canopy of a clump of tall thin spruce in the Mount. Freezing cold, though fine.

At the bottom of the hill is The Fish Pond, a dark narrow pond with dense wood and bramble on the west side (in which were two **greenfinches**).

{reverse side}

14 DECEMBER 1957.28 DECEMBER 1957.

* confirmed as almost certainly so, by H.N. Southern, consulted.
Carduelis spinus.

14 DECEMBER 1957. WYTHAM WOODS & PARK ***

Where the upper part of the Mount adjoins the Park, there is a large seepage marsh, with a short muddy spring channel, inside the edge of the wood. It has a dense growth of *Equisetum telmateia*, now in winter collapse.

On a bare plough further up the Park were a **magpie** and a flock of **rooks**.

28 DECEMBER. WYTHAM WOODS.

With Joy, Catherine, and Robert Elton, walked from the Chalet down Radbrook Common to Pond 1 and back by Pond 2. There were small parties of **yellowhammers** on the hawthorn and others scattered scrub canopy at the edge of Rough Common and the Singing Way – males so brilliant in the late afternoon sun as to “look like budgerigars”. Three small finches, red-poll size but with no head marks, streaky breasts and rather yellowish-greenish tinge on a shrub (canopy) in middle of Rough Common: young **siskins***.? Three red-polls (*Carduelis flammea*), seen close by Rob and me, were eating steadily the birch catkins at scrub canopy height in a thick young mixed plantation on Radbrook Common (= “mixed scrub, 10-15 ft.”). This is their typical winter feeding habit. The whole of this complex and varied mosaic of plantings on Radbrook Common would begin to repay a survey now.

Pond 1 was looking quiet and very beautiful, with bits of open water (the *Potamogeton natans* has only its underwater leaves in winter), the scrub and trees, and reddish-brown bracken and Jap larch behind. The water

{reverse side}

28 DECEMBER 1957.

* H.N. Southern saw them again here a day or two later.

28 DECEMBER 1957. WYTHAM WOODS ***

was a foot or less below the top of the dam and there was a good outflow under the sluice. As we approached, a flock of about a dozen **teal*** (*Anas crecca*) rose and flew off.

Pond 2 had some drastic work done by the foresters in 1957, putting a big culvert under the ride below the Pond to take the flow of Stream 10 B; but they also cut down a foot or two through the retaining dam. Lloyds says they compensated for this by directing surface drains from the slopes, into the pond. Thus there is now a good solid marsh of ***Epilobium hirsutum*** and a coarse tall *Carex*, with water flowing through it. Formerly it was a more limnocrone marsh with *Equisetum limosum* dominant. But the vegetation must surely have changed before the culvert job was done, as it is extensive and well-established. It now more resembles Wormstall Duck Pond in some ways. (There is some sallow scrub as well).

{reverse side}

2 JANUARY 1958.

2 JANUARY 1958. WYTHAM WOODS.

With Robert Elton, spent afternoon in Marleywood Plantation, checking on the scientific logs, seeing to labels and current state of Logs. 22, 23, 28, 32, 33 and 34; and verifying that Logs. 21, 29, 30, 31 & 35 are still there. The old dead standing trees 29 and 30 have not yet been felled. A few others to be checked next time. The 'log reserve' is working well, the labels have not been damaged, and there is a great variety of types and stages of decay. Except for *Ganoderma*, which seems permanent on some, the only conspicuous fungi on the logs were greyish or yellow-orange *Polystictus*, and a very minute fungus looking like white moth eggs.

Rob saw a flock of **goldfinches** flying and settling on the pasture turf of Lower Follies. There were several **robins** in the ground and field layer of the wood. Thinning is now complete in the whole area i.e. they did from the Lodge, through "Fager's Patch" up to Stream 5 "Area A of 20.10.56). This was done in 1957. Area C is all thinned too. A **grey squirrel** drey was set on a ledge 14 ft. up the broken trunk scar on the beech = Log 34. No squirrel at home, but we saw one a little way away. There is intense growth of young **ash** and **sycamore** in some places – post-myxo? The hazel coppice near Stream 5 has not been cut away.

{reverse side}

2 JANUARY 1958.

These yellow beetle larvae were similar in shape and colour and habits to the ***Prionychus ater*** (Fab.) bred out from LOG 39 frass (see 18.12.59, C.E. 14 p. 19).

2 JANUARY 1958. WYTHAM WOODS ***

Log 32 has a huge rotting scar running up it, on which great brackets of *Ganoderma applanatum* grow. The tree is otherwise a large alive beech. The half hollow base has a deep deposit of frass almost a foot deep in places. From here (2-5 ft.) I took a bag of the frass, which was damp and consisted of friable small material with remains of ? hyphae as well. There were several yellow alleculid larvae of unknown species. Kept all in tin to "breed out" fauna. 1318

3 *Quedius* on 3 January

Cis nitidus (Fab.) 1 on 6 January K. Paviour-Smith det. 1958

This species occurred abundantly in *Ganoderma* on or very near the same tree in April 1955. 1 on 8 January Also det. K. P.-S.

Abraeus granulum Erichson 1 on 6 Jan. 1 on 3 Feb. and 1 on 17 April (n.k.)

Abraeus globosus (Hoffman) 1 on 8 January

1 on 14 Jan. (n.k.) 1 on 7 February (n.k.) 1 on 28 Feb., 1 on 4 March, 1 6 March, 1 13 March + 1 19 March (n.k.)

Small black sphaerocerid fly, emerged 12 February

1 ♂ *Chalarus spurius* (Fallén) K.G.V. Smith det. 1958 "although without a head, easily distinguished by unique venation."

1 small parasitic hymenopteran

1 young *Oniscus asellus* L. (10 April)

1 staph. *Gyrophynus myrmecophilus* (Kiesenwetter)*. P.J. Osborne det. 1958

Abraeus species feign dead for a short time when touched, closing their legs against the body.

Ended experiment 16 May.

{reverse side}

2 JANUARY 1958.

2 JANUARY 1958. WYTHAM WOODS ***

Not used

{reverse side}

8 JANUARY 1958.

8 JANUARY 1958. WYTHAM WOODS.

Went again to Marleywood Plantation with Robert (Elton), to continue log checking. Did LOGS 20, 25 & ? 27. Log 25 has a half-rotted standing bole, much ? woodpeckered on the inside (field to scrub layers), and below this a heap of frass. I took home a bag of the rotting damp surface wood from inside the bole, 2-5 ft., to breed out the animals. 1319

1 very small fast-running small black fly A

♀ *Megaselia ciliata* (Zetterstedt) C.N. Colyer det. 1959.

{reverse side}

8 JANUARY 1958.

8 JANUARY 1958. WYTHAM WOODS ***

1 spider *Ciniflo*

1319 (cont.) B

1 ♂ black Tipulid with amazing yellow and black comb antennae *Dictenidia bimaculata* (L.) C. Elton det. 1958. Emerged 25 February. Another ♂ 24 March, inside the tin. D

Ended experiment 16 May.

On an old uprooted beech stump, now in thinned wood, but before last year in such dense ground vegetation (and canopy) that I couldn't find it, were a lot of medium-sized brackets with shiny corrugated hard black top surface, and dark brown tubular gills showing a good many beetle galleries. Very far gone. Probably *Polyporus dryadeus* Fr. J.L. Harley det. 1958. n.k. Had galleries and at least one individual of *Cis nitidus* (Fab.), K. Paviour-Smith det. 1958. n.k.

{reverse side}

8 JANUARY 1958.

8 JANUARY 1958. WYTHAM WOODS ***

Rob saw a mixed flock of **blue, great, coal** and **marsh tits** in the canopy of mixed deciduous and its edge. There was a large flock of about 20 **long-tailed tits** moving both in high and low canopy, and I noted them feeding up in high canopy (cf. 40 ft.) of English elm and oak. Two **jays** in the woodland and edge, in canopy, and another out in a thin shelter belt east of the wood. Jays usually seem to go in the scrub canopy zone and the lower parts of the tree canopy zone, not very high; and to be adept in handling dense cover.

Out in the scrub and bramble patch across the drive from Log 20 were one or two **bullfinches**. In a stubble field by the road from Botley to Wytham (i.e. outside Marleywood Plantation) a great many birds were feeding: 3 **pheasants**, several **rooks, starlings, yellowhammers**, a big flock of ♂ and ♀ **chaffinches**, and one **blue tit**. The stubble was thin and not over 6 in. high, but the smaller birds often disappeared completely in it.

{reverse side}

14 JANUARY 1958.

14 JANUARY 1958. WYTHAM WOODS.

Went to Marleywood Plantation with Robert (Elton), via Wytham village, to look at alluvial plain and farm field birds; and go on checking logs. After doing Log 29, had to curtail work through cutting my hand on machete (slipping on frozen ground).

It was freezing and there was a heavy mist cutting visibility to some hundreds of yards, less bad when the sun forced through.

A **kingfisher** flying over the River at Wolvercote bathing place. We note today, but also earlier days this winter when the ground was not frozen, that the thrush tribe are seldom seen on (a) the flood-plain grass (b) alluvial grass pastures above this level. A few individual **blackbirds** and occasional **song-thrush** with them, (but few **redwing** and no **missel** {sic = mistle} **thrush** or **fieldfare** flocks; no redwings today).

Drove to the University Farm ('Northfield') and noted how bad the hedges are – bare, short, straggly. Some **larks** in a grass ley field.

Many **chaffinches** on stubble and kale + kale 'stubble' between Wytham and Botley.

In Marleywood Plantation a flock of **long-tailed** and **blue tits** in the canopy, low and high. Also a pair of **bullfinches** along the low canopy of the edge of the Drive.

{reverse side}

14 JANUARY 1958.

14 JANUARY 1958. WYTHAM WOODS ***

There are some enormous *Ganoderma* brackets on the ground-field layer trunk of standing 40-50 ft. dead beech of Log 29, one of which is 2 ft. across. There are 30-35 ft. ash saplings filling what was a glade in 1949, and visibly shading out the bramble. In 1949 the ashes were circa 8 years old, they having started probably soon after the two beeches died i.e. the trees are about 16 years old now.

From a cleft in the rotting bole, at 5-6 ft. I took a little frass and some of the harder outer rotting wood.

1320

1 luid young *Tachypodiulus niger* (Leach) C.A. Elbourn det. 1967 n.k.

A

1 speckled-iridescent-winged psocid *Loensia fasciata* (Fab.) W.S. Richards det. 1960.

B

Ended experiment on 16 May.

{reverse side}

5 MARCH 1958.

Heavy *Microtus* runs and fresh cuttings in the *Calamagrostis epigeios* patch near the Pond.

5 MARCH 1958. WYTHAM WOODS.

Went, with Dr. Ralph Audy and Dr. Robert McArthur, to look at the young plantation mosaic on Radbrook Common, and Ponds 1 and 2. The object was to look at the planting pattern to see if it would provide a useful set-up for measuring bird habitats.

From Pond 1 rose 18 **teal** and 2 **mallard**. One flock of four teal flew near enough to show two drakes and two ducks. They had not been visible at all among the pond vegetation. One **moorhen** there also. The making of Plantation by clearing rough wood and scrub continues along Nealing's Copse (Comp.31). Near the figure 30 on the outline map a patch of deciduous wood ("Guy's Copse" according to Probitts) has been left in the midst of plantings: it is not part of the Pond 1 reserve.

On Sunday's Hill all of what were **rabbit-grazed** turf areas are now thick *Festuca* mat tussock of ground zone/low field layer structure. Some **vole** runs and cuttings.

Common Piece and Little Ash Hill are this winter losing much of their variety and charm through drastic thinning, (which leaves some of the old trees, e.g. **hollies**, and a scrub edge to the outer margin on Lower Seeds).

(As a result of this reconnaissance I got the forestry department to put together a map of the young plantings on most of Radbrook Common and have copies made, showing age and species of trees; and MacArthur decided to do a short study there of the warbler populations).

{reverse side}

15 MARCH 1958.

15 MARCH 1958. WYTHAM WOODS.

10 a.m.-12 noon G.M.T.

Went with Robin Newson round one of his "habitat trap lines", on the lower slope of Holly Hill Copse (Compt. 9) and upper part of Interplantation (just into the top edge of the Marsh). Compt. 9 at this lower level, thinned and singled last year or so, is a bare open stretch of moss and dog's mercury and nettle, below a not closed canopy of sycamore with a bit of oak and ash: a few large or old trees, and hardly any fallen rotting wood. Hardly any small mammals at these traps, except one or two *Microtus* and *Clethrionomys* and *Sorex araneus* where cover of bracken, bramble and sallow begin at the lower ride edge.

In open patches above the Marsh there is thinning and brush clearing going on now, including the **birch** grove.

{reverse side}

15 MARCH 1958.

15 MARCH 1958. WYTHAM WOODS ***

Here there is much bracken and some thin large *Carex*, and a few tussocks of *Deschampsia caespitosa* with vole runs and fresh cuttings. Several *Microtus* and **pigmy shrews**, though it is hard to see what the voles find enough to live on except these tussocks (and perhaps roots and snails?).

No *Apodemus* at all, today.

On one trap point on the Comp. 9 he has trapped several **marsh tits** (*Parus palustris*), and today we saw three there (identified by R.N. for certain by their note). This place has several old stumps, including two **sycamores** that had been “coppiced” at about 3 feet. One was very rotten and hollow and showed some signs of excavation (however, the marsh tit is said not to excavate its hole).

We took up the traps and went over to Brogden’s Belt where he has another line running into the Edge from the scrub/*Brachypodium* of Upper Seeds near the Snakepit.

The two **sycamore** patches at this part of the Belt have been thinned (mainly singled) by the foresters, as agreed.

They have taken nothing else, and

{reverse side}

15 MARCH 1958.

12.15 p.m. G.M.T.

15 MARCH 1958. WYTHAM WOODS ***

what remains makes a useful shelter belt on each side, though the canopy is far above reach on most of it.

The untidy elder in Compt. 8 has all been thrown into the reserves, which now stretch in an arc from Lord's Common to Spring 2 below the Dell. Much of this **elder** has holes and rot useful to birds and I saw a pair of **marsh tits** (presumed) by the small grass opening in it, between the Belt and the Ridge (N.B. not near any water or willows).

Mixed with hens that feed by the Seacourt Stream in a pasture, just north of the bridge into Wytham village, was a large flock of **jackdaws**, attracted by some corn-straw refuse or whatnot put down by the farmer. At First Fork, Common Piece-Little Ash Hill the three fine old gnarled **ashes** have been spared. One, with several holes, had a dozen **jackdaws**, perhaps inspecting nest sites*. Little Ash Hill is being sadly tidied and thinned, but some large trees are left, especially ashes, others are numbered for eventual culling.

*[Later Jim Lockie told me jackdaws often assemble on particular trees].

{Lower half of page neatly cut out.}

{reverse side}

29 MARCH 1958.

29 MARCH 1958. WYTHAM WOODS.

Went up 9.45-12 noon G.M.T., with Robert MacArthur and Rob (Elton). We walked from My Lady's Seat to the Ridge, by Brogden's Belt, back *via* Spring 2 to the head of the Park, the Singing Way, and Rob and I visited the Bowling Alley.

(I have arranged with Major Mills that the thick tall ragged hedge from the bottom up to nearly the Forester's House, with its scrub, elms, and **clematis** hammocks, will be watched; if the tenant farmer wants it, at any rate a proper hedge will be left.)

In the wood just below The Ridge, a **grey squirrel**. We have seen no **rabbits** for at least twelve months, though Meads has found and gassed a few earths. He continues to control **squirrels**. This winter Dr Fischberg has shot 3 **fallow deer**.

Two **jays** in scrub and trees at the edge of Rough Common and the Singing Way, and one in Brogden's Belt.

The old standing dead **beech** trunk in Brogden's Belt ('Log No. 9') that I originally used for *Polystictus* fauna reconnaissance, has some new ? *Polystictus* coming again on the lower foot or so. The identity of this needs checking. There are three dead standing beech trunks near together (Nos. 9, 2 and an unmarked one), or with round old woodpecker or natural holes at various heights, though not occupied today.

{reverse side}

29 MARCH 1958.

29 MARCH 1958. WYTHAM WOODS ***

Brogden's Belt has to be defined rather carefully. The north end, where all of our fallen beech log work with the W.E.C. class has been done, is almost pure deciduous (beech mainly, with other species like wych elm, sweet chestnut, etc.), and the two flanks of nearly pure coppice sycamore (now thinned and singled). But it has one or two scattered larch, and pine. For record I have treated it as deciduous. The south end is similar, with beech even more predominant, but also one or two scattered larch. In between there is a more open wood with a good deal more grass, quite a large patch of seral bramble and thorn scrub, and a mixture of larch, pine and beech that is definitely in the category 'mixed'.

The south part of Upper Seeds is green mat of fallow, and must have been so all last year, as there are several small tussocks of *Brachypodium* in it. The **sheep** were moving up (by the path) from Lower Seeds. The latter has a lower area fenced off, that is green sheep pasture, the upper being apparently ungrazed and in a slowly reverting stage through coarse limestone Meadow 2 (patches of) bramble and small hawthorns. At the bottom of Lower Seeds, the Forester has penned off some patches for storing trees after cutting.

Spring 2 was running merrily, only an inch or two as usual. Full of sticks, and leaves of grey poplar – partly skeletonised. *Gammarus* and one *Planaria alpina* seen. A pair of marsh (?)

{reverse side}

29 MARCH 1958.

29 MARCH 1958. WYTHAM WOODS ***

tits in the poplars round the spring.

The pair of **marsh tits** I saw in the Ridge elders on the 15th, were not seen today.

The upper half of the Park is still grazed (T/2) with a good many scattered English elms, oaks and some ashes. It is a sort of very open savannah and either the trees were planted (which is a bit unlikely) or else we see the final stage of regressive woodland, exposed to grazing for a century. The number of ant mounds (*Lasius flavus*) is very large and extensively spread. There was a **green woodpecker**, seen by Rob, about ten feet from the edge of the woods. No doubt the Park is one of its chief food areas.

A **great spotted woodpecker** was heard drumming near My Lady's Seat.

Near the birch clump in the Bowling Alley Plantation, on the margin and a few yards from the Singing Way, is a dying beech, on a dead branch of which circa 15 feet up, were some soft fungi with decurrent gills (? *Pleurotus*). A huge beech has crashed in the wood just south of the Bowling Alley, on the windward edge.

The Bowling Alley. There is a dead large birch in thick wood just outside the south-west edge, that should be kept. Meads has cut all the young birch strip by the pines, except for a few yards at the south end. Two 10 inch

{reverse side}

29 MARCH 1958.

29 MARCH 1958. WYTHAM WOODS ***

pine seedlings coming up in the grass at the edge of the pine belt – due to **rabbits** disappearing?

There was a **bullfinch** in the scrub edge of the north end of the Alley.

In Compt. 34, now almost wholly cleared of large trees, the source of the Streams down to the two Ponds, is still conspicuous as a *Juncus (effusus ?)* flush, with *Equisetum telmateia* etc. At this time of the year the dark green *Juncus* stands out visibly on the bare hillside, which at this level has only very small treelings. MacArthur flushed a pair of resting **mallard** from here today. (Professor Champion told me this week that the flushes are difficult to tree-plant: they use **Norway spruce**, and if that fails, **oak**). Below the marsh is a system of surface drain channels, which were running today.

4 APRIL. WYTHAM WOODS.

Walked in Marley Wood and The Pasticks, with Rob [Elton], 3.15-4.45 p.m. G.M.T. It was cold and calm, and the woods were remarkably quiet and lifeless. The only small birds active were **blackbirds**, **robins** and a few tits. We have flushed a **tawny owl** roosting 20 ft. up in a thick *Clematis* hammock in the deciduous wood. Both laughing **green** and drumming **great spotted woodpeckers** heard in the region of Jew's Harp and Park, but not seen.

The boundary of the reduced Marley Wood reserve is now marked and runs a hundred

{reverse side}

4 APRIL 1958.

4 APRIL 1958. WYTHAM WOODS ***

yards above the main green grass ride at the south end, thus keeping the character here.

A good deal of **birch** grows in Marley Wood, some of it in the Reserve. Not much of it is dying or has bracket fungi. In one birch patch in the upper part of the wood, I found half a dozen ***Trametes rubescens*** (old specimens, very tough, det. by K. Paviour-Smith) on a 5 in. dead birch bole, at 1-5 ft. Nearby (also in birch patch in otherwise mainly oak-hazel wood) I took home the top 1 ft. of a very soft rotting 6 ft. birch bole with some bark on, to breed out animals. It was in a small thicket of wild rose, and was about 5 in. diameter. 1321

- 1 young ***Porcellio scaber*** Latreille n.k.
- Several Collembola (n.k.) in tin 22 April
- 3 medium-sized *Lithobius* running (very fast) inside tin and onward, 22 April,
evidently having not been attracted out to light tube B
- L. melanops*** Newport 2 ♀♀ adult; 1 immature M. Lloyd det. 1958 (says this is a
very fast runner) specimens lost
- 1 ***Oniscus asellus*** L. 26 April; 1 adult to 16 May, in tin n.k.
- 1 ***Cerylon ferrugineum*** Stephens 30 April. Another circa 1 June (n.k.) C

Demobilised experiment 3 June.

{reverse side}

4th APRIL 1958.

4 APRIL 1958. WYTHAM WOODS ***

Marsh No. 5 is very dry and not yet showing any growth.

Wild rose and **elder** are beginning to expand their leaves, and **dog's mercury** an inch or two high.

The former pasture below the drive is now a thick mass of scrub up to 10 ft. in places, mostly less than six, with just room to make one's way about the interspaces. The ground seems rather damp. There is a lot of **whitethorn**, **blackthorn**, **rose** and **bramble**. We saw one warbler, either willow wren or chiffchaff probably, in the low bramble thicket. Also two **bullfinches** in the scrub layer. This is the largest patch of seral scrub in the Woods, and was open pasture in my memory e.g. 1945.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 12.

4 May 1958- 29 October 1958.

C.E. 1330-1389.

Red ticks²³ mean ready to be indexed. Crossed red ticks mean indexed.

Circles²⁴ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

²³ Shown as **bold** in edited version.

²⁴ Edited to A or 00

4 MAY 1958. WYTHAM WOODS.

Rob and I went to Marley Wood, 6.30-8.15 a.m. G.M.T. There was noticeably little bird activity and song until the sun broke through cold dull cloud about half-way through. All the warblers were seen in some kind of woodland edge; or woodland-edge/scrub-edge mosaic, rather difficult to define exactly in the present complex structure of Marley Wood.

Along the main cross ride (above Marsh 5), there were **willow wrens** (*Phylloscopus trochilus*) one of which was tamely haunting the low bramble edge and carrying nest material; and inside the field layer the wood near here was a **great spotted woodpecker**. In the woodland (scrubby) edge between this ride and Marsh 4, we had close views of **blackcap** (*Sylvia atricapilla*) and **garden warbler** (*S. borin*) males and could compare the short song of the former with the longer one of the latter. There were also **whitethroats** (*S. communis*) here.

{reverse side}

4 MAY 1958.

4 MAY 1958. WYTHAM WOODS ***

In the clematis-matted tree that we found a **tawny owl** in on 4 April, we flushed out only a wood-pigeon today.

Most trees and scrub were about half in leaf, giving already a great deal of cover for birds. Lower down, not 50 yards from the drive to the Abbey, the hawthorns and other scrub gave pretty good cover, in which we heard a **grasshopper warbler** (*Locustella naevia*); also very actively a **nightingale** (*Luscinia megarhyncha*), in snatches of incomplete song etc. Although seen in glimpses, it stuck close to the dense scrubby wood. I heard a **chiffchaff** (*P. collybita*), possibly outside Marley Wood: they were either silent or very scarce. Apart from any marsh birds, we therefore saw or heard the full complement of Wytham warblers + nightingale.

A **cuckoo** flew over, and was ranging around the Wood. Marsh 4 had nothing active in its reeds, which are still only last year's brittle stalks. Pair of **linnets** in hedge outside road, near Botley Lodge.

Primroses going over, but **bluebells** in full flower there are some large patches in the reduced Reserve e.g. on the south side.

{reverse side}

16 MAY 1958.

16 MAY 1958. WYTHAM WOODS.

Went to Upper Seeds with Dr. Frank Pitelka to see a line of cover slabs (of several materials) that he laid out before Christmas. They are in groups along the strip of rather solid tussocky ***Dactylis glomerata*** just south of the conifer clump. There is some bramble, but otherwise the vegetation is coarse and dominated by cocksfoot grass. Elsewhere there is a rich meadow with a lot of plants, now nearly all less than 6 in., apart from cocksfoot tussocks which are dead among them. Some very large bramble clumps are developing and might usefully be controlled; also a scattering of small **hawthorn** plants.

On the path in thick oak-sycamore-*Mercurialis* wood, Chalet Woods, were some lumps of

{reverse side}

16 MAY 1958.

1330 2 ♂♂ ***Sphaerocera curripes*** Latreille. K.G.V. Smith det. 1958.

16 MAY 1958. WYTHAM WOODS ***

not very fresh dung from a strayed cow, on which were swarms of *Borborus*: I kept two. 1330

A pair of **bullfinches** flying across Upper Seeds. In the Chalet Woods two adult **fallow deer**.

{reverse side}

1 JUNE 1958.

1 JUNE 1958. WYTHAM WOODS, BERKS.

With Rob, visited Rough Common, Radbrook Common, and the woods between Pond 1 and the north-west corner of the young plantation of R.C.

7-8.15 a.m. G.M.T. Overcast turning to showers at the end, warm, north-east wind.

A **tree-pipit** perched on top of a hawthorn on Rough Common, with a large green caterpillar in its beak. 3 young **moorhens** seen by R. on the water, Pond 1, and parent heard. No ducks or sedge warblers observed. The floating pondweed now covers most of the surface of free water. There is extremely dense scrub north of the pond (= T/4, mainly hawthorn mixed with other species). **Nightingales** in this and one watched singing

{reverse side}

1 JUNE 1958.

= greater butterfly orchid (*Platanthera chlorantha*) confirmed by structure of the flower column.

Some spotted orchids (*Orchis fuschii* presumed) were in bud near here also.

C *Carex flacca* (large)

D *C. sylvatica* Tussocks. (but fruits seem rather deeply bifid, and bracts are longer than flowers).

E C. larger species with triangular stems. Not kept.

1 JUNE 1958. WYTHAM WOODS, BERKS .***

on a hawthorn spray at about 10 ft. We took the path through the north-west part of Pond 1 reserve, which consists here of low **hawthorn** 2 feet upwards to high scrub and eventually ash-oak margin, that has invaded what used to be more of a meadow. One or two more **nightingales** heard.

This path is rather wet and it soon develops into a narrow shaded wet ride through woods (Rough Copse, Comp. 28) containing a lot of ash, but eventually we turned up a vertical ride that took us up the south edge of Woodcroft Copse to the drive. In a slight clearing of the damp lower side was a colony of about 30 butterfly orchids of which one was already half in flower (photo). Took a broken specimen in bud, to confirm species (n.k.). 1333

Three kinds of *Carex* were flowering about here, as well as **white comfrey** (which is now common also on the open rides in Radbrook Common Plantations). D

Further on, and in the vertical ride, also *Carex pendula* flowers. Down here we were on the Oxford Clay and we met the sand belt again above it. In the damp brambly vertical ride in oak-ash wood, "yellow pimpernel" (*Lysimachia nemorum*) grew. B

And where it joined the lower ride **sanicle** was in flower.

{reverse side}

{Record punchcard found attached here reproduced on reverse of p. 22}

4 JUNE 1958.

1334* "Emerged" from tins in lab. up to 18.12.58:

- 1 ♂ *Sciara longiventris* Zetterstedt K.G.V. Smith det. 1958.
- 1 ♀ *Sciara* species K.G.V. Smith det. 1958.
- 2 *Baptolinus affinis* (Paykull) n.k.
- 2 *Acalles ptinoides* (Marshall) P.J. Osborne det. 1958
- 1 *Bembidion harpaloides* Serville P.J. Osborne det. 1958
- 1 ♂ *Austrolimnophora ochracea* (Meigen) K.G.V. Smith det. 1958
- 1 *Clusioides gentilis* K.G.V. Smith det. 1958
- 1 *Oxychilus alliarius* Miller n.k.
- 14 adult and young *Oniscus asellus* L. n.k.
- 2 Tipulid larvae

Vast numbers of very small Sciarid flies, breeding out for several months. 7 k. (♂+♀)

2 *Scolisplanes* {???

6 *Lithobius forficatus* (L.) 1 adult ♀, 2 pre-mature ♀♀, 1 pre-mature ♂, 2 immature. M. Lloyd det. 1959. n.k.

Collembola, on emigration (from drought in tin?) 10-11 September, not seen before.

1 *Abax parallelipipedus* (Piller & Mitterpacher). n.k.

2 ♂♂, 5 ♀♀ *Sciara* species (Group II of Edwards). K.G.V. Smith det. 1958.

11 *Podura minor* Tullberg C.A.Elbourn det. 1967 (as *Tomocerus m.*) n.k.

4 JUNE 1958. WYTHAM WOODS.

Visited Marleywood Plantation and Marley Wood, with Rob, 9.30-11 a.m. G.M.T. Overcast and cool, but later sunny, warm, damp after recent very heavy rains. Full canopy everywhere except on some **ashes**, and a few of the **oaks** look slightly moth-eaten (literally) in parts of the canopy. Watched a **great spotted woodpecker** searching trunks and canopy (T/5/4-5), and often taking things off leaves; ash and oak, Marleywood Plantation. It also worked for a bit, pecking some high canopy rot-patch on the beech, living tree, called LOG 32. There is abundant past and some new growth of *Ganoderma applanatum* brackets on especially the field and ground layers of the rotten part of the trunk. Re-examined the frass (2-5 ft.) inside the hollowed trunk (see C.E. 1318, 2 January 1958). Found no large yellow beetle larvae, nor any visible life at all. Took home a creamery tin full of damp very cheesy rotten beech material from the ground by the trunk. This fallen debris is much bored with old tunnels. Searched generally for *Lasius brunneus* (because *Microglotta gentilis*, found in the trunk frass in January, is partly found with this ant, of which I have earlier record 1334*

{reverse side}

4 JUNE 1958.

{Record punchcard found attached to page 21 reproduced below, actual size}

FOR	BRIT.	MARIT.	OXON.	BERKS.	BUCKS.	OX. REG.	WYTHAM	2	3	4	5	6	7	8	SPECIES	LEAF/	TWIG	FLOWER	FRUIT	TRUNK/	BRANCH	ROOT	FUNGUS	MISC.	1	2	3	4	5	6
A	LOCALITY														PLANT										OP.					
T	SPECIES CODE NO.														RECORD CODE NO.										BREEDING					
A-T	C.E. 1334*																								BEHAVIOUR					
SUBTERR.	DAY	4	MONTH										YEAR										MOVEMENTS							
DOM.	TIME (G.M.T.)	HT. ABOVE GROUND										Obs.										POP. DENSITY								
D/D WOOD	HABITAT & NOTES														STAGE										MORTALITY					
DUNG	"Em." in lab. from damp very cheesy rotten beech														EGG Y. PUPA AD. ♂ ♀ MISC.										COMPETITION					
CARRION	wood pieces on ground under partly decayed live														Specim.										HOST/PARASIT.					
ANIM./ART.	beech ("Log 32"), decid. wood, Marleywood																								ENEMIES					
HUM./ART.	Plantation.																								FOOD					
MISC.																									MEDIUM					
Sal.																									CLIMATE					
Br.																									MISC.					
A	Coll. C. Elton														Det.										19					
B																														
C																														
D																														
E																														

4 JUNE 1958. WYTHAM WOODS ***

from LOG 29), but found nothing.

The field layer in this part of the wood has **bramble** (now in fresh green leaf), *Carex pendula* (as sign of the damp clay soil), many **young ash** plants, mostly under 6 ft., etc., while **bluebells** are going over into fruit (not abundant here).

On bramble leaves, 2-3 feet were

1334

1 *Coccinella 7-punctata* L. (n.k.).

Several pink-gold-metallic weevils (1 k.) *Phyllobius pyri* (L.) P.J. Osborne det. 1958. [A]

1 ♂ *Denticollis linearis* (L.). (n.k.) C.E. det.

2 dark brown elaterids *Athous haemorrhoidalis* (Fab.) P.J.O. det. 1958 n.k.

1 Cantharid, *Podabrus alpinus* (Paykull) C.E. det. [C]

1 Cantharid, dark blue elytra *Cantharis pellucida* Fab. P.J.O. det. 1958 [D]

Great numbers of mycetophilid and Tipulid flies, in the air, low field layer zone, settling by hanging under the leaves of bramble etc., and immediately taking to flight if the vegetation vibrates.

1 larger (Tipulid) ♂ *Ormosia* species (poor specimen, n.k.) K.G.V. Smith det. 1958.

Rob saw a **bullfinch** in the open thorn-bramble area half-way down Comp. 46, and here also a **garden warbler** singing in the field layer. This used to be grass-herb meadow. It has wood around three sides. **Whitethroat** in brambles

{reverse side}

4 JUNE 1958.

1 silver-Y moth (*Plusia gamma*) on the grass edge of the green ride across Marley Wood.

1335

A. Small brown cantharid *Rhagonycha testacea* (L.). P.J. Osborne det. 1958.

B. 4 *Byturus* 1 *B. tomentosus* (Degeer) 3 *B. urbanus* (Lindemann) (1 kept) P.J. Osborne det. 1958

C. 1 *Anaspis*

D. 2 *Eusphalerum torquatum* (Marsham) P.J. Osborne det. 1958

Also a cockchafer (*Melolontha melolontha*), beaten from flowers or foliage of haw.

4 JUNE 1958. WYTHAM WOODS ***

on drive verge i.e. T/5 (Edge).

In Marley Wood all vegetation cover is now very dense and few birds visible, especially at this time. Chief conspicuous song is **blackbird**. **Wren** hunting in T/5/2 and below 3 in the thick oak-ash-birch-hazel. **Chiffchaff** heard in upper part of Wood, also **nightingale** snatches. **Hawthorn** flowers going over, but still have many small beetles in them, of which I took a sample. The commonest was *Byturus*. These were also in the T/5 (Edge)/3. 1335

{reverse side}

4 JUNE 1958.

4 JUNE 1958. WYTHAM WOODS ***

Marsh 5 looks very impressive at this growth stage, with 3 ft. or less hemp agrimony, giant horsetail, *Carex* *, *Epilobium hirsutum*, dewberry, etc. 1336 A*

Some wild current {sic} in green fruit at the T/5 Edge of the marsh. 1 moth disturbed from the Marsh ground layer.

Brown silver-line (*Lithina* (*Lozogramma* etc.) *chlorosata* (Scopoli) (= *petrasia* (Huebner)) (Feeds on bracken)

B

{reverse side}

4 JUNE 1958.

14 JUNE 1958. WYTHAM WOODS AREA.

A large patch of ***Geranium pyrenaicum*** in flower, growing on what was probably a disturbed patch of ground in a hay meadow, between Marleywood Plantation and the Botley-Wytham Road (near this road). This species is in the same “invasion category” as *Lamium album* and comes from the Caucasus region, reaching Britain by at least the 18th Century. 1345

{reverse side}

21 JUNE 1958.

21 JUNE 1958. WYTHAM WOODS.

Visited Lord's Common, Rough Common, the Dell, and Marleywood Plantation with Professor Eugene P. Odum, who contemplates a month or two's investigation of productivity in grassland communities here.

Lord's Common has by no means been invaded yet by *Brachypodium* and I think the position might well be held by Meads and ordinary users doing careful trampling. At present the patches of open ground have a nearly closed association of the following (among others: the ones mentioned are in flower); wild thyme, viper's bugloss, large "hop trefoil" (= ? medick), *Bellis perennis*, etc. Who runs the small quadrats, including 4 inverted closed metal trays?

On Rough Common, in the thick *Brachypodium pinnatum* centre, there is a large amount of ***Bromus erectus*** scattered in it, and in flower. I think it has much increased lately. ***Briza media*** in flower.

{reverse side}

21 JUNE 1958.

24 JUNE

21 JUNE 1958. WYTHAM WOODS ***

along the trampled turfy edge of the road.

Upper Seeds (south half) has just been cut for hay.

In Marleywood Plantation at the shaded damp roadside where Stream crosses, some *Orchis fuschii* in flower.

24 JUNE. WYTHAM WOODS.

Visited Rough Common with Robin Newson, fine afternoon, 3-4 p.m. G.M.T., mainly to collect grasses. The main *Brachypodium pinnatum* area has a lot of *Bromus erectus* in flower and locally a little *Arrhenatherum elatior*, though the latter seems more abundant towards the shelter of the woods.

1348

Dactylis glomerata scarce in the open, abundant under shade of edge of Chalet Woods, where *Brachypodium sylvaticum* also comes in. In this shade also a lot of tall *Poa pratensis* (det. E.F. Warburg; not kept).

{reverse side}

24 JUNE 1958.

E.F. Warburg said today that he found a lesser butterfly orchid (*Platanthera bifolia*) at the top of Radbrook Common this summer. This species is almost unknown in the district.

24 JUNE 1958. WYTHAM WOODS ***

Rough Common***

The edge by the road grades from pure turf through turf with a few short flowering grasses less than 6-9 in, to thin mixed grasses (not much *Brachypodium*) – several feet wide, kept so by trampling, car parking and mowing (on south side just done, north side has 3 **bee orchids** in flower and has not been cut). Then the solid *B. pinnatum* tussock starts, with a few smaller grasses except where it has been repressed in patches by trampling etc. It is simplest to classify this road margin strip, not as T/2, but as T/3 (Edge). The following grasses were collected by me, and named by me, or by E.F. Warburg, in a live state:

1349

<i>Briza media</i>	C.E.
<i>Koeleria gracilis</i>	E.F.W. and C.E.
<i>Cynosurus cristatus</i>	C.E.
<i>Brachypodium pinnatum</i>	C.E.
<i>Helictotrichon pubescens</i>	C.E. (tall) E.F.W. (short)
<i>Trisetum flavescens</i>	E.F.W.
<i>Festuca rubra</i>	E.F.W.
<i>Poa pratensis</i> (reddish flowers)	E.F.W.

A
B
C
n.k.
D
E
F
G

{reverse side}

24 JUNE 1958.

26 JUNE.

24 JUNE 1958. WYTHAM WOODS ***

Rough Common***

1 *Orchis pyramidalis* in short grass on quarry slopes, in flower.

The burned area at the west end, north of the road, has now nearly recovered and has thick grass, mostly *B. pinnatum*. But there are some *Heracleum* plants, and several smaller herb species (being suppressed).

A **large skipper** (*Augiades venata*) sucking flowers of *Centaurea scabiosa* (single plant near edge of T/3 *B. pinnatum*).

26 JUNE. WYTHAM WOODS.

Visited the head of the Park opposite Bowling Alley Plantation, B. Alley, and Sundays Hill, with E.P. Odum, 9.30-12 a.m. (noon), to choose sites for him to measure grassland productivity. Took some photos.

Wytham Park. This is cattle pasture, cows active, with a close turf of grass mixed with some herbs. Quite common and rising a foot or two are flower spikes in bud of **ragwort** (no caterpillars) and **common thistle**, also beginning of spikes of the huge woolly thistle (*C. eriophorus*).

{reverse side}

26 JUNE 1958.

26 JUNE 1958. WYTHAM WOODS ***

Wytham Park ***

Lasius flavus mounds (active populations in those examined, and only a few damaged by ? woodpeckers or crows) are distributed right over the upper part of the park i.e. the pasture. They are much scarcer on the steep slope below the wood, and here cattle have eroded soil in places by trampling; it may also get a bit less sun. The mounds have a distinctly different flora, both in some of these species or the fact that they are flowering – though grass is partly cropped by the cattle: self-heal, white clover, *Festuca rubra*, and so on; not **wild thyme**. **Tormentil** (*Potentilla erecta*) and white clover abundant in park turf. We failed to find root aphids for certain.

Bowling Alley.

There seems to be a good deal of change going on in the vegetation, unless I have not seen it much at this season. There are still large areas of mat vegetation, a mosaic of low species though little **wild thyme** visible. Formerly I remember much more of the limestone fragments showing between mats of things like thyme and *Ranunculus parviflorus*. Now it is more continuous cover. Besides this, there are quite large drifts of flowering *Holcus lanatus*, and patches of *Brachypodium pinnatum* (though no heavy tussock).

{reverse side}

26 JUNE 1958.

- B. This is a small dense form of *Linum catharticum* L.! E.F. Warburg det. 1958.
- C. det. E.F. Warburg 1958.
- D. = *Trifolium campestre* Schneb. (flowers and leaves, no pods)

26 JUNE 1958. WYTHAM WOODS ***

Some other tall grasses are also here and there: *Arrhenatherum elatius* and *Lolium perenne*, both in flower; and at the north-west end there are several large societies of *Carex flacca* in flower. One seedling **pine** about 18 in. high, out in the open. Other grasses noted in flower were:

Koeleria gracilis (scarce)

Festuca rubra

Poa pratensis?

A great network of **wild strawberry** in fruit over much of the T/2 ground. A few **bee orchids** (about 8 seen) and **spotted orchids** in flower. Other plants noted in flower were:

Hieracium pilosella, self-heal, *Potentilla reptans*, *Bellis perennis*, wild thyme (little), 1350
 a tall (1 ft.) "*Hieracium*", a small white "sandwort", B
 some big societies of *Lotus corniculatus* in flower, one or two **hop trefoil** too, and locally **rock rose**. C

The **birch saplings** cut by Meads have begun to coppice up, less than a foot.

Sundays Hill.

Duffey's "Area A", that was pure *Brachypodium pinnatum* in 1951. The section of it 50 yd. wide, nearest the Bowling Alley, is being invaded by quite a lot of *Arrhenatherum elatius* and a little *Bromus erectus*, both in flower. **Cocksfoot**, very little. Further south-west there is still an area of almost pure *Brachypodium pinnatum* looking a much yellower green. (Has any of this been hormone-sprayed by Fryer?).

{reverse side}

26 JUNE 1958.

1351

F A small green weevil was fairly frequent, eating the margin of the flower petals (watched doing in the field, and confirmed by keeping in lab. with fresh petals).
Phyllobius parallelus (Olivier) (1 kept) P.J. Osborne det. 1958.

26 JUNE 1958. WYTHAM WOODS ***

Sundays Hill, "Area A".

No traces of live **voles** (*Microtus*) or of recent runways found. Soil up to six inches or so of a sort of brown marl.

"Area B". This was rabbit-grazed *Festuca* turf association in 19, but is now a thick regular mat mainly of ***Festuca rubra***, but also mixed with other grasses like ***Holcus lanatus*** etc., and 6 in. to almost a foot deep. When one burrows to the ground, **vole** runs can be found, all old, and large numbers of large and small ***Glomeris***. There is some ***Heracleum*** (very backward).

No grasshoppers nymphs or adults were seen on any of these areas.

To the north-west Sundays Hill has a very ragged belt of **elders**, some in full flower and some dying, and between this and the grassland is a bracken belt. At the corner of this is a group of several large pink **wild roses**, and the (field-layer) flowers of which were carefully searched for insects: 1351

Several ***Grammoptera ruficornis*** (Fab.) A ♂ and ♀ (not in copulation) kept A
A score also of black *Anaspis*. 2 kept, of different sizes, ***A. frontalis*** (L.) P.J. Osborne
det. 1958. B

1 ***Anaspis maculata*** Geoffroy in Fourcroy C

1 hive bee (***Apis mellifera***) n.k. D

Several tiny metallic green moths with basal costal purple on forewings. 2 kept:

Micropterix aruncella (Scopoli) E

{reverse side}

31 JULY 1958.

31 JULY 1958. WYTHAM WOODS.

Took Prof. Walter P. Taylor up to the Bowling Alley, where E.P. Odum and A.J. Pontin were radioactive-marking ants (*Lasius flavus*). Much wild **thyme** mat coming into flower.

Page 69

6 SEPTEMBER.

Drove to Godstow before breakfast; a misty day after heavy rains, little bird life. **Wild hop** grows abundantly on the hedge by the lane from Godstow to Wytham, and some white bindweed (*Calystegia sepium*), both in flower on the 1-8 ft. hawthorn. The new bypass road is going to smash across here in a month or two and will greatly alter parts of this quiet country river plain between the river and Wytham Woods.

{reverse side}

11 SEPTEMBER 1958.

11 SEPTEMBER 1958. WYTHAM WOODS.

Rob and I visited the Lower Follies and Marleywood Plantation, 4.45-6.15 p.m. G.M.T. I was mapping the positions of the sources of Streams 4, 5 and 5 A.

Stream 4 starts from a not very wet marsh just outside the wood, at the bottom of the sloping pasture. The marsh has ***Juncus inflexus***, ***Equisetum telmateia***, **water mint** (in flower), and a little **marsh thistle**, and

{reverse side}

11 SEPTEMBER 1958.

11 SEPTEMBER 1958. WYTHAM WOODS ***

some non-flowering *Vicia cracca*. But although the horse-tail extends into the woodland, where it becomes mixed with **nettle**, *Carex pendula*, *Rubus caesius*, etc., and there is an old stream channel, no water runs there. As this has been one of the wettest summers on record, one may suppose the stream does not run and makes its way underground. But I can clearly remember water swamp above the drive here at some seasons. 1377 A

Stream 5. The source is rushy ground 170 yd. (paced) above the edge of the wood. The stream runs down for 70 yd. as a small trickle in a groove of ground, and has grazed grass and a little meadowsweet at the edge. It then is crossed by a cattle path made of stones. Below here, also in the open pasture, it continues for 100 yd. in different vegetation consisting of *Equisetum telmateia*, **water mint**, **marsh thistle** etc. There are no cattle troughs.

Stream 5A. The actual stream starts out of a pipe about 43 yd. above the wood, but above this there is marshy ground 35 yd. higher up (now named Marsh 6). This marsh, (as well as some of the grassy ground below it, is extremely wet, a quagmire into which one can sink to the ankle, but well covered with field-layer of plants. Though obviously trampled it is not grazed down to ground layer. I noted *Juncus inflexus* (mostly with *Coleophora* larval white cases on the seeds), **water mint** (in flower), **marsh thistle**, *Epilobium parviflorum* (in seed, a few flowers definitely with non-revolute carpels same length as stamens), *Equisetum palustre* (with old flowers), a little *Hypericum tetrapterum*, (= *quadrangulum*) and some grass. B
C

{reverse side}

11 SEPTEMBER 1958.

1377

D ♂ *Helophilus hybridus* Loew K.G.V. Smith det. 1958.

11 SEPTEMBER 1958. WYTHAM WOODS ***

In Marsh 6 I swept a great many flies and spiders. I kept one syrphid fly of yellow and dark pattern. 1377 D

About 50 yd. north of where Stream 5A enters the wood there is a patch of marsh. South of Stream 5 there is a rather patchy and indeterminate ditch, created by bits of dry-stone wall abutting on a hollow outside the wood. It is almost a ha-ha wall defining a short stretch of the woodland edge.

Lower Follies. Today this pasture has a lot of young cattle, some sheep, and several horses, but they seemed to prefer the upper, drier parts today. It is broadly a T/2 turf, heavily grazed, with much dung about. There are a few small browsed hawthorns scattered in one area. However, all over are scattered and quite abundant thistles – *Cirsium eriophorum* up to about 3- ½ ft., *C. lanceolatum* (= *vulgare*) about 1½-2 ft., and only a few **common thistles**. Seed was profuse, and Rob watched six young **goldfinches** picking the seeds out of both larger species. In habitat terms, this field is a very unequal mixture of T/2 and T/3, with the former “50 x ” the latter, and it can be listed in practice as T/2 as we do for the open Park. Large **yellow ant** mounds, chiefly grass-covered, are very numerous. Two **green woodpeckers** flew up from the field to the wood. Other birds were **jackdaws**.

This woodland edge is rather sharp and has trees right up to its fence. The sharpness is due to grazing outside.

There is a heavy **acorn** and **ash** key crop this autumn in Marleywood Plantation, but **sycamore** keys look backward and hardly pink. I noticed the leaves of the field layer sycamore were easily swept off, which is early. Ian Efford tells me they are falling off the lower layers now and they have pale ? fungus patches on the leaves.

{reverse side}

11 SEPTEMBER 1958.

The branch was off the ground at a height of 4½-5½ ft.

11 SEPTEMBER 1958. WYTHAM WOODS ***

At the woodland edge, with slight oak canopy near but not over, a dead black poplar big branch projected into the field where it had fallen i.e. it is exposed to much full sun, is very dry on the outside, and would normally be expected rather barren. But, whether from slight shelter, from the very thick corky bark remaining in large areas, or the very wet summer, there was a large fauna underneath the bark, and in places thick mats ¼ inch thick of yellow mycelium of fungus, also some sea-weed-like brown strands of some earlier fungal occupation.

1378

Oniscus asellus L. Abundant, much frass in underparts of tree. n.k.

1 large ♀ *Porcellio scaber* Latreille (N.B. no parent tree for it to have migrated up), with young in pouch. n.k.

2 Huge black millipedes *Tachypodiulus niger* (Leach) M. Lloyd det. 1959

2 *Lithobius variegatus* Leach. M. Lloyd det. 1958.

Marpessa laminata, *Oxychilus alliarius*,

Limax maximus (young) and *L. marginatus*

B
A

{reverse side}

26 SEPTEMBER 1958.

26 SEPTEMBER 1958. WYTHAM WOODS.

Went to Marleywood Plantation via the Lower Follies, with Harold Gall and Monte Lloyd, 9.10-11 a.m. G.M.T. Warm, clear and sunny. Drainage engineers are just going to start digging the ditches in the Lower Follies. One will run from the seepage point down the east side of the Marley Wood reserve i.e. just outside the wood, a 4½ foot wide channel. This will bend at the bottom and run to join Stream 3. A ditch will also run along the north-west side of Marleywood Plantation at the field edge, partly running back downhill to Stream 3, partly the other way to Stream 5, – and ? 5A. This is costing £500! (Information* from young engineer on the spot).

Monte and I swept some insects and spiders from the field layer *Equisetum telmateia* etc. that is by and in Stream 5 in the open pasture. 1380 A

Brown heteropteran ♀ *Phytocoris insignis* Reuter ? G.G.E. Scudder det. 1960† C.E. collect.

Brown and yellow striped spider immature ♀ *Pisaura mirabilis* (Clerck) M. Lloyd det. 1958 C.E. collect. B

*this matter was subsequently investigated by H.N. Southern and adjusted in detail. Record of new drainage with map, in CN.

† “probably this species, but is a ♀” (and Southwood and Leston say this species comes on heather).

{reverse side}

26 SEPTEMBER 1958.

26 SEPTEMBER 1958. WYTHAM WOODS ***

Near Stream 5 and road edge in deciduous wood are two dead fairly large coppice sycamore stems. Most of the bark has gone, the wood being still hard and standing, with some *Ptilinus* (assumed) holds. The lower a few feet has large sections of loose bark, damp beneath. From 1-4 feet we found (M. Lloyd and C.E.) beneath it on one tree:

<i>Limax maximus</i> L.(mostly not full size)	n.k.
<i>Limax marginatus</i> Müller	n.k.
<i>Goniodiscus rotundatus</i> (Müller)	n.k.
<i>Clausilia rugosa</i> Draparnaud	n.k.
<i>Marpessa laminata</i> (Montagu), (not full grown)	n.k.
1 <i>Oxychilus alliarius</i> (Miller)	n.k.
2 <i>Cepaea nemoralis</i> (Müller) (1 plain fawn, 1 banded).	n.k.
<i>Oniscus asellus</i> L. (no <i>Porcellio</i>)	n.k.
Small earthworms	n.k.
2 <i>Lithobius variegatus</i> Leach M. Lloyd det. 1958.	n.k.
Collembola	n.k.
No beetles or fly larvae.	n.k.

At the base, below 1 foot, was a nest of *Myrmica ruginodis* Nylander with young stages, also under loose bark. 2 queens “probably *ruginodis*” M.V. Brian det. 1960 1381

{reverse side}

26 SEPTEMBER 1958.

1382 Young earthworms, young iulid millipedes, young *Oniscus asellus*, mites, collembola, a fly larva, not kept.

G. 3 small black thrips 2 *Limothrips cerealium* Haliday G.D. Morison det. 1962 (1 slide) 1 *Taeniothrips atratus* (Haliday) G.D. Morison det. 1962 (1 slide)

H. Abundant small globular Histerid beetles (Tullgren)
44 *Abraeus globosus* Hoffmann C. Elton det. 1958. (not kept)
1 *A. granulum* Erichson C. Elton det. 1958. (not kept)

A. Also a number more young and adult det. M. Lloyd 1958.

E. *Gyrophypnus myrmecophilus* (Kiesenwetter) H.Frank det. 1965 Specimen corrected to “*Arctium* species”

1383. Emerged from tin in lab.

E. 1 teneral Trypetid fly (from seed-head presumably)
1 ♂ 3 ♀ (1 ♂ + 1 ♀) *Tephritis bardanae* (Schrank) K.G.V. Smith det. 1958.

26 SEPTEMBER 1958. WYTHAM WOODS ***

We visited the live standing beech with partly rotten bole and **Ganoderma** (which is growing scattered from base to 20 ft. or so) – “Log” 32, and I took a large bag of brown vegetable debris from the rotting trunk hollow at 2-4 ft. to get out insects. Half kept in an emergence tin, the rest put in Tullgren funnel. 1382

- 1 adult **Cryptops hortensis** Leach. M. det. 1958. [A]
 One of the three British species of Scolopendromorpha, blind, recorded in literature from D/D WOOD and ground (not litter, though).
- 2 **Cis nitidus** (Fab.) (Tullgren). K. Paviour-Smith det. 1958. n.k.
- 1 ‘furniture beetle’ **Stegobium paniceum** (L.) Mark Robinson det. 1980 (Tullgren) [B]
- 2 small beetles **Corticaria elongata** (Gyllenhal) Mark Robinson det. 1980 (Tullgren) [C]
- 1 small beetles **Atomaria cf. {?} ruficornis** Mark Robinson det. 1980 (Tullgren) [D]
- 4 smallishstaphs. (3 in alcohol) [E]
- 1 very small staph. F

By the oak-ash-sycamore woodland edge near the drive was a large group of this year’s burdocks (**Arctium** sp.) – all dead, leaves shrivelled brown, many burs also dry and brown. The plants have a fairly open structure, this year up to 6 feet high, but the clusters of burs and smaller upper leaves give a denser micro-cover. Collected a lot of terminal stuff from 2-4 feet. 1383

- 1 **Cepaea nemoralis** was on a shrivelled dry upper leaf. n.k.

Sorting the stuff in the lab. gave:

- 1 live (brown – with one conspicuous dark band) **Cepaea nemoralis** n.k.
 1 live **Goniodiscus rotundatus** n.k.

{reverse side}

26 SEPTEMBER 1958.

Specimens corrected to ‘*Arctium* species’

26 SEPTEMBER 1958. WYTHAM WOODS ***

burdock (cont.): 1383

1 spider	A
3 ♀♀ harvestmen <i>Oligolophus agrestis</i> (Meade). M. Lloyd det. 1960	D
1 beetle larva Cantharid (? <i>Cantharis</i>). K. Paviour-Smith det. 1958	B
1 ♀ earwig (<i>Forficula auricularia</i> L.)	n.k.
4 Lathridiid beetles: 3 kept = <i>Corticarina gibbosa</i> (Herbst). P.J. Osborne det. 1958; confirmed J. Balfour-Browne 1960 (as <i>Melanophthalma</i> (C.) g.)	C

At the road edge with beech-ash-oak-sycamore wood, near Stream 5, damp but not A-T marsh, we swept the patch of umbellifer, now in green seed and still with green leaves, and kept some spiders:

1348

- 2 ♀♀ *Meta segmentata* (Clerck) agg.
 1 ♂ *M. s. segmentata* (Clerck)
 1 ♂ *M. s. menzei* (Blackwall)
 M. Lloyd det. 1958.

{reverse side}

26 SEPTEMBER 1958.

26 SEPTEMBER 1958. WYTHAM WOODS ***

Tree and shrub fruit crops are remarkably heavy this autumn. In Marleywood Plantation one could see this on **oak, ash, beech, sweet chestnut, hawthorn, elder**, and also on one small plant of **guelder rose** not far from Stream 3. Newson reports signs of recovery in his mouse populations in Wytham Woods.

{reverse side}

28 SEPTEMBER 1958.

28 SEPTEMBER 1958. WYTHAM WOODS.

On reports of big windfalls during storms last week, I visited the Chalet and made some arrangements with D. Meads for the preservation of two more log sites for beech. One is across the Singing Way, a large branch, of which three bits are to be kept and towed into good ground cover nearby (Log 45). There was a similar one across the path in 'Blenheim', but I decided not to claim this. A third near this – between the Chalet and Upper Seeds – fell about 3 months ago: a bit will be kept and towed to cover (Log 46).

{reverse side}

6 OCTOBER 1958.

6 OCTOBER 1958. WYTHAM WOODS.

Went to the Mount, with H. Gall, and walked up through Lower Seeds to Brogden's Belt, and on to the Bowling Alley, and back. Recent very heavy downpours have filled the Thames to the brim with very turbid brown water, and Port Meadow and sound fields near Eynsham are very flooded. This is very early for Port Meadow. About 10 in. of water has flooded the lane between Godstow and Wytham, where the new by-pass is to run. The path up Lower Seeds had a pool on it, and all tracks, especially the Singing Way were very muddy.

This year the North section of Lower Seeds forms three very distinct zones (1) the upper rocky knolls and slope, unploughed, good mixed limestone meadow, though with small hawthorns, bramble, and *Brachypodium* moving in (2) middle zone of lush grass, presumably new ley (3) lower, net-fenced pasture with sheep.

On the path up Lower Seeds were beautifully clear imprints (with claw marks) of **badger**.

On the south (beech) end of Brogden's Belt has a few white toadstools. *Cephalanthera damasonium* is rather abundant this year (now in seed); one *Epipactis*, either *latifolia* = *helleborine* or *purpurata*, probably (from its broad oval leaves) the former – this was in seed; seeding brown shrivelled-leaved stems of *Monotropa* species. = *M. hypophagea* Wallr. E.F. Warburg det. 1959 All these were on beech humus. 1386

The upper part of the Dell has lost its mixed grass-herb character since the rabbits died off, and is now thick grass, *Brachypodium*

{reverse side}

6 OCTOBER 1958.

6 OCTOBER 1958. WYTHAM WOODS ***

and other species, including *Bromus erectus*. But the old rabbit warren still looks quite different, with a lot of nettle etc.

Now that I have learned to recognise it, I see *Festuca gigantea* widely in the Woods, e.g. edge of Brogden's Belt beeches and path, edge of Marleywood Plantation and path, – both these are almost too shady to be true “edge”, and I do not notice the grass out in quite open spots; edge of Singing Way beech-mixed wood near Bowling Alley Plantation; etc. Indeed it seems a common, perhaps the commonest really tall “brome-looking” grass in shady edges, the other common big grass (though not usually actually with it, I think) being *Deschampsia caespitosa*.

The Bowling Alley shows quite a lot of its basic mat vegetation at this time of year, the *Holcus* flowers being over. A good many small pine seedlings in low meadow near the parent trees. **Fallow deer** had broken off a quantity of pine branch in small bits at about 4-7 ft. – tracks numerous, and marks of horn-rubbing.

On Sunday's Hill one would never know there had been wide patches of rabbit-grazed turf, though the patches of *Festuca rubra* are visible, now a foot deep.

{reverse side}

6 OCTOBER 1958.

11 OCTOBER 1958. WYTHAM WOODS.

Went to Common Piece and Thorny Croft, with Harold Gall (10.15-12 a.m. G.M.T.), to look at marshes and see what the foresters were draining.

In Common Piece several big oaks had been felled. Two were lying across the ride. Also a big sycamore. The big **hornbeams** have been left. These and the one near Lover's Barn have some seed on, perhaps surviving because grey squirrels are now not abundant.

Festuca gigantea is common along the road and ride edge of oak-ash-sycamore wood from the Mount along to Second Fork. Inside the wood it is not much found, even in the end of parts. Jones' (Five-Acre) Enclosure is apparently untouched by forestry so far. It is quite a nice thick structure of wood. What is its future?

The upper stretch A of Stream 7 has water running over very leafy bottom – not clean like 5 and 5A. The margin for several yards is very soggy leaf-mould and mud. All shaded fairly well. The lower stretch B is being dug out 12-18 in. down into solid Oxford Clay with fragments of *Gryphaea*. This has only gone up to within 50-100 yards of its 'rise'. Plenty of *Carex pendula* plants remain on the

{reverse side}

11 OCTOBER 1958.

E.F. Warburg would not certainly name the 1 specimen.

11 OCTOBER 1958. WYTHAM WOODS ***

banks, but have been cut. In its uncleared stretch the stream channel is practically covered across by scrub and bramble etc. I looked carefully for ***Gammarus pulex*** in this uncleared upper bit, above the trenching, but saw none, indeed no animal life. The water, though only an inch or so, was running very fast over sticks and mud. Some remaining tree leaves showed some calcification.

In the upper part of King's Lock Path i.e. narrow and rather shady ride between Common Piece and Thorny Croft, we found 40-50 tall orchids in seed, of which several specimens were kept. They look like the leaves being narrowish oval. They were among fairly thick grass.

The adjoining bit of Thorny Croft has been heavily thinned recently, and much small wood still lies in piles, there are almost no really mature trees, canopy is not at all complete. A good deal of ***Deschampsia caespitosa*** is growing, but not at all in a dominant layer. There is bramble. Open patches between trees have some big societies of **red campion** leaf rosettes. Beyond, it is still to be done, thick, untidy, attractive. Some **dogwood** and **privet** coming back on the thinned part. Beyond are **privet, dogwood, hazel, spindle, rose** etc.

{reverse side}

11th OCTOBER 1958.

11 OCTOBER 1958. WYTHAM WOODS ***

There is little leaf fall yet (except perhaps through storms) in sycamore, ash, oak, elm, hornbeams, beech, maple. Also little of autumn colours.

Marsh 1. There is no visible inflow at S 32, but a small stream runs through lower down. The marsh vegetation is head high in places (mainly hemp agrimony, with much *Carex*, the latter leaves 1-3 ft. only). Other species are *Equisetum telmateia*, *Rubus caesius*, *Scrophularia aquatica*, *Angelica sylvestris*. I thought there was no *Epilobium hirsutum*: this needs checking.

Rich ground of mosses and liver-worts, but practically no leaf litter except some undecayed *Carex* leaves. Collected a few insects, and saw numerous small flies, when moss removed, wet solid mud below: 1388

1 black large <i>Stenus bimaculatus</i> Gyllenhal	P.J. Osborne det. 1958	A B C D
1 small plain dark <i>Bembidion guttula</i> (Fab.)	P.J. Osborne det. 1958	
1 small <i>Anacaena globulus</i> (Paykull)	P.J. Osborne det. 1958	
1 small yellow and brown bug = <i>Scolopostethus thomsoni</i> ?		
Collembola very abundant.		

{reverse side}

29 OCTOBER 1958.

29 OCTOBER 1958. WYTHAM WOODS.

Went to Pond 1, Rough Copse and Woodcroft Copse, with Harold Gall, 10.30 a.m.-12 noon, G.M.T. Fine day after a very foggy night; all vegetation dripping wet.

Pond 1. The *Scirpus lacustris* is very extensive now leaving a rather small patch of 'open' water, itself thickly covered and crowded with *Potamogeton natans*. 4 ♂ and 3 ♀ **mallard** flew up from among the *Scirpus*, which is now brown and dying at the season's end. Probitts has been throwing large bits of white bread in, to attract the duck for shooting.

The grassy-scrub mosaic southwest of the Pond, and possibly within that reserve, has a good deal of dyer's greenweed, *Genista tinctoria*, among the thick grass. This was one of the original species for which E.W. Jones wanted the reserve. But both on this side and just west of the Pond, some scrub control is urgent, to preserve the rich damp meadow. The latter has *Deschampsia caespitosa* (which *Microtus* will presumably keep thinned), and some *Calamagrostis epigeios*, but no *Brachypodium*. Scrub removal, and some bramble control, is all that is needed.

The **butterfly orchid** patch among the tallish *Carex* in the ride through Rough Copse, is in seed. The seeds have a pointed shape. Here I briefly look at this damp community. Although at present it is pretty damp or squelchy on the clay, I don't think the ground can be water-logged all round the year (a less wet year, for example). There is mint, a little **dewberry**, some *Equisetum telmateia*, flea-bane, but the

{reverse side}

29 OCTOBER 1958.

K ♂ and ♀ red small spiders

L ♂ spider

M ♀ spider

29 OCTOBER 1958. WYTHAM WOODS ***

chief dominant is *Carex* (species not yet known, see 1.6.58).

Sweeping produced a lot of (partly crab) spiders (n.k.). Also one *Tachyporus chrysomelinus* (n.k.), and

1389

1 Sepsid fly ♀ <i>Sepsis ? fulgens</i> Meigen K.G.V. Smith det. 1958 (needs ♂ for certainty)	A
1 other small fly <i>Louchoptera lutea</i> Panzer K.G.V. Smith det. 1958	B
4 <i>Chrysomela polita</i> (1 kept), presumably from the mint.	C
1 blue <i>Lema cyanella</i> (L.). (comes on common thistle. Joy; Fowler)	D
Some heterop. bugs (1 k.) <i>Lygus rugulipennis</i> Poppius G.G.E. Scudder det. 1960	E

The ground surface at the base of this thick 2 ft. vegetation has a rich though patchy moss-liverwort layer over the damp clay earth. Rather little litter – no uniform cover, only scattered leaves, mainly *Carex*, some ash and sallow. This whole marshy patch is rather shaded. There was not an abundant fauna at the surface, and here it was mainly in or under the moss; a little vole dung (*Microtus* or *Clethrionomys*).

1 Black, two spot, dark and yellow-legged large <i>Stenus bimaculatus</i> Gyllenhal	F
Several small <i>Bembidion</i> (2 k. one kept for collection) <i>B. guttula</i> (Fab.) W. Murdoch det. 1962	G
2 <i>Tachyporus chrysomelinus</i> (n.k.)	
1 very small black beetle	H
Many small sphaerocerid flies (3 k.) <i>Limosina</i> sp. Undetermined K.G.V. Smith det. 1958	J
1 <i>Glomeris marginata</i> (n.k.)	

{reverse side}

29 OCTOBER 1958.

29 OCTOBER 1958. WYTHAM WOODS*****

Very large numbers of **acorns** now on the ground.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 13.

12 November 1958-

C.E. 1390-

Red ticks²⁵ mean ready to be indexed. Crossed red ticks mean indexed.

Circles²⁶ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

²⁵ Shown as **bold** in edited version.

²⁶ Edited to A or 00

12 NOVEMBER 1958. WYTHAM WOODS.

Inspected grassland areas on top of the Hill, with H. Gall and D. Meads, to work out a management policy for control of invading scrub and bramble.

- Agreed that
- (1) Meads will continue to scythe **brambles** on Rough Common, but not during the grass growing season,
 - (2) he will cut out all young **hawthorns** on Upper Seeds, Lower Seeds, and the centre of The Dell (not the scattered ones by the path at the top),
 - (3) we will work out later a policy for **bramble** control on these areas,
 - (4) he and I will together do some selective scrub management on the Lord's Common and on the Ridge.
 - (5) so as far as possible, at least some of the **bramble** clearance work should be experimentally designed, with controls.

Rough Common. Looked at the area west of the road and south of the quarry. This has developed some fairly strong patches of *Rubus vestitus* by 1954, on the area of pure 'climax' *Brachypodium pinnatum* used for grasshopper censuses. It was hormone-sprayed by J. Fryer in 1954, and the dead brambles were burned. A small grass fire was accidentally started in 1957 in the more south-west bit, and this gave rise to aberrant succession (see my notes in C.E. {Book} 11 page 48, {Book} 12 page 36) which has now mainly reverted, though effects are complicated by some probable effects of rabbit disappearance over the same period.

{reverse side}

12 NOVEMBER 1958.

12 NOVEMBER 1958. WYTHAM WOODS.

During this period Meads has done energetic cutting of **bramble** regrowth with latterly a 'Jumbo' scythe, all over the west area south of the old Quarry, also on the main grass area east of the road. At present the open parts away from the scrub and wood margin are free of bramble thickets, though a large number of small and weak plants still remain in the grass, scattered about. This year the control was usually every week. My impression is that the main aim of reducing bramble to a quite subordinate state has been very successfully achieved by a lot of unremitting attention; but that the hand may have been over-played, insofar as trampling plus some scything of the grass has almost certainly reduced the denseness and extent of flowering of the dominant grass *Brachypodium pinnatum*. Its flowering and dense tussock are far more patchy than formally. By leaving the grass alone during the growing and flowering period, on these 'climax' areas, the action of the grass, aided by less intensive bramble scything at other seasons, would probably suppress the bramble. At any rate this could easily be tested by marking some control areas.

There is a very good strip of flowering the *Calamagrostis epigeios* on the west side, that seems to have increased in strength latterly. This is additional to the one by and under oaks by the south end of the Common. **Harebells** still in flower among *B. pinnatum*. Undominated areas have a fair mixture of plants, including some **ragwort** (not much flower), and *Arrhenatherum* clumps.

{reverse side}

12 NOVEMBER 1958.

1948 date confirmed to Meads by Archer, the chief farm hand of Mr. Wise. (Mr. Wise, the old tenant died at the end of this month.)

12 NOVEMBER 1958. WYTHAM WOODS ***

It is Meads' opinion that, while hormone-spraying may possibly be worth while for a large job of killing **bramble** thickets, scything is much less trouble for all smaller jobs, e.g. cutting out small individual plants. On the other hand, this cutting does not kill the roots, which is why the grass itself must be allowed to make maximum competitive growth.

Lord's Common. Meads has done a good job of walking on the ***Brachypodium pinnatum*** patches, which though they have been apparently spreading slowly, do not appear to me thick tussocks or flowering freely.

Upper Seeds. We inspected a good deal of this. The rolling ground creates a natural 'ridge and furrow' effect. In the hollows **cocksfoot** grass is extremely lush and forms deep grass mats and field layer. The tops have more patches of low field layer or even herb mat in places. In general, the area is an extremely rich and varied limestone meadow. It has not been ploughed since 1948, on the north half. At the earlier period, there was a great deal of stony ground, – limestone coral fragments and small flat stones. There is virtually no bare ground at all now. **Bramble** has formed a few limited thickets, mainly around the round copse area. There are many small bramble plants in the grass, which may itself limit their growth. We discussed the idea of letting the bramble accumulate in a ring round the copse, but controlling it elsewhere.

{reverse side}

12 NOVEMBER 1958.

*Actually, Meads told me (1 December) that when he finished cutting out the **hawthorns** on all those areas he counted 1300 odd! Most of these were quite small ones hidden in the meadow. I think the spread of hawthorn must mainly be by birds feeding on the berries, at any rate on these open areas. The importance of the larger young trees as perching sites and therefore as centres of dispersal, or ditto of any existing perching sites like fence-posts may therefore be great.

†Archer told Meads this has not been ploughed since the last war, when it had a crop of buck-wheat on it in one year.

12 NOVEMBER 1958. WYTHAM WOODS ***

The scrub-grass patch near the Snakepit and Comp. 8 will be left uncontrolled. Elsewhere, the comparatively few* hawthorns etc. coming up will be slashed out.

There is a centre strip cut for hay, and a **lucerne** strip nearer The Dell. Sheep have been up here.

Lower Seeds. I explained my plan to try and secure for additional reserve the upper (unploughable, and not ploughed since at least 1948†) knolls running parallel to Brogden's Belt as far as the Swimming Bath. A suitable fence line would be from about the junction of Comp. 7 and The Ridge, past Varley's Knapweed Cage to the path, at the Swimming Bath. This area, once half bare ground with violets and bugloss and wild strawberry, then thickly invaded at the edge by ploughman's spikenard, is now a dense meadow, with much **cocksfoot** and apparently invading ***Brachypodium pinnatum***, and locally this year a lot of ***Cirsium eriophorum***. There is **bramble** invading, and young **hawthorn**; the latter to be slashed. Large flock of sheep seem to be kept mainly on the lower grass slopes, and these knolls little used.

Brogden's Belt. Gall showed me where he found ***Geaster*** fungus on the litter under beech, and we found several more, in advanced age but puffing spores when pinched. Unattached to the ground at this stage. Do the "legs" help by pushing the spore outlet above the new beech litter?

{reverse side}

12 NOVEMBER 1958.

12 NOVEMBER 1958. WYTHAM WOODS ***

The Dell. This does not seem to have changed conspicuously on the centre and lower parts; but the upper part, that had a rich herb-grass species mixture in 1950, is now rather dense tall grass, including *B. pinnatum*. A few **hawthorns** are to be slashed out, but leaving those by the path at the top, and a young ash there.

Miscellaneous notes.

- 1) Meads did not know of slow-worms (*Anguis fragilis*) on The Dell (where Gill Godfrey found them during her *Microtus* work); but has seen them on Rough Common.
- 2) We saw a **hare** on Lower Seeds.
- 3) I collected a large syrphid fly on a dandelion flower in Upper Seeds limestone meadow. ♀ *Eristalis* (= *Tubifera*) *tenax* (L.). K.G.V.Smith det. 1959
- 4) The Chalet Woods between the Chalet and the water tower still has much **bramble** field layer after thinning several years ago. On this two **wrens** were hunting.

1390

{reverse side}

25 FEBRUARY 1959.

25 FEBRUARY 1959. WYTHAM WOODS ***

In the afternoon; with Harold Gall, met the assistant University land agent Major J.R. Mills, who is now secretary to the Biological Advisory Committee, to discuss further reserves in Lower Seeds and the Park. Following the death of Mrs. Ffennell we were able to extend down to the head of the Park, and we now have a ring of scientific reserves on the top of the North Hill, from Rough Common (with a short gap in the Chalet Woods) to Lord's Common, elder scrub in Comp. 8, Brogden's Belt down to the Park, plus a bit running on the Park edge, the Dell, and all the scrubby woods up to My Lady's Seat (nearly); thence (with a gap by the Singing Way and Bowling Alley Plantation) to the Bowling Alley and (perhaps later on) Sunday's Hill. The two main blocks besides this area are the northern wood and Marley Wood. To which can be appended a good many marshes; and odd bits (like Chalet beeches and Upper Seeds) that are not officially scheduled; and the Logs.

The present plans for extensions are the result of the death of tenant farmer, Mr. Wise, of the Home Farm. A new tenant may be taken on soon. The following three areas were visited and preliminary plans discussed.

Lower Seeds. Reserve a strip of 5.93 acres of rough limestone grassland on the upper rocky knolls outside Brogden's Belt, above a line from the Swimming Bath to the farther corner blue post of the Ridge. All this ground has grown into very dense tussocky grass, mostly **cocksfoot** and *Brachypodium pinnatum*. (Meads has not been able to cut out all the thorn etc. yet, but is going to do so). The new boundary

{reverse side}

25 FEBRUARY 1959.

25 FEBRUARY 1959. WYTHAM WOODS ***

fence will eventually be taken along this line, and be stock-proof. There are a lot of ploughman's spikenard (*Inula conyza*) dead flower stems in this grass, and all (and a bit more below) of this area has a wire-netting sheep fence to exclude sheep that are on the T/2 pasture below. Evidently the upper zone has not being grazed at all last year, both from its appearance generally and the spikenard that sheep eat down eagerly in summer. There are many tall dead thistle stems (*C. eriophorum* etc.)

On the old plough fallow or stubble on the other side of Lower Seeds, **skylarks** were singing and a common **partridge** flew. There were a few **bullfinches** on the beech edges of Brogden's Belt, field layer and scrub zones.

Park Pasture. The upper sector of the Park from about level with Wormstall Duck Pond is still rough pasture (as described on my visit with E.P. Odum, 58) with a number of old scattered trees and big shrub-trees, some fallen. All over our yellow ant mounds except where seepage makes the ground too damp. I don't think it can ever have been ploughed in the last hundred years, (and may simply be regressive woodland exposed for a long time to grazing?). The **yellow ant mound** systems must be quite old, and one of the great values ecologically is the undisturbed nature of the ground, except for some stock trampling.

Agreed to propose that 5.2 acres at the head, possibly joining the Dell/Scrub

{reverse side}

25 FEBRUARY 1959.

25 FEBRUARY 1959. WYTHAM WOODS ***

be kept out of the new tenancy, but grazed by the tenant, and marked by posts, not a stock fence. Trees will be under control of Mills, and some left.

Wormstall Duck Pond. There are now a cattle-excluding rough barbed wire fence round the whole of this. It has jungly trees and salallows and is very marshy, even though the water runs out through a deep underground channel through the dam. The water is very cold and the swamp has much leaf litter. Agreed that this might be excluded from the tenancy as a reserve, as farmers now do not like their cattle drinking from ponds and marshes, but prefer piped troughs. This would involve the Chest in fence maintenance. The improvement of the dam, though a possibility, is not immediately required.

A pair of **lapwings** are circling and sitting on arable land below the Pond.

{reverse side}

2 APRIL 1959. WYTHAM WOODS.

- A I put some dry brown last-year's lime tree leaves in jar. The stoneflies only found them when I weighted the leaves to keep them on the bottom, and thereafter crawled on them. Failed to breed them out.
- B. 2 ♀, 2 ♂ ***Theobaldia annulata*** K.G.V. Smith confirmed 1959 + 2 larvae kept
- C Two emerged from pupae at surface 3 and 4 April, but the first one stuck and was not kept. The other two lay still on the bottom as pupae. The fly is a chironomid. ***Pentaneura nubila*** (Meigen) D.H. Eccles det. 1959 (says larvae carnivorous)
- D Smaller chironomid fly emerged 1 May. ♀ ***Tanytarsus (Micropsectra)? brunnipes*** Zetterstedt K.G.V. Smith provided details 1959. ("Cannot be certain of species without male").

2 APRIL 1959. WYTHAM WOODS.

Went (with Rob) to Wytham Park, 2.45-4.30 p.m. G.M.T., to collect some fresh-water animals, more particularly stonefly nymphs of *Nemoura dubitans* for Dr. Hynes. Warm day with sun/cloud. (No *dubitans*, if present at all, survived because parcel not opened in time.)

Marsh 9. This number is now assigned to a narrow seepage strip of grass and *Equisetum telmateia* in the margin of The Mount wood (oak-ash-sycamore, a few spruce) and the open Park. The marsh is all just inside the wood. The horsetails were flowering magnificently. There is apparently no visible running spring, only small puddles of seepage water a foot or two long, with muddy detritus bottom, and a certain amount of alga. There were a lot of stonefly nymphs, of small and medium-size, and some dead leaves, including sweet chestnut and sycamore; these were kept to breed out.

Also kept about a dozen large dark mosquito larvae, that hung on the water surface; and for much smaller pale chironomid pupae that kept to the bottom.

Also kept alive.

1391 A
B
C
D

Spring Trough 8 (T 8). This number now given to the spring where *Bathynella* and *Niphargus* were found by Efford recently. A fast flow of water comes out of a 4 in. drain-pipe into a brick tank, or trough, open at the top and measuring circa 2 x 1½ ft., and water 10 in. deep. No plants, only muddy silt in which were some large coupled *Gammarus* with eggs, and a few insect larvae. No subterranean forms found. The ground is heavily cattle-trampled around, and in the grassy seepage marsh below, which meanders for over 100 yd. to join the main brook. The soil looks "alluvial", and the

{reverse side}

2 APRIL 1959.

2 APRIL 1959. WYTHAM WOODS ***

spring is in a well-grazed T/2 pasture with some yellow ant mounds, and the nearest tree is over 70 yd. away. No leaf litter in the trough.

Wormstall Duck Pond (now a Reserve). This has a very wild, neglected and mixed vegetation, of which some of the trees must originally have been planted. A full description of the plants is needed later. There are some tall willows, common elms, and a few others, like sycamore. On the banks round there are a lot of overgrown hawthorns, perhaps the remains of a hedge. The marsh is almost completely occupied by salallows, while the “reed-swamp” or marsh is dense tall *Carex*, *Epilobium hirsutum* and a little *Typha latifolia*. The water runs in very shallow complex channels over muddy sand, and there are large areas of very soft muddy, dead leafy quagmire too soft to walk on.

I spent some time scooping the debris and very muddy bottom – the water runs clear an inch or two deep, but becomes turbid with fine brown mud the instant it is disturbed. Examined in the field in a white dish. No planarians seen. Many *Gammarus*, some coupled and with eggs. Only a few stone-fly nymphs, patchy, not in the open silty water. Some very large ones, and more smaller ones. Took a live sample for Hynes, kept in moss (terrestrial, wetted), not in water, and posted to
Failed

{reverse side}

2 APRIL 1959.

B. 3 *Asellus meridianus* Racovitza I.E. Efford det. 1959.

2 APRIL 1959. WYTHAM WOODS ***

Liverpool at 5.30 p.m. in a tin. Among other animals noticed were some rather small *Asellus*. Collecting was done on the north edge of the swamp, where I had originally found *Nemoura dubitans* on the willows. 1392 B

Rob saw a **green woodpecker** pecking into a **yellow ant** mound in the T/2 pasture above here, and two others flying. We heard the roll of a **greater spotted woodpecker**. N.B. if the new tenant does plough and re-seed these pastures, the **green woodpeckers** will be deprived of an important part of their food supply; and possibly the birds will press more heavily on the 5 acres reserved at the top?

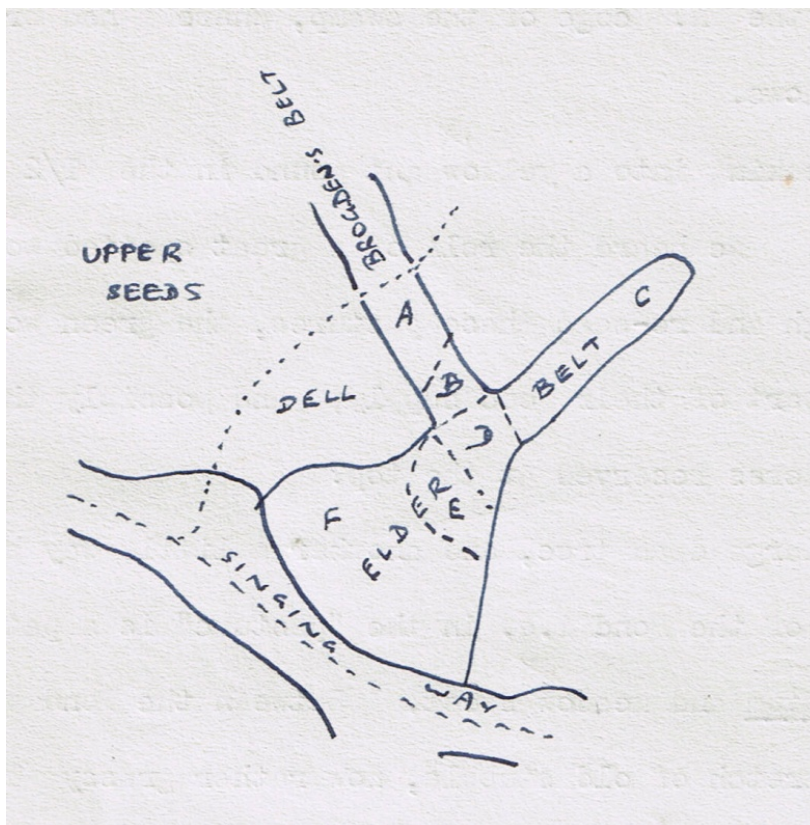
Just by Wormstall D.P. is a large dead tree, and another a little way below.

Just outside the north-east corner of the Pond i.e. in the "pasture" is a patch of marshy ground with *Epilobium hirsutum* and **meadow-sweet**. Between the Pond and the pasture that has T 8, is a wide stretch of old stubble, now rather grassy T/2 fallow, on which one or two pairs of **lapwings** were flying and settling. In it is some scattered **coltsfoot** in flower, and leaves of silverweed (*Potentilla anserina*).

Rob saw a pair of **kestrels** sitting high up in a tree in the upper pasture of the Park.

{reverse side}

2 APRIL 1959.



9 APRIL 1959. WYTHAM WOODS.

With Kitty Paviour-Smith and H.N. Southern, did a reconnaissance of the lower end (South) of Brogden's Belt and the Elder Belt woods forming the new scientific reserve on the edge of the Park. K.P.S. noted and labelled LOGS 70-79, including some good standing beech and other dead or decaying boles.

A. South part of Brogden's Belt. This is mainly large or good sized beeches, several dying or dead, but canopy generally and beech litter, with only a scattering of dog's mercury, bramble or grass in more open patches, hardly dignifiable as glades. There are also a few elm (apparently both English and wych), 1 big larch at southwest corner, near this a small sweet chestnut (galled and suckering). There is a lot of woodpecker pecking of the rotten standing trees, but very seldom below 6 ft. One large beech just in from the larch tree, has a good tree hole at circa 8 ft., at the base of two close-together columns of double trunk. It was overflowing down the lower trunk. On the same tree at 6 ft. was a tiny 8 in. stub that a tawny owl had used as a hunting patch, as pellets lay below.

B. Transitional bit. Partly a group of enormously grown up coppice sycamores, and two very big scale-barked old **sycamores**, one of which is double-stemmed (? also old coppice). Some **grey-squirrel**-killed branches in canopy. One or two fallen stems. There is blown beech litter, but dog's mercury and nettle and moss makes a fairly sudden-green edge. Much elder, partly fallen and decayed. No other shrubs except a few

{reverse side}

9 APRIL 1959.

9 APRIL 1959. WYTHAM WOODS ***

hawthorns. Just below the sycamores are the fallen birch logs of LOG 10, in thick elder and wood.

C. East Belt. There is a fairly uniform structure all along here, the high elders (up to 30 ft.!) recording the smashing discrimination of the former very heavy **rabbit** population, in turn dependent upon the geological formation. The upper part is a flat or gently sloping terrace, roughly along the 400 ft. contour. This is Coral Rag. Below is a steep slope down to the Park (which now has the modern stock-proof fence along it). A few feet below the escarpment the Calcareous Grit yellow-brown sand belt begins. This is where the **rabbits** were, but there are now no open buries, and no rabbits seen, only a little dung in one spot. But we found three single-hole **badger** earths, two here and one in D, with well marked path between. One of them here was actually made in the exact junction of limestone and sand. Tracks. The trees were quite varied; though they only form a touching high canopy (i.e. above the elder, though this is all above scrub limit) in a few places. There are beech, oak, wych elms, 1 big sycamore, 1 big larch, 1 horse chestnut, 2 limes, 1 maple, and near the tip 1 pine and 2 large ash. Right at the tip is one heavy *Clematis* patch climbing into the canopy, elsewhere none, no ivy, no honeysuckle. Most of these trees were earlyish 19th Century plantings.

{reverse side}

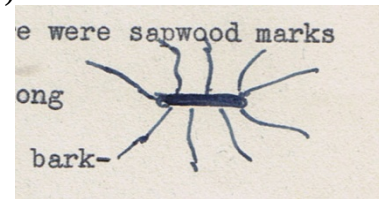
9 APRIL 1959.

9 APRIL 1959. WYTHAM WOODS ***

The total canopy must be fairly dense, and the chief ground and field layer is very simple: dog's mercury, nettles, moss, with small societies of plain or spotted arum and bluebell, a little ground ivy, violets, no primrose, celandine, anemone, St. John's wort etc. The only bird a robin.

The large amount of **nettle** may date from the heavy rabbit warren period, though a lot is also on the rocky top – could be a manuring effect.

One not very old fallen **wych elm** log had a lot of bark torn off apparently by **grey squirrel** wanting the under-bark for nest material. There were sapwood marks of bark-beetle colonies – rather short parent galleries and long larval ones (not many). This is the first definite record



of bark-beetles in Wytham wych elm.

D. and E. Below the Dell. The situation is in general similar. There is a big oak and two maples, and a **badger sett**. West of the track down from the Dell to the Park are the grey poplars with Spring 2. These poplars are spreading into a larger group. There is much elder etc., but in one place where it is open there is a big bramble thicket by the Park edge.

There is now a wide new gate in the fence at the bottom of this track. When the

{reverse side}

9 APRIL 1959.

John Clarke reported (13 July) that the wheel tracks have now been well grown over by grass. In trapping this month on the Dell he found **Microtus** numerous, but commoner on the east side. He has been trapping at intervals there during the last year or two, and has a wide grid of orange-painted sticks. Has never seen any **blindworms**.

9 APRIL 1959. WYTHAM WOODS ***

fencing was done, they evidently churned up this with vehicles, and have made an obvious track up through the Dell *Brachypodium* which has more of a different grass (? *Holcus*). Any further through traffic of vehicles and above all of stock must be prevented.

The Dell. There is a wide-spaced grid of orange stakes. Later John Clarke confirmed that he used these last year to trap *Microtus* for experiments, and that they were quite abundant. Will do more this year; promises to look out for blindworms.

The Park. **Kestrel** flew past. H.N.S. says pair often nests in Park trees, another in Follies, and sometimes another on Radbrook Common.

Spring 2. Running well. A good deal of poplar dead leaf still unskeletonised. A few *Gammarus*. No stone flies or planarians visible. Dead shell of *Succinea* (? *putris*) (very old) in sand.

F. Below my Lady's Seat/Dell. There are only a few trees until one gets near the top by the beeches – one or two big oaks, maple. Thick or scattered elder, and a jungle of heavy bramble mixed with it, difficult to traverse at all in places. We did not visit Spring 1, or the slope opposite Sunday's Hill sector.

{reverse side}

9 APRIL 1959.

B-C	B	3 <i>Orchesella cincta</i> (L.)
	C.	1 <i>Mydonius nivalis</i> (L.) (as <i>Entomobrya n.</i>) C.A. Elbourn det. 1967

9 APRIL 1959. WYTHAM WOODS ***

In B K.P.S. found a small amount of *Trametes mollis* Fr. growing on an old fallen branch of sycamore (LOG 76). It appeared tough in the hymenium like *Daedalea*, thin and dry, attached by a narrow base to the log. Under its rather tight base was one *Agathidium*. Brought home and banded in addition, it produced about a dozen small staphs. of probably more than six species, 7 *Agathidium*, three other species of beetle, and half a dozen other invertebrates! A fairly full sample (except mites and very small springtails) kept to name 1395

3 very young *Oniscus asellus*

n.k.

1 false scorpion *Chernes cimicoides* (Fab.) M. Lloyd det. 1960.

*A

Collembola

*B-C

2 *Agathidium varians* Beck (all 7 *Agathidium* rolled into ball at death)

*H

1 *Agathidium nigripenne* (Fab.)

*J

2 *Vincenzellus viridipennis* (Latreille) 1 k.

*K

1 *Rhinosimus ruficollis* (L.)

*L

* = K. Paviour-Smith det. 1959.

1 *Lordithon thoracicus* (Fab.)

J.H. Frank det. 1966.

M

1 *Leptusa fumida* (Erichson)

J.H. Frank det. 1966.

N

1 *Bolitochara bella* Maerkel

J.H. Frank det. 1966.

O

5 *Bolitochara obliqua* Erichson

J.H. Frank det. 1966.

P

4 Staphs.

{reverse side}

11 APRIL 1959.

11 APRIL 1959. WYTHAM WOODS.

Went out early (6.30-8 a.m. G.M.T.) with Rob, to look for woodpeckers working on dead trees in Brogden's Belt. Cool, sun not quite through cloud, little breeze from West. But though we heard both **green** calling and **great spotted** drumming in the Singing Way beeches near My Lady's Seat, and green in the Park, none visited the Brogden trees. A good many **woodpigeons** flying between Park trees. We went down to Spring 2, then along the top of Lower Seeds to The Ridge, and back down the Chalet Road. Birds were rather quiet, and practically no warbler song was heard, two problematical warblers only were seen (probably willow wren and ♀ blackcap). But plenty of **blackbird** and **song-thrush** song.

The Lower Seeds reserve at the Swimming Bath end has dense grass cover, mixed with other plants, but there are large patches of violets flowering in it. The flowers are dark purple, have spreading hairs on the petioles, 1396

{reverse side}

11 APRIL 1959.

11 APRIL 1959. WYTHAM WOODS ***

no scent, but apparently quite obvious stolons or at any rate a rhizome. They are either *V. hirta* or some hybrid of *hirta* and *odorata*.

There is some **fallow deer** damage to spindle on the The Ridge.

{reverse side}

30 MAY 1959.

10 July. She has ceased all trapping on this quadrant.

30 MAY 1959. WYTHAM WOODS.

Went with Rob to look at a pair of **redstarts** (*Phoenicurus phoenicurus*) nesting at circa 12 ft. in a nest-box on an oak-tree near the Chalet. It is by the drive, essentially on woodland edge, though not on the outer edge but in sycamore-oak wood very close to it. The birds were flitting and hawking in the high canopy (i.e. over 15 ft. mainly), and though elusive occasionally appeared clearly with brilliant flash of colour in the afternoon sun. C. Perrins has noted 5 pairs nesting in Wytham Woods this year, one of which is in a nest-box on grey poplars in the upper part of the open Park. This species very neatly illustrates the structural influence on nesting site: mainly tree-holes in South Britain, commonly stone walls in the North. It seems to be chiefly a bird of Edge and Savannah habitats.

Ellen Phipps is doing some field trapping of *Microtus* for Dennis Chitty, on Rough Common, and the trampling effect on *Brachypodium pinnatum* at this season is already striking. As Meads has now stopped bramble-slashing there, it is important that the main "grasshopper count" area should be left untrampled this summer, to enable us to (a) see the result of *Brachypodium*/bramble competition (b) *Brachypodium*/*Bromus erectus* etc. competition

{reverse side}

30 MAY 1959.

30 MAY 1959. WYTHAM WOODS ***

(c) achieve one good area (as in former years) of climax *B. pinnatum* (d) use this for repeat counts of *Chorthippus parallelus*.

In the centre of a fairly shady path through 'Blenheim' wood (mixed deciduous with much beech and oak) was a single plant of gromwell (*Lithospermum officinale*) with some of the pale yellow flowers just open. Druce records this species for "Wytham".

In the edges of the oak-ash-sycamore woods by the drive up to the Chalet, patches of **red campion** in flower are conspicuous just now.

H. Gall reports *Orchis praetermissa* in flower on the Bowling Alley – a new record there. (See also CN 202/8/1-14).

{reverse side}

14 JUNE 1959.

14 JUNE {1959}. WYTHAM WOODS.

The great drought and sun of May (the driest for many years) has largely continued to mid-June. Many plants are backward and some are stunted. We noticed this for *Anacamptis* in bud on the partly trampled edge of Rough Common. But a good deal of **rock rose** is in flower though mostly rather hidden by grass growing through it. The advent of a skilled part-time rabbit-killer to help Meads must cause the **rabbits** at Wytham to remain very scarce. The abundance of *Bromus erectus* in flower on the *Brachypodium* area of Rough Common is again striking.

Rob and I walked down to Pond 1 to obtain some water-fleas to stock my garden pond. There was an extraordinary profusion of spotted orchids (*O. fuchsii*) flowering in the plantation ride down Radbrook Common. Most of these plantings are now at scrub canopy height and much of them actually closed canopy. But

{reverse side}

14 JUNE 1959.

(A) H. Gall says these are variety of *fuchsii*.

14 JUNE 1959. WYTHAM WOODS ***

the remaining grassy spaces and the rides have a very rich meadow type, in which flowering ***Dactylis*** 4 ft. high is conspicuous in places, and the orchids give much lilac and purple. There is no sign of the drought on the slopes, which indeed did have a lot of spring flushes (one of which still contains bogbean). The contrast with the dry look of the Corel Rag grassland above is very obvious. There were a few smaller, more compact orchids, paler, with no or less spots on the leaves. I kept one of these and a tall *fuchsii*. 1399 [B]

Otherwise these grassy rides do not have many forbs in flower just now. The white comfrey has finished.

Rob saw a **bullfinch** in the plantation (later I saw a pair in the lane-edge scrub – which we score as deciduous woodland edge – below the Forester's House).

The little meadow north of Pond 1 also had ***O. fuchsii***. Also – a great surprise and a beautiful site – a society of the meadow thistle (*Carduus pratensis* – now ***Cirsium dissectum***) in dark pink flower with non-dissected leaves that are white with down underneath. Several were over, and one of these had the leaves holed by an insect. This plant is new to my knowledge of Wytham Area, but Druce gives Wytham [C]

{reverse side}

14 JUNE 1959.

14 JUNE 1959. WYTHAM WOODS ***

as the only locality in his "Isis" district. The books specify that it comes in damp or boggy meadows or fens. Damp meadow (not A-T) is the description for Pond 1 site. Also in this meadow were a number of twayblades (*Listera ovata*) in full flower. I think the place should be classified as woodland edge, though, as it is closely surrounded by scrub and in part by trees as well, and the whole area is very small.

Pond 1. The water is very low, about 2 ft. 6 in. below the dam top. There was a very minute trickle out at the base of the sluice board. A slight smell of rotting vegetation. The greater part is occupied by a great *Scirpus lacustris* reed-swamp (just beginning to come into flower and its stems showing the pale muddy traces of higher immersion before the drought). Among it were numerous pairing blue demoiselle dragon-flies. One ♂ *Agrion splendens* on the A-T scrub. One **mallard** ♀ flew up.

In the relatively small V gap opposite the sluice the water is practically full of a dense growth of *Potamogeton natans* (with the usual chironomid fly leaf mines), which covers much of the surface. Among it a few stems of *Hippuris*. The *Potamogeton* was in flower. Water less than 8 in. deep.

{reverse side}

14 JUNE 1959.

These moths were flying when disturbed from field layer.

14 JUNE 1959. WYTHAM WOODS ***

We used a small dip net of bolting silk with glass tube, within 4 ft. of the dam. It is in practice quite impossible here to collect by this means the plant, water and bottom things separately: one can only assign the animals habitats from observation and knowledge of their habitats. This is probably why Mary Laurie's notes 10 years ago gave no such break-down.

There were huge numbers of *Daphnia pulex*; a *Eurycercus lamellatus*, and *Simocephalus* and some large *Cyclops*; also many *Chaoborus*. And a very young (i.e. 1959) larva of *Triturus* (presumably crested newt). A young *Asellus* and adult and young *Gammarus*. Young *Corixas* and *Notonecta*. Many other animals.

Among the rank marginal vegetation by the dam (much of it *Equisetum telmateia*, and all partly tree sheltered) were many china-marked moths (*Nymphula nympheata* (L.)). We found there the biggest **common toad** I have ever seen, with dark bands on its legs.

In the ride at the bottom of Woodcroft Copse, a large patch of *Lysimachia nemorum* was in flower.

{reverse side}

26 JUNE 1959.

26 JUNE 1959. WYTHAM WOODS.

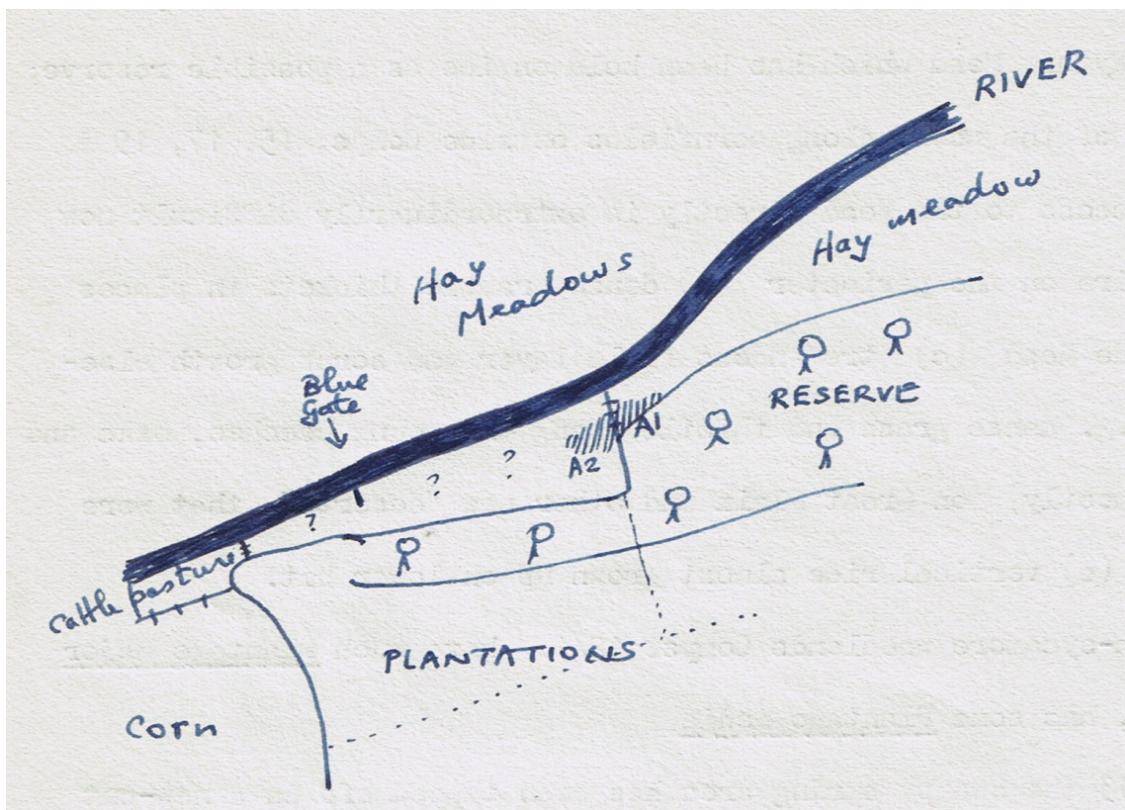
Went down from the Chalet on the vertical ride Comps. 18 + 16 + 15/12 + 13 + 14, to look at the west end of Wytham Mead which has been held on ice as a possible reserve; returned by the W. side of the wood, along corn fields outside Comps. 15, 17, 19 and 20, and Rough Common. Access to the Mead directly is extraordinary difficult now because of (a) barbed wire on the perimeter (b) dense bramble thickets in places both in the wood and on the Mead (c) tremendous field layer and scrub growth elsewhere on the open parts e.g. dense grass and thistle among the young beeches, oaks and spruce (still < 6 ft. mostly) on Great Plain and other new "deserts" that were heavily cleared of trees (d) vertical ride almost grown up on lower bit.

The Corel Rag oak-ash-sycamore woodlands Comps. 12/18 have much *Plantago major* (huge) in the grass rides, and some *Plantago media*.

In (I think) Comp. 13 the swampy spring area has been tapped off in a new-cut drain (? 1958) which is cleverly contoured to make virtually a new spring. I must map its complete course next winter. One glade through which it passed had tall marsh plants on edge of the drain (which had ½-1 in. of flow); also ? *Nasturtium* growing on the squelchy bottom mud and in flower. The absence of litter on the mud bottom suggests it was cut last winter. 1400

{reverse side}

26 JUNE 1959.



? = Part left rough for possible reserve.

26 JUNE 1959. WYTHAM WOODS ***

On the damp clay in woodland ride Comps. 14/15 some *Lysimachia nemorum* in flower. This is the second colony I know of in Wytham Woods.

On this and the cross ride Comp. 15/18 + 17 there are heavy growths of flowering *Carex pendula*, *Juncus inflexus*, *J. effusus* and *J. conglomeratus* in places, and many tussocks of flowering *Carex sylvatica* and *C.* (tallish, dense heads). Ragged-Robin (*Lychnis flos-cuculi*) and *Campanula trachelium* occur in the ride at the west end of Further Clay Hill.

All the Mead in sight north-east of the fence that still cuts off the possible reserve, is mowing meadow (hay recently cut and cleared), except for a narrow riparian zone on the steep river bank and actual edge, and a small area of damp ground [A1] which has been left standing as a marsh of dense *Digraphis*, *Carex* etc. This marsh continues over into the north east edge of the reserve (A2), where it includes dense stands over 4 ft. of a *Carex* with rather narrow leaves, and *Epilobium hirsutum*, comfrey, etc. In it some *Thalictrum flavum* (flowers over but remains present). There is a rich riparian "meadow" along the riverbank reaching 6 ft. in places, though its inner zone is ordinary grass meadow. It includes *E. hirsutum*, comfrey, meadow sweet, nettle,

{reverse side}

26 JUNE 1959.

26 JUNE 1959. WYTHAM WOODS ***

and many other species. Sweeping disclosed a great many bugs (both HET. and HOM.) And this included aphids; but very few beetles or flies. I kept a few insects: 1401

1 *Empis livida* L. K.G.V. Smith det. 1959 A

1 Trypetid fly ♀ *Xyphosia miliaria* (Schrank) K.G.V. Smith det. 1959 B
(Breeds in *Cirsium arvense*)

1 Mirid bug *Leptopterna dolabrata* (L.) G.G.E. Scudder det. 1960 C

2 small heteropt. bugs *Plagiognathus arbustorum* (Fab.) G.G.E. Scudder det. 1960 D

Specimens of flowers and fruit of *Galium aparine* from riparian meadow. 1402

The rest of the reserve is less interesting and includes the following components

- 1) A thin stand of rye-grass and white clover sown on the wide bare swath left after the new water-pipes were laid: hardly covers the ground anywhere, which is cracked by drought.
- 2) Huge bramble area in the right-angle by the wood. This species has smallish white flowers; it is widespread all over this north slope of the Hill.
- 3) Bits of more natural dry grassland at the south-west end.
- 4) Bits of scrub, hawthorn, not large areas and not dense.

{reverse side}

26 JUNE 1959

Soper agrees to leave it untouched for discussion with Professor Blackman in autumn.

26 JUNE 1959. WYTHAM WOODS ***

I think the reserve should be kept as it is. One can see the appalling results of heavy cattle grazing and trampling in farmer Franklin's fields just beyond.

In any case it should not be allowed any farm uses except hay-mowing (either once, or regularly – but the ground is very irregular and knobly), and even so the marsh and broad riparian belt should be kept (say 15 ft.).

All the fields from the River to the Chalet Road, West of Wytham Woods, are corn now. There is a high hedge bank covered with white bramble, which completely prevent entry! Just outside Spring 37, there is a marshy area with much ***Equisetum telmateia*** which has defied the plough – about 40 x 40 yd. square. In the fields outside the road exit gate there are two metal drinking troughs with cistern-controlled piped water. One was very turbid-looking and had *Agabus* in.

Tufted vetch (***Vicia cracca***) in flower on the (field-layer) plantation of Comp. 15, and on meadow in the reserve on Wytham Mead.

Bullfinches: 1 at woodland edge Wytham Mead; 2 in wood below The Ridge; 2 in woodland edge at bottom of Keeper's Hill. Blue **skullcap** in flower on River bank.

{reverse side}

26 JUNE 1959

26 JUNE 1959. WYTHAM WOODS ***

The drought has broken yesterday, with heavy thunderstorms, but it was very dry and mostly hot through May and June. The hay-meadows have big polygonal cracking in the soil.

{reverse side}

24 JULY 1959

24 JULY 1959. WYTHAM WOODS.

Went up, on a very hot sunny day during an unusual continued drought over most of two months or more, with Professor Robert Platt of Emory {sic = Emory} College, Georgia. He is an American botanist I met at Mols. Probitts said he saw 5 **rabbits** on a recent evening between That Chalet and the Old Nursery. The ground is extremely hard everywhere and is practically impossible to drive stakes in.

On Lord's Common the limestone grass is patchy T/2 of turfy (drought and trampled?) vegetation with stunted **centaury**, **viper's bugloss**, **Lotus**,

{reverse side}

24 JULY 1959.

24 JULY 1959. WYTHAM WOODS ***

many **carline thistles**, less than 6 in. high, and scattered ***Pastinaca*** and **ploughman's spikenard** and ***Brachypodium pinnatum*** – even this nearly all less than 2-2½ ft. high. All these were in flower. On top of the Coral Rag section was a luxuriant tuft of **harebell** in flower.

I swept the ***Pastinaca*** mixed with a little flowering spikenard, at field layer heights 6 in.-3 ft. and there was not a large amount of insect life, and especially few flies. Has the hard drought prevented emergence of soil species? 12 noon-1 pm. GMT. (Some bees, and one or two ***Polietes lardaria*** seen but not collected).

1406

1 green narrow bug ***Megaloceraea linearis*** (Fucasly) G.G.E. Scudder det. (as *M. recticornis* (Fallén)

A

2 small active green and black speckled heteropteran bugs, which were abundant
Lygus campestris (L.). G.G.E. det. 1960 (as *Orthops c.*) 1 kept

B

1 dull green ***Oedemera lurida*** (Marsham)

C

2 (♂♀) ***Rhagonycha fulva*** (Scopoli) in copulation

D

18 black thrips (which were extremely abundant)

E

A brilliant clear yellow Thomisid crab spider, matching ***Pastinaca*** flowers,
= ♀ ***Misumena vatia*** (Clerck). (This species can change to and from white and yellow in 3-4 days, according to its flower background, and lurks in flower heads to catch visiting insects.)

F

During the same hour we also visited the reserve along the top of Lower Seeds (which is marked by posts but not yet fenced). This is a dense grassland-meadow with a lot of thistles. Not great variety of flowers, but a lot of **field scabious** (***Knautia arvensis***) and **basil thyme** (***Clinopodium vulgare***).

{reverse side}

24 JULY 1959.

24 JULY 1959. WYTHAM WOODS ***

They will was here also an astonishing lack of variety of insects swept from the field layer, 1-3 ft., of grass, scabious etc. 1407

- 1 orange-red *Rhagonycha fulva* (Scopoli) n.k.
- 1 *Phytocoris varipes* Boheman G.G.E. Scudder det. 1960
- 1 black *Meligethes*

A
B
C

My sweeping was very limited, but again the scarcity of flies was remarkable.

In Brogden's Belt deciduous woods there is a lot of **enchanter's nightshade** in flower among the dominant dog's mercury. No "sticky" seeds yet. Many nightshade leaves covered thinly with white fungus. We also noticed some 2-3 ft. **oak** stump shoots at the woodland edge near My Lady's Seat, absolutely white with mould, which blew off as a white dust when disturbed. In our garden the Jerusalem cowslip (*Cynoglossum*) has its white-spotted green leaves and attacked by a similar thin white film. Professor Platt hazarded the idea that the checking of plant growth during drought may cause glucose etc. to pile up in leaves and so afford a favourable base for fungi.

On The Ridge, the grass growing on large *Lasius* mounds is blasted brown with drought, and daisies (*Bellis perennis*) along the path are an inch high and flowers 1/8- 1/4 in. diameter. A great deal of **rosebay** in flower on the wood margin.

{reverse side}

4 AUGUST 1959.

4 AUGUST 1959. WYTHAM WOODS.

With Joy, went to the limestone grassland of Lower and Upper Seeds to collect animals, 3.30-5.30 p.m. GMT, very hot but many flies pestering out of the breeze – though not in the cooler climate inside Brogden's Belt beeches.

Lower Seeds.

I collected on the Pond 3 end of the new reserve, which is a riot of flowers and grass, though in many respects stunted by the dry summer. In flower and abundant were ***Pastinaca***, ***Cirsium eriophorum***, ***Clinopodium***, ***Hypericum perforatum***, agrimony, ragwort, field scabious, ***Brachypodium pinnatum*** (of the

{reverse side}

4 AUGUST 1959.

4 AUGUST 1959 . WYTHAM WOODS***Lower Seeds meadow***

the last there are some solidly established areas, much less flowery with other species). Also in flower were **teasel**, **Lotus**, **Inula conyza**; **Silene cucubalus** in seed. **Dactylis** abundant. A lot of small rows clumps established, less than 1-3 ft.

The **Cirsium eriophorum** are not nearly as big as usual, but flowering fully 1-4 ft., and much visited by bumble bees. One conopid fly was swept in this area of grassland. ♀ **Sicus ferrugineus** (L.). K.G.V. Smith det. 1960 1410 A

Flying at intervals in the lower field layer were

Large crambid moth <i>Crambus trustellus</i> {??}	B
Small crambid moth <i>Crambus pratellus</i>	C
Waved moth = shaded broad-bar Ortholitha limitata (Scopoli)	D
Two ♀♀ heath moths (Ematurga atomaria (L.))	n.k.

And after about 4.45 p.m. GMT, swarms of darkish yellow-brown flying ants settling on me (2 k.) 1 ♀ **Myrmica scabrinodis** Nylander M.V. Brian det. 1960 1 ♂ **M. ruginodis** Nylander or **laevinodis** Nylander M.V. Brian det. 1960 F

and of *Simulium* (1 k.). ♀ **S. erythrocephalum** (Degeer). K.G.V. Smith det. 1960 G
One or other of these stung or bit me on the eyelid and produced a slight swelling, that got quite bad for several days.

{reverse side}

4 AUGUST 1959.

J. Immature ♀ **Xysticus cristatus** (Clerck). M. Lloyd det. 1959

4 AUGUST 1959. WYTHAM WOODS ***

Small heath and wall butterflies flying. One small fly kept out of general sweeping 1-4 ft. ♀
Opomyza germinationis (L.). K.G.V. Smith det. 1960. 1410 H

Ragwort (***Senecio jacobaea***). One plant only was found with ragwort moth caterpillars
 (cinnabar), full grown. J

On one plant I took a small fawn crab-spider holding a live fly (*Empis*), among flowers. ♂
Empis livida L. K.G.V. Smith det. 1960 K

Small spiders looking like this were fairly common in the sweep net, and seen also on
Pastinaca.

I collected carefully on ***Pastinaca*** flowers at 2-4½ ft. Except for ladybirds and soldier beetle
 is, one seldom found that more than one insect on a whole plant, and the umbels are much
 reduced in size this year though thousands of them. ***Rhagonycha fulva*** was very thickly
 distributed, ones or twos, one or two pairs in copulation. n.k.

Ladybirds ditto – three seen on one plant

Coccinella 7-punctata L. Rather small specimens. n.k.

Other insects collected were

Small orange sawfly ***Athalia lineolata*** Lepeletics R.R. Askew det. 1961 M

Small white and black pentatomid bug ***Eurydema oleraceum*** (L.) G.G. Scudder det.
 (as *E. oleracea*) N

Very small green heteropteran bug ***Lygus campestris*** (L.). G.G. Scudder det. (as
Orthops c.) P

{reverse side}

4 AUGUST 1959.

U 2 ***Symphorobius elegans*** (Stephens)

V. ***Jassus mixtus*** (Fab.) W.J. Le Quesne det. 1960 (as *Allygus m.*)

4 AUGUST 1959. WYTHAM WOODS ***

Three large syrphid flies

1410

2 ♂♂ *Tubifera pertinax* (Scopoli) K.G.V. Smith det. 1960 (as *Eristalis p.*) n.k. Q
 1 ♂ *Myathropa florea* (L.) K.G.V. Smith det. 1960 (as *Myiatropa f.*) R

Some *Polietes lardaria* occurred n.k.

S

Upper Seeds.

This is a fallow of low (< 1 ft.) grass, low nettle, and large scattered clumps of lucerne (*Medicago sativa*), and less commonly *Galium pumilum* in full flower. Sweeping the lucerne clumps produced very little except a few hive bees (*Apis mellifera*), and no beetles. Two flying winged ants kept. 2 ♂♂ *Myrmica ruginodis* Nylander or *laevinodis* Nylander M.V. Brian det. 1960. T

Beech wood, Brogden's Belt, South End.

The **beechs** practically all have some sign of *Cryptococcus fagi* on the trunks, though none as bad as in Marleywood Plantation, 1956; the worst one had two small dark lacewings also, at 2-3 ft. U

On one beech trunk I found a grey-brown-black marbled homopteran at 5½ ft., V
 and another pale winged psocid at 5 ft. *Trichadenotecnum sexpunctatum* (L.) W.S. Richards det. 1960. W

{reverse side}

4 AUGUST 1959.15 AUGUST

Record all catches as 'C.S. & R.A. Elton collected'

1412 K *Peronea emargana* (Fab.) G.C. Varley det. 1959 (says on *Salix*, less on oak.)

4 AUGUST 1959. WYTHAM WOODS ***

Saw a young (small) **common whitethroat** in the bramble scrub round Pond 3 (brick tank, edge of Lower Seeds arable barley/oats).

15 AUGUST. WYTHAM WOODS.

Went mothing with Rob, 8-9.40 p.m. GMT – early dark in Common Piece, Thorny Croft and Ten Acre Piece. It was calm after a very windy day, cool and damp, with many small pools in the cart-ruts after recent heavy rainstorms. Most insects were seen in the ride along Common Piece between First and Second Forks. (Here one of the geneticists has large bits of live branches enclosed in white or black textile). We used electric torches. 1412

8.-8.30. Deciduous ride by Common Piece (a few spruces) flying at field layer height:

1 herald moth (*Scoliopteryx libatrix* (L.))

1 *Notarcha ruralis* (Scopoli)

1 other

A
B

n.k.

8.30. Conifer wood (East Heronry Plantation) with nettles and bramble, flying at field layer height:

1 *Notarcha ruralis* (Scopoli)

D

n.k.

circa 9.00. Small scalloped brown moth beaten from oak branch at 10 ft., ride in Common



Piece/Thorny Croft.

K

{reverse side}

15 AUGUST 1959.

1412 G. Flame shoulder. *Ochropleura plecta* (L.). G.C. Varley det. 1959.

15 AUGUST 1959. WYTHAM WOODS ***

8.45-9.15. Ride in deciduous woods, by Common Piece, flying at field height: 1412

Small moth oblong when at rest, with fawn shoulders, fast runner (same as C.E. 1409 A, lost.)

G

9.20. Large green lacewing (*Chrysopa vittata* Wesmael ♀), flying at field layer height.

H

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 14.

15 December 1959-25 May 1960

C.E. 1426- 1456

Red ticks²⁷ mean ready to be indexed. Crossed red ticks mean indexed.

Circles²⁸ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

²⁷ Shown as **bold** in edited version.

²⁸ Edited to A or 00

15 DECEMBER 1959. WYTHAM MEAD, etc.

Went out in the afternoon with M.H.R. Soper, Major J.R. Mills and his assistant, to settle the new reserve boundary and discuss teaching along the north edge of the reserve woodland abutting on the hay meadows etc. of the University Farm.

It was agreed to move the barbed wire fence and gate separating the Farm from the river margin reserve 100 yards or so to the north-east, thus including the whole of the marsh outside the woods, plus the narrow strip of meadow between the marsh and the River.

As Fox Path (down from the Chalet to Wytham Mead Reserve) is blocked at the bottom by barbed wire to prevent trespass, it was arranged that there should be access of an inconspicuous kind (wooden sleepers across the ditch and sacking round the barbed wire strands) by Meadow Path (which runs from the western conifer plantation down through Hither Clay Hill). There are two fields (with barbed wire fencing) between here and the river, and little public trespass.

No ditching at all will be done along the woodland margin by the new Wytham Mead Reserve. The marsh at the north-east end is bounded by a low ridge of ground, forming part of the shallow marsh basin. Ditching will start just beyond this and follow the woodland edge to Summerford

{reverse side}

15 DECEMBER 1959.

(Salix fragilis)

15 DECEMBER 1959. WYTHAM MEAD, etc. ***

Corner. (N.B. On the 18th century field map what we call Wytham Mead is termed Summerford Mead.)

This ditching is to be done by the University in consultation with the M.A.F.F. and using hired ditching machinery requiring a good deal of overhead room. There is now a very old silted up ditch immediately outside the wooden fence, bounded on the field side by a bank. It is a little above the field level, to give a gradient back to Summerford Corner. In order to do the work the woodland margin will have to be drastically cut for about 700 yards, and work is already in progress on (a) removing scrub on the farm pasture edge (b) cutting all overhanging trees or scrub or their branches (c) cutting down to near the ground all the smaller trees and scrub just inside the woodland reserve.

Clearly if the ditch is necessary for draining the fields or preventing run-off from the woods, these clearing activities are necessary. The woodland edge in question consists almost entirely of a very ancient **hawthorn** hedge and some willows (*Salix fragilis*) (probably once pollarded) grown into large trees; together with a few other species. This must have been "let go" for fifty years or more. Although there are accordingly a large

{reverse side}

15 DECEMBER 1959.

15 DECEMBER 1959. WYTHAM MEAD, etc. ***

number of really old under-storey trees, I think it will do little scientific harm to remove them because there will grow up, with the loss of a few yards of “edge”, a more natural forest margin.

The excavated alluvial clay will be tipped along just inside the wood. Again, it is so shaded at present that I do not think any important vegetation will be lost.

Positive aspects of this operation are

(1) the eventual improvement of the natural edge (2) the creation of some additional obstacles to entering the Wood (the new boundary fence will run between the ditch and the field). (3) possibly a certain amount of standing water in the ditch, (to which stock will not have access when the fence is made), providing a little habitat variety – so long as it is not used for herbicide tests, as is a good deal of the Farm land. (4) settling an awkward conflict between adjoining different land usages. (5) it was agreed to leave as much as possible of the larger trees that are right at the edge, – nearly all willows.

The ditch will probably drain out into the former lower end of the now disjunct Stream 8, outside the wood. There is no connection with the woodland stretch. The marshy reedy bed at Summerfield Corner is actually on the Farm.

{reverse side}

15 DECEMBER 1959.

18 DECEMBER 1959

15 DECEMBER 1959. WYTHAM MEAD, etc. ***

Soper told me that the farm's grass is all flooded in winter, some 150 acres = about half the farm area (it runs right down to the Thames angle). There are some 250 old and young **cattle** (too many, he thinks), but only 5 **sheep**. **Pigs** are the other main stock.

The A.R.C. herbicide workers are mostly here and do a lot of plot experiments, including some on the River Meadow.

He has recently enlarged a quite impressive drain, forming a sort of backwater from the River, during the present high level (after huge rains). It joins "Lower Stream 8 ditch" from the west. Fryer has done some herbicide tests on water weeds within the Farm area but with not very striking results.

18 DECEMBER. MARLEYWOOD PLANTATION, WYTHAM WOODS.

9.15 a.m.-12.15 p.m. G.M.T. Warm and fine after rain.

K. Paviour-Smith and I did a round of all the LOG trees and she took full notes for the LOG card index, including fungi. The only live large brackets were ***Ganoderma applanatus*** on several beeches. Dead *Polyporus squamosus* and probably *Pleurotus* were on one beech. No ***Polystictus versicolor*** was evident anywhere, perhaps because of the drought season. The last month or two have been very rainy, and I think fungi are mostly only just breaking out now.

{reverse side}

18 DECEMBER 1959.

18 DECEMBER 1959. WYTHAM WOODS ***

I took one or two special notes, not on the LOG cards.

LOG 36. Under loose ½ thick bark on top of 2 ft. diameter lump of beech log 5 ft. long, in a glade of the deciduous wood, was a hibernating *Phosphuga atrata*. n.k.

LOG 22. Under loose bark (with much “frass” and damp) of beech log lying partly under bramble, to medium-large tipulid larvae kept to breed out. 1426 A failed

LOG 33. Under damp loose 1/3 in. bark on horizontal part of big beech log was a thick mat of yellow mycelium. Kept a lot of this in a tin, to get the fauna out. Before “tinning” it I searched it and banged it on a tray. There were large numbers of springtails* but very few beetles, nothing else. 1426 A*

A number of large springtails* were still emerging at the end of January 1960. The yellow mycelium seems quite active – mostly living like the inside of a sandwich, between bits of bark turned inner face to face. Little more came out after this, and the bark was bone dry with no active mycelium when demobilised on 16 April.

{reverse side}

18 DECEMBER 1959.

By 22 April it had pupated and emerged as large Cistelid (Alleculid) black beetle, *Prionychus ater* (Fab.) (known to live as larvae in wood frass on deciduous trees, and have adult nocturnal on trunks in summer.)

It can evidently stand very dry conditions as larvae, because it was alive until at least mid-March, and several times I had found the frass bone-dry and had sprinkled water on it, and when looked at the larva was quite active in the dry stuff. I can find no local records nearer than Windsor.

18 DECEMBER 1959. WYTHAM WOODS ***

LOG 39. One large yellow beetle larva in dry friable white-rotted wood-frass in a cleft of rot in trunk of standing live beech, 5 ft. 1427

There is not much scrub left in the thinned areas, but enormous numbers of young **ashes** of various ages, and rather fewer young **sycamores**. It is nice to see a sprinkling of natural **beech** coming up, mostly < 4 feet (i.e. since rabbit decline?) and a few older. But there were fresh **rabbit** droppings on a few of the logs.

I saw a few **rose** clumps grown up; one **spindle**, a good many young **hawthorns** towards the Seacourt edge of the wood; a good many of the thinnish **elder** bushes (come up mostly since the thinning slash, cut from bushes). Along the drive, at Botley Lodge End, there is a fine mixed narrow scrub edge of the wood – **blackthorn**, **hawthorn**, **spindle**, **sallow**, (*S. caprea*) **rose**, **privet**.

The central part between Streams 5 and 5 A has still not been thinned. Both streams running strongly, full of litter. N.B. The Lower Follies fence is on the field side of the new drainage ditch, so that the latter becomes ecologically part of the wood, not subject to stock pressures.

The rough marsh in the upper part of

{reverse side}

18 DECEMBER 1959.

(*Lasius flavus*)

18 DECEMBER 1959. WYTHAM WOODS ***

the pasture by Marleywood Plantation/Marley Wood, still exists, and the anti-hills. **Sheep** were grazing there today.

Many of the dying or dead standing beeches that are logs have both extensive woodpecker feeding holes, but also nest-holes, recent or old. There are rather a lot of the latter: do they make new ones each year?

The season has been so mild so far, that **dog's mercury** is still standing, green, not brittle. Some areas have no ***Hermæophaga*** holes in the leaves, but I saw one very heavily perforated patch.

Though there is very heavy **bramble** growth over much of the woodland floor, some forming impenetrable patches 4-6 ft. high, most of it is navigable with some difficulty. Where young saplings are thick and growing up, the bramble is thinning. We saw one patch (rather open area among the trees, near the crop fields on the east side) ***Galium aparine*** had covered and apparently killed bramble, which was not burned as far as one can see.

In some parts ***Brachypodium sylvaticum*** is now very common, and locally even dense; while ***Deschampsia caespitosa*** is quite scarce compared with its tremendous dominance immediately after the thinning. **Bracken** hardly occurs.

{reverse side}

18 DECEMBER 1959.

18 DECEMBER 1959. WYTHAM WOODS ***

In the thick bramble undergrowth there were **wrens** flitting about, and some **blackbirds** in the scrub (field layer) or on the ground.

I get the impression that in some of the denser **bramble** young trees like **ash** are far less able to establish, probably because extreme shade suppresses (if only for some years) the seedlings

{reverse side}

12 JANUARY 1960.

20 JANUARY 1960.

12 JANUARY 1960. WYTHAM WOODS.

Went out in the morning 10.30 a.m. to about noon G.M.T., with S.W. Hurry – his first visit to Wytham as graduate assistant to the Ecological Survey. Usual approach via Chalet to My Lady's Seat. Saw a **jay** in the thicker woods near 5-Acre Enclosure, scrub canopy; and **bullfinch** in deciduous edge of the Mount. Young planted **beeches** and some self-sown in Singing Way (mostly <6 ft.) have full leaves on. The foresters have planted several groups of these on the Singing Way between My Lady's Seat and Rough Common.

The new creep-under diversion road between Godstow and Wytham has recently been opened and the direct lane shut.

20 JANUARY WYTHAM WOODS.

Visited Marley Woods, with S.W. Hurry, 2.20-4 p.m. GMT, in order to verify the positions in our habitat classification, of molluscs recorded by Mark Williamson. We also ascertained the exact line of the Reserve – it certainly has retained a substantially large part of the Wood, including all the marshes and most of the glades. The number of large trees (oak, sycamore, ash, elm, birch)

{reverse side}

20 JANUARY 1960.

20 JANUARY 1960. WYTHAM WOODS ***

is enough to provide good species representation, but in few patches in the Reserve, except on the south-east quarter, is there much really high canopy, the situation being more like Wychwood Forest, where the big trees are mostly thinly spread and the effective canopy produced by dense stands of scrub or young-middle aged trees. There is a good deal of **birch** in the reserve, and also much overgrown scrub coppice of **sycamore**, **hazel** etc.

On the south (terrestrial, woodland edge open strip) of Marsh 5 there is an enormous old **spindle** tree with many twisted trunks and the “seed-holders” still hanging on the trees. This winter *Mercurialis*, though generally cut down by cold, here and there survives in green crumpled state.

Marsh 5 has a clearly defined upper area, with a stream channel. Then it seems to go underground and reappears in a small patch that has no obvious channel, and with *Phragmites* (not abundant), *Calamagrostis epigeios*, *Epilobium hirsutum*, *Equisetum telmateia*, *Carex*.

The *Phragmites* covering Marsh 4 is intact.

In the Wood near the Reserve boundary with the Forestry part was a flock of **great** and **blue tits** and a (probably) marsh tit, in mixed deciduous low and high canopy.

Several **bullfinches** in thick scrub at edge of Fager’s Patch in Marleywood Plantation, field layer to scrub canopy. Several **green-finches** flew up from track by Marley Wood

{reverse side}

20 JANUARY 1960.

25 JANUARY

20 JANUARY 1960. WYTHAM WOODS ***

R. Newson brought in some **sycamore** buds that he found on the ground, fallen from low or high canopy in the deciduous wood of Chalet Woods. The centre of each bud had been pecked out by a small beak, and Southern suggests bullfinches.

25 JANUARY. WYTHAM WOODS.

Did a round **via** the Bowling Alley, with S.W. Hurry, 10.30 a.m.-12.40 p.m. GMT. Fine and sunny, calm, rather misty distance. There was very heavy rain 23-24th following a generally very mild and pretty wet six weeks (except for a week of snow in early January). Ground very heavy and muddy.

At bottom of Lower Seeds a large manure stack, smelling strongly. No **sheep**. The line of reserve is not fenced yet. A great pile of Coral Rag boulders has been removed from Lower Seeds. The Swimming Bath has dense bramble and low scrub growing up around it.

The Dell is still mainly *Brachypodium pinnatum*, but there are some bramble patches that will need control.

The **elders** below the Dell are old and some dying. Some have fallen across Spring 2 and should be cleared. The old elders often have fine infestations of **Jew's-Ear** fungus and a good deal of fairly loose bark.

Spring 2 running well, an inch or so,

{reverse side}

25 JANUARY 1960.

25 JANUARY 1960. WYTHAM WOODS ***

and almost full of decaying grey poplar leaves only a little skeletonised. Going with this, only a few ***Gammarus*** among the leaves, and some Nemourid stonefly nymphs.

The east end of Elder Belt, two fine stag **fallow deer** stood in the woodland edge of the Park and then jump the fence into the Belt. Deer tracks below the Dell.

Spring 7 running well, and there was a flowing trickle in grassy marsh for 30-40 yd. above it, perhaps temporary after the rains.

In the Bowling Alley scores of tiny **pine** seedlings have sprung up where the birches were cut out (these have not been recovered). ***Festuca rubra*** areas still detectable on Sunday's Hill.

Back by Upper Seeds, Lord's Common, The Ridge and Lower Seeds.

{reverse side}

2 FEBRUARY 1960.

2 FEBRUARY 1960 . WYTHAM WOODS.

Walked, with Stephen Hurry and Monte Lloyd, (10.30 a.m.-12.45 p.m. GMT), from 3 Pines by the Ridge, Brogden's Belt, Wormstall Duck Pond, The Jews Harp, Chalet Woods. Mild, cloudy, a little rain.

Two **bullfinches** in scrub canopy layer of woodland edge near Five-Acre Enclosure. Just above the enclosure and huge **ash** has blown down.

In Brogden's Belt, north end, a good many rotting piles of sycamore poles are left from the sycamore thinning of 1957-8. The middle bit of the Belt has a row of mature **larches** on the Upper Seeds edge, and near it there is a large open patch of heavy bramble with a good deal of **wild rose** growing through it. Beeches in south end of Brogden's Belt. I broke off a thin (c. 3 in. diameter) 5 ft. branch growing at 8 ft. out of the trunk of a large live beech. The tree is at the edge on a patch of elder scrub, but the dead branch was under the canopy of course. Broke it into bits, roughly examined, further split, and kept in lab. in two tins. The outside was quite barkless and partly green with algae. The inside was partly too hard to cut with a chisel, though wet through, but much was of a

{reverse side}

2 FEBRUARY 1960.

Major habitat "Woodland edge"

Small piece of galleried wood also kept from which another *G. excavatus* emerged 10 Feb.

13 more adult *G. exc.* emerged in the next few weeks (n.k.)

1 small ***Porcellio scaber*** (n.k.)

F. Several medium black collembola 6 adult, 20 young ***Isotoma arborea*** (L.) n.k.
1 adult ***Mydoniuus albocinctus*** (Templeton) – (as *Entomobrya c.*) n.k. C.A. Elbourn det. 1967.

Large numbers collected inside tin, when wood still damp and covered in places with purple "mould".

B (1 slide) 1 ♀ ***Limothrips denticornis*** Haliday
Phlaeothrips ulmi (Fab.) 2 macropter, 3 micropter ♀♀ 1 micropter ♂, 2 1 Instar & 1 II instar larvae G.D. Morison det. 1962.

D. E. & F (D & E not kept) ***Pollenia varia*** (Meigen) K.G.V. Smith det. 1960.

F. Fly "emerged" 9 February (also a few small Sciarids – n.k.)

G. 1 ***Dromius agilis*** Fab. with. "Emerged" 8 February

H. Small narrow brownish staph ***Phyllodrepa ioptera*** (Stephens) J.H. Frank det. 1965 (as *Hapalaraea i.*)

Demobilised

2 FEBRUARY 1960. WYTHAM WOODS ***

rather hard but cheesy white-rotted texture, with many irregular small galleries, about 1.5-3 mm diameter, leading to short vertical circular shafts opening by rather distant scattered holes on the surface – larger than *Trypodendron* or *Ptilinus* holes. M.L. found an adult beetle inside the branch, which I found to be (certain) 1427

Grynobius excavatus Kugelann A

also I found several white grubs apparently of this (2 k.) This species is recorded from beech, oak and hawthorn. All this branch was interwoven, though not very densely with a population of the beetle.

Also some black tubular thrips and pink nymphs were right inside, – some of the galleries had visible microfungal growth. B

Two adult leaf-mining weevils of the beech (*Rhynchaenus fagi* (L.)) were knocked out of gallery holes – hibernating. (1 kept). C 1.k

Also small flies with face looking out of gallery hole at the surface, and another in a gallery right inside. D E

A little *Cryptococcus fagi* visible on some beeches at field layer/scrub height on trunks.

{reverse side}

2 FEBRUARY 1960.

D. M. Lloyd also collected/det. 1 young ♂ *Lithobius melanops* (n.k.)

2 FEBRUARY 1960. WYTHAM WOODS ***

Monte pointed out how west wind has drifted the beech litter over to the east side, leaving shallow or bare areas under the west beeches.

In the Elder Belt, **dog's mercury** just sprouting about an inch through or under leaf litter and moss. **Badger** earth active.

The Jews Harp. Log 65, a large English elm trunk a foot or two off the ground has much "fruity" loose thick bark, under which old bark-beetle galleries are conspicuous 1428
It was very damp and frassy, but with very few woodlice. Many millipedes, det. by M. Lloyd as 4♀ 4♂ *Polydesmus g. gallicus* Latzel.; Also a number of snails, including *Marpessa laminata*, *Oxychilus alliarius*, *Goniodiscus rotundatus*. C

3 ♀♀ *Vespula*, which at once showed torpid movements.

2 *V. germanica* (Fab.) (1 kept). det. C.E. A

1 *V. vulgaris* (L.) det. C.E. B

Much ancient collapsed *Polyporus squamosus*.

Kestrel hovering over very young grass seed plantings between Singing Way and Radbrook Common scrub-plantings i.e. near the scrub edge.

{reverse side}

2 FEBRUARY 1960.

This winter the other two small "islands" but not the main wood, in the Pasticks, were also felled. All three fellings show clearly on the new air photo of 30 April

2 FEBRUARY 1960. WYTHAM WOODS ***

“The Island” of planted mature trees, containing many beech, at the west end of the Pasticks field, has been clear-felled in the last week or two. Some of these stumps are very wide and may develop a D/D WOOD fauna as the (presumed) young plantations are extended over it. M.L. took some wood frass from inside a hollow, to look at the myriapods. It was one (dead) fork of a large live beech, and the hollow, probably open above was at c. 9 ft. Trs. to W 829

{reverse side}

4 MARCH 1960.

4 MARCH 1960. WYTHAM WOODS.

Visited Common Piece, Thorny Croft and 10-Acre Piece with Stephen Hurry, 10.30 a.m.-1 p.m., mainly to look at streams and marshes. Very sunny and warm.

Marsh 2. had a small stream trickling through dead *Equisetum telmateia* etc. A great part of it is however shaded by *Salix* scrub, and all is very much under woodland influence. The open part has some thick but loose cover of luxuriant *Mnium*, under which is thin litter on soil penetrated by small mammal runs. Here I took 3 live *Clausilia rolfii*, which in the lab. seemed to choose to walk and ? graze on the dying or dead leaves of this moss, at the base of the frond. 1430 n.k.

Also 1 Chrysomelid beetle, *Lema melanopa* (L.). B

Marsh 1 was not running at the "source" below the path, but had a trickle a few yards below there. The blue stakes of both these areas certainly need renewing. Rich fauna in the litter and under rich liverwort mat. Found 1 *Clausilia rolfii* shell. *Goniodiscus rotundatus* c. Saw three *Tachyporus chrysomelinus* but no *T. hypnorum*, adding slight weight to my suspicion that the former may be only n.k.

{reverse side}

4 MARCH 1960.

4 MARCH 1960. WYTHAM WOODS ***

a polymorph with main HQ at A-T habitats. Small mammal runs in surface soil, and some eaten snails.

Stream 7A is at the top a solid wet mass of soggy leaves – not by any means residual hard species, but also sycamore etc. No **Gammarus**. Shallow fast-running stream with great quantity of highly calcified objects, of which we took a selection – twigs, acorn cups, snail shells and so on. There are thick deposits of this stuff drifted in pockets, much more thickly “stalactited” than in Streams 5 or 5A. 1431

Stream 8. This is running well right from the source just above Marsh Path. There is not a thick deposit of dead leaves all over the bottom, which shows stretches of calcareous sand. But there are heavy drifts of only partly skeletonised leaves at the edges and in places where twigs etc. have made little dams. No **Gammarus**. The commonest animal to be seen, both in open bottom and among dead leaves, was a straight stout cylindrical caddis with case made of small mosaic fragments, all leaf, all calcareous shell and grit bits, or mixture. I brought some back with dead leaves – chiefly oak and partly skeletonised, and observed that they do graze on the partly skeletonised leaves in daylight sun. Kept specimen in alcohol. 1432

{reverse side}

4 MARCH 1960.

4 MARCH 1960. WYTHAM WOODS ***

Stream 8 ***

Other animals noted among the dead leaves were:

A good many rather small Nemourid nymphs	n.k.
1 young leech, thin pinkish, <i>Erpoldella</i> sp. (I.E. Efford det. alive).	n.k.
Small <i>Pisidium</i> .	n.k.

Lower down a good many dead **common maple** leaves were partly skeletonised. There is no sign of any green aquatic plant or alga in this heavily shaded (summer) stream. The banks have margins of either bare or litter (twig and leaf) covered mud, with also a lot of ***Carex pendula*** tussocks. In spite of the wash down of Calcareous Grit sand, the Oxford Clay is here, as shown by a *Gryphaea* shell found by S.H.

The Larch Grove in Thorny Croft, just outside the Reserve bank and above the source of Stream 8 is being occupied this year by **herons** for nests, and I counted 14 flying and circling against the blue sky, or settling on the tree tops, where some bulky new nests were in progress.

{reverse side}

22 MARCH 1960.

22 MARCH 1960. WYTHAM WOODS.

Walked with Stephen Hurry to Ten Acre Copse, 10.30-12.30 in the morning.

Sallocs (*S. caprea*) – many of them over 15-20 ft. high – in flower, the male ones making blazes of yellow; also some in Common Piece. In the cool earlier part of the morning no bees, but by mid-day bees visiting flowers. At the mixed larch-deciduous wood ride edge between Thorny Croft and 10 Acre Copse, tall ♀ *S. caprea* c. 25 ft. high were being visited at c. 20 ft. by a ♀ **chaffinch** and a **coal tit**, which pecked among the greenish yellow catkins.

The upper end and middle parts of 10 Acre have a dense understorey of all sorts of scrub, including hazel, blackthorn, rose, **buckthorn**, *Viburnum*, spindle, **dogwood** and **privet**, with a good deal of **honeysuckle** and bramble. To make permanent rides in this stuff is a problem. The Hope Department, and E.G.I. people have caused some fairly narrow rides or paths to be maintained. Lower down, the wood is more open and

{reverse side}

22 MARCH 1960.

22 MARCH 1960. WYTHAM WOODS ***

has a good deal of old hazel coppice.

Not far above Summerford Corner, and between Stream 8 and the flood-plain, the wood has an enormous old **wych elm** (now in flower), with many small trees of this species around it, making an almost pure grove. A lot of dead wood, mostly small, on the ground, some with rubbery purple encrusting fungus (material kept for study by S.H., who also took some small dead wood from the ground). I broke off some 1½ in, diameter dead branches of young wych elms, from 5-6 ft., some with, some without bark: (grouped) 1434

1 ? Cantharid beetle larva

1 *Anaspis* "Emerged" 7.4.60

Small ant-like bug nymph

A

C

Both demobilised 20 April

{reverse side}

22 MARCH 1960.

22 MARCH 1960. WYTHAM WOODS ***

Between here and Summerford Corner is **hazel** coppice with some deciduous trees above, and much **bluebell** beneath. The soil may change here from Oxford Clay to valley alluvium, judging by a section dug by an Agricultural Department Polish student, Resulovic, who has here some soil thermometers. His records will be interesting to have, as we have no soil records for the inside woodland, only Macfadyen's for Chalet edge and the Dell.

Hearing the call of a curlew, I went into the corn-field just east of 10 Acre (where a **kestrel** hovered), and saw a **curlew** pair standing in the rough pasture just north of Summerford Corner. This is the first time curlews (of which one or two pairs breed between King's Lock and Cassington, have been seen by me on Wytham Area itself. They are usually north of the River.

Walked along the edge of the Mead and a little beyond Meadow Path. The edge has been cut ready for ditch drainage all the way along. The result is not unpleasant, and a good many mature **willows** (*S. fragilis*) and some youngish ash have been left. The old hedge has gone.

{reverse side}

22 MARCH 1960.

22 MARCH 1960. WYTHAM WOODS ***

Visited G.C. Varley's **oak** patch, which lies quite near the north edge of 10 Acre. The place seems to have changed a bit since I first visited it in .

There is essentially a large glade carpeted with ***Deschampsia caespitosa*** (rather trampled or cut low), and about 20 smallish oak trees whose branches mostly do not touch their neighbours. Round the glade there is an abrupt woodland and dense scrub edge. At and in some places under this uncleared wood is some *D. caespitosa*, but mostly the canopy is so thick as to leave either moss or pure litter. There is one tiny patch of scrub left in the glade, presumably for historic interest. The leaf litter in the glade is oak leaves (possibly drifted "soft" leaves have already been eaten).

The artificial clearance of all scrub and most field layer except grass must profoundly have altered many conditions here – microclimate, alternate hosts, soil compacting, nutrient circulation and so on. When did this oak "wood"/high scrub with standards, like Wychwood Forest) change into "woodland edge"?

{reverse side}

22 MARCH 1960.

22 MARCH 1960. WYTHAM WOODS ***

In Ten Acre we saw a good many **wrens** and some **robins** in quite thick wood, and moving in ground/field layers. One great spotted woodpecker on ride edge, and **green woodpecker** heard in the wood. **Hérons** occupying the Thorny Croft larch grove.

S.H. collected a *Nemoura* flying and settling at edge of coniferous wood, 25 yd. from Stream 7 A. ♀ *N. erratica* Claassen. 1435 n.k.

By First Fork, one of the huge old live ashes at the edge of the road has a stout decayed stub of branch, from which (at circa 15 ft.) a huge lump 3 ft. long x 1 ft. diameter had fallen to the ground. I brought it in and chopped up about half of it, keeping four creamery tins full of bits.

Three with red-rotted wood, all burrowed by *Sinodendron*, of which many large and very small (2 extreme sizes = last year and year before broods?) larvae; 1436
(also *Porcellio scaber* and *Oniscus asellus*, 2 *Forficula auricularia*, though not sure if these partly under the bark). n.k.

1 Aculeate brown cocoon.

A

{reverse side shown as Page 40A}

{reverse side of Page 40}

22 MARCH 1960.

1436

- U Small ***Lithobius melanops*** Newport young ♂. M. Lloyd det. 1960. (also 1 immaturus ♂ n.k.)
- V 2 adult, 1 young pseudoscorpions ***Chernes cimicoides*** (Fab.). M. Lloyd det. 1960 (n.k.)
- W 2 very young ***Melanotus rufipes*** (Herbst).
- X (? teneral) ***Baptolinus affinis***
- Y Fly “emerged” 3 May. ♂ ***Sciara trochanterata*** Zetterstedt K.G.V. Smith det. 1960.
- Z 2 Flies “emerged” 21 April and 3 May. Callophrid: ***Ptychoneura cylindrica*** (Fallén). K.G.V. Smith det. 1960. (= *Oebalia* in K. & H.)

1436 (cont.) 1 very small fly ♂ ***Megaselia ciliata*** (Zetterstedt). C.N. Colyer det. 1960.
Several new hatched very young Opilionids (n.k.)

1 ♀ ***Anaspis frontalis*** adult. Very good condition C.E. det. 1962

1 Black and grey Muscid fly, very fresh ♂ ***Eutalomyia festiva*** (Zetterstedt). K.G.V. Smith det. 1960

1 small staphylinid ***Phyllodrepa ioptera*** (Stephens) J.H. Frank det. 1965 (as *Hapalaraea* i.)

Small iulids ***Proteriulus fuscus*** (Am Stein) ♀♀ and young. No adult ♂ present M. Lloyd det. 1960

3 Pselaphids: 1 ♂, 1 ♀ ***Billioporos minutus*** Raffray. 1 ♂ ***Euplectus karstenii*** (Reichenbach) C.A. Elbourn det. 1966 *E. karstenii* J. Balfour-Browne det. 1966
“Position of mesotibial spur is diagnostic.”

1 large *Cis* ***C. boleti*** (Scopoli). K. Paviour-Smith det. 1960.

Very abundant large Collembola

c. 100 ***Orchesella cincta*** (L.) C.A. Elbourn det. 1966 (k.),

3 ***Mydonius*** (*Entomobrya*) ***albocinctus*** (Templeton) C.A. Elbourn det. 1966 (n.k.),

1 ***Podura*** (*Tomocerus*) sp. C.A. Elbourn det. 1966 (n.k.),

8 *Isotoma* C.A. Elbourn det. 1966

4 small black aculeates emerged 5 May ♀♀ ***Coelocrabro ambiguus*** (Dahlbom) I.H.H. Yarrow det. 1960.

L

M

N

P

Q

R

S

T

U

22 MARCH 1960. WYTHAM WOODS ***

- 1 *Dromius quadrimaculatus* (L.). 1436 B
Porcellio scaber (various sizes) 44 n.k.
Oniscus asellus 4 n.k.
 3 very small *Sinodendron cylindricum* (L.). 22-24 March C
Camptobrochis (= *Deraeocoris*) *lutescens* (Schilling) adult & active. 2, 22nd, kept
 23rd + 2 31st + 1 13 April n.k. D
 2 Pseudoscorpions 31st – 2 April *Chernes cimicoides* (Fab.). M. Lloyd det. 1960 (One
 of these mixed from 1437) E
 Large black iulid 1-2 April *Tachypodiulus niger* (Leach) adult ♀ F
 1 *Cerylon histeroides* (Fab.) 31st Size as small as *C. ferrugineum*, but colour, striae
 etc. typical C. Elton det. 1966 J
 1 Fly “emerged” 2 April *Pollenia varia* (Meigen) K.G.V. Smith det. 1960 K

1 tin of thick outer bark ($\frac{1}{2}$ – $\frac{3}{4}$ in.) that covered part of the branch. Chief difference is the
 number of small iulid millipedes. But both sizes of the *Sinodendron* occurred under the bark
 too. 1437

- Small iulids 1 *Isobates varicornis* (Koch), 5 *Proteriulus fuscus* (Am Stein) M. Lloyd
 det. 1960 A
 1 small *Lithobius* 5-7 April n.k.
 5 small *Porcellio scaber* 5-7 April + 52 (9-11 April!) n.k.
 1 small staphylinid 31st lost n.k.
 2 small staphylinids 13 April both similar, lost n.k.
 1 young spider 2 May. n.k.

Demobilized 27 May

{reverse side}

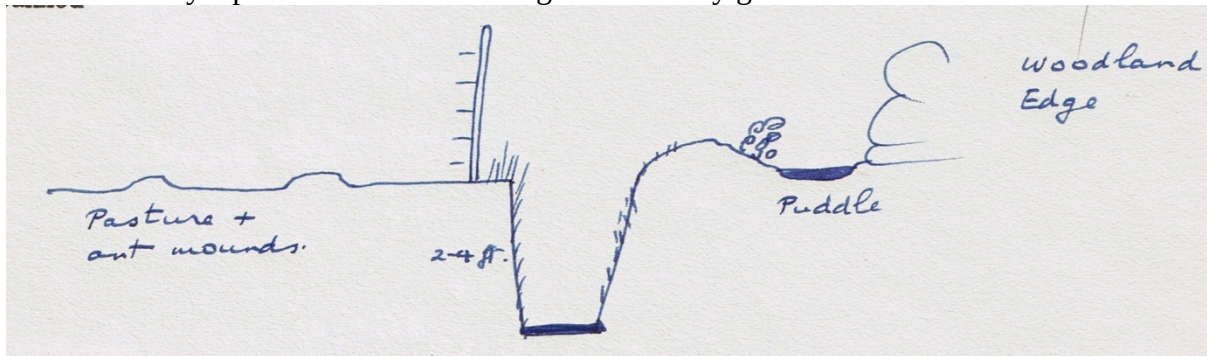
22 MARCH 1960.5 APRIL

22 MARCH 1960. WYTHAM WOODS ***

The branch had been heavily woodpeckered and *Sinodendron* is the main large and juicy food. As they seem to burrow about in a rather random way, it might be that they constantly renew the supplies available at beak depth and would be a most important source for the woodpeckers.

5 APRIL. WYTHAM WOODS.

Went out 1-1.45 p.m. G.M.T. to Marleywood Plantation. The recent new ditch down the junction of Marley Wood and Lower Follies is fenced off by wire from cattle, and is therefore now effectively a part of the woodland edge. It is mainly grass banked



{reverse side}

5 APRIL 1960

5 APRIL 1960. WYTHAM WOODS ***

The grass inside, though still less than circa 6 in., is already thicker and higher than in the cattle pasture (which has many yellow ant mounds). Among the grass on the bank tops, and in patches on the steep drain sides, are many flower stalks of *Equisetum telmateia* up to 10 in. high. The earth was thrown over onto the woodland side of the pitch, making a very rough and irregular bank: in one place was a large group of radical leaves of *Scrophularia aquatica*. Between this new bank and wood the surface holds water in places – shallow pools a foot or two across. A very shallow (1 in.) current flows down the bottom of the drain itself, from the flush zone at the top of the field, though it has not rained much recently. The lower part of the drain where it turns along the Plantation has a thin grass on the bottom, so the water is presumably intermittent. On the bank here, at the edge of oak-ash-beech-sycamore wood was a small clump of gooseberry (*Ribes uva-crispi*) in flower – either native or escaped from Marley Lodge garden. 1438

{reverse side}

12 APRIL 1960

12 APRIL 1960. WYTHAM WOODS.

With Stephen Hurry and Tom Huxley round the top of the hill, 9.30 a.m.-12.30 p.m. G.M.T., to test some of the points in our habitat classification, especially decisions about “Edges” and “Mixtures”. T.H. has just begun a tour of Nature Conservancy regions to discuss and test a habitat chart for Nature Reserve Management Plans, based on use of our Habitat Card for assessing habitat variety on an area – an idea I first tried out several years ago for Wytham, Moor House and East Anglian reserves. In the afternoon we completed a chart for Wytham Area (see across).

Lower Seeds reserve is free from whitethorn and (except for one or two big patches) bramble, but *Brachypodium pinnatum* has now spread very extensively. Both here and on the Ridge, and the Dell and Rough Common there is a tendency for the larger **yellow ant** mounds to provide relict areas of relatively open and unstable soil, on which partly survive the smaller plants that are being suppressed by the spread of grasses. The

{reverse side}

12 APRIL 1960

2 ♂♂ *Clytochrysus cavifrons* (Thomson) I.H.H. Yarrow det. 1960. (as *Ectemnius* (C.) c.)

[B] 8 May. 1 brilliant yellow and black Crabronid wasp emerged from one of the pupae. Later a smaller ditto from the tin.

4 adult *Oniscus asellus* (n.k.)

12 *Porcellio scaber* (4 large, 3 medium, for circa 5 mm) “emerged” (n.k.)

[1439C] Blue-black Lonchaeid fly

Lonchaea laticornis Meigen K.G.V. Smith det. 1960.

[D] Many *Polyxenus lagurus* (L.) all sizes.

[E] Very small yellow and brown fly (in alcohol) *Clorops* sp. “Group 8 of Séguy” K.G.V. Smith det. 1960.

[F] Small bug like a gnat + 3 brown mites attached to the legs. *Empicoris vagabundus* (L.) K.G.V. Smith det. 1960.

G Mites (in F)

[J] Abundant Collembola, especially a small brightly banded one.

2 *Orchesella cincta* (L.) n.k.

50 *Mydonius albocinctus* (Templeton) (as *Entomobrya*) n.k.

4 *M. nivalis* (L.) n.k.

C.A. Elbourn det. 1967

12 APRIL 1960. WYTHAM WOODS ***

road end of The Ridge has a dense *Festuca rubra* mat (deep) where formerly (before rabbits decreased) there was **rock-rose** mat.

On The Dell we saw a **rabbit** and a **hare**. A green **woodpecker** rose from the ant-hill-meadow of Lower Seeds reserve. These birds must play some part in preserving the rock rose! The unmown patch of reserve limestone meadow on Upper Seeds had in it a pair of **partridges**, and a **jay** which flew to the wood.

In the scrub of Lord's Common a dying large elder had a 7 in. diameter branch hanging to the ground. I sawed off 2 ft. of the hollow butt of this (i.e. original height circa 8-9 ft.) and brought it in to keep for emergencies. Part was fairly strong touchwood, no bark, and on the surface were more than a dozen large (circa 1 in. long) oval cells exposed. 1439 B

Also there were these inside the hollow butt. There were 2 intact brown papery wasp cocoons, and one empty open one (bird damaged I think). Kept.

Part also had very thick rugged bark with some moss on.

Several small *Porcellio scaber* were shaken from all this stuff. On 19 April several large *Porcellio* were walking about inside, chiefly on the outer deeply rugose bark with moss and *Pleurococcus*.

1 spider ♀ *Segestria senoculata* (L.). M. Lloyd det. 1960

A

1 small staphylinid *Phyllodrepa ioptera* (Stephens) J.H. Frank det. 1965 (as *Hapalareoa* i.)

K

{reverse side}

15 APRIL 1960

15 APRIL 1960. WYTHAM WOODS.

Visited Pond 1 with Rob and Hugo Kerr, 9.30-11.15 a.m. GMT, fine, rather cool, little wind. Heard a **dabchick**'s courting cry (they had nested here before) and a **moorhen**. No warblers except one **willow wren** singing on top of a *Salix caprea* in the pond-edge, woodland edge.

The Pond has filled again to within about a foot of the damp top, and there is a fast outlet flow. At this season there is as yet little vegetation growth – ***Typha*** still dead and collapsed, though giving some bird cover, ***Potamogeton*** with no leaves, but some green under-water bottlebrushes of ***Hippuris***. The side of the dam has a lot of short green water moss (sample kept). 1440 C

It has obviously suffered from last year's drought, that practically dried it up. The bottom is covered with unbroken-up leaves (land and aquatic) and has a very unoccupied look; and netting produced very little life – 1 empty shell of **limpet**, and 1 young *Asellus*. The bottom detritus smelt rather sulphurous. 1440 A

No newts or fish or dytiscids or water-bugs were seen.

{reverse side}

15 APRIL 1960.

Specimens preserved after being kept the week in warm house, when a few began to show ephippium formation.

= Italian Black Poplars (*P. x canadensis* var. *serotina*)

15 APRIL 1960. WYTHAM WOODS ***

In the open water were large numbers of adults and young pink *Daphnia pulex*, which were not near the surface, but mostly less than 6 in. down, also seemed more concentrated in the shady part. Among them were many water-mites swimming about in the open water – red ones and other globular, also ♂ *Arrhenurus*. Large numbers of very small ostracod, but their habitat zone not clear. 1440 B

The moss-alga dam wall produced a Helmid beetle, 2 snail (*Limnaea pereger* ?) egg masses, and a mayfly nymph, and a few fly larvae. Some small delicate fawn flies were on the water surface, near the wall.

We saw 5 **jays** today, one in the field layer scrub branches of sycamore-elder at the woodland edge of the Forester's Paddock; two in Little Ash Hill wood; two in the ride in mixed scrub plantations on Radbrook Common. A **kestrel** hovering over the Common.

On Rough Common a **yellow-hammer** and a pair of **long-tailed tits** on scattered scrub.

Sallow flowers are over, though still visible. **Elder** half out. **Sycamore** and other trees still in bud. **Hawthorn** just breaking. **Blackthorn** flowers mostly over. **Black poplars** in flower. **Primroses** in flower – less abundant in woods than after their first great spread when a lot of thinning and cutting was done several years ago.

{reverse side}

24 APRIL 1960.

24 APRIL 1960. WYTHAM WOODS.

We walked to the Bowling Alley from the Forester's House by the Dell, to 4.15 p.m. GMT. Out of the cool north breeze it was warm, and in the sun one could smell the wild thyme that is still common on the Bowling Alley. This was the first burst of spring with some but by no means all **beeches** sprouting, **rose** and **hawthorn** half in leaf, young **sycamores** just unfolded, **grey poplars** half out and so brilliantly grey-green as to appear flowering.

{reverse side}

24 APRIL 1960.

24 APRIL 1960. WYTHAM WOODS ***

The south part of Lower Seeds was being harrowed today, all the earth full of Plateau Drift pebbles and Coral Rag lumps. Immense bits of the latter still come to the surface, some 1-2 ft. long, though this area has been cultivated since the Middle Ages! **Jackdaws** and a few **rooks** were on the bare earth, the former also about in the beech canopy of Brogden's Belt, where there are many holes in the dead trees.

Round the Swimming Bath (dry now) is a patch of the grass, with some cowslips in flower, and a good deal of bramble and some scrub.

In the beech grove of Brogden's Belt there is a lot of beech felted **coccid** on the trunks of certain trees, mostly running in lines up grooves or cracks in the bark. No lacewing stages seen.

On the fallen very rotten bole bit of LOG 9 were three very peculiar fungi, the shape and size of half the yoke of an egg i.e. hemispherical with the flattish side plastered on to the side of the log facing prevailing wind more or less. But it was pale yellow, with a leathery membranous skin, and was soft, and almost liquid inside.

The Dell still has John Clarke's orange sticks for vole trappings, and there is some sign of path-trampling – **cowslips** grow on one or two of these thinner *Brachypodium* patches. The large nettle patch marking a former rabbit warren that was a clear patch also in Nielsen-Macfadyen days, is obvious among the grassland.

{reverse side}

24 APRIL 1960.

A **holly blue** flew across, and a speckled wood was pottering in grass-bramble ground and field layer below the pine tree (= Mixed Wood) edge.

1443 B 1 ♂ ***Denticollis linearis*** emerged 12 May and 5 small larvae.

☐ Several young false scorpions 22 May. 4 ***Cthonius*** {sic = *Chthonius*} ***ischnocheles*** (Hermann). M. Lloyd det. 1960

☐ 2 very small Empid flies ♀♀ ***Euthyneura myrtilli*** Macquart. K.G.V. Smith det. 1960. Presented to Hope Department

24 APRIL 1960. WYTHAM WOODS ***

I collected some **wych elm** in seed and budding leaf, from beech-wych-elm woodland edge by the Dell. 1441

The Bowling Alley main area has at present practically no field layer, except where old ***Brachypodium pinnatum*** low tussocks rises just about 6 in. There are still quite large areas of T/2 made of **rock-rose**, **wild thyme**, **daisy** (*Bellis perennis*, small, in flower), **dandelion** (mostly very small, in flower), violets etc. The absence of widespread ***Festuca rubra*** invasion is striking. Many small pines are coming up, but few more than a foot yet. On the south side, where there is an active deciduous wood and scrub edge, there is quite a lot of young common **maple** (derived from a parent tree a few yards in the wood). These are mostly under 5-6 ft., and at this age have remarkably strong wings and ribs on the stems. Not in leaf yet. **Wild rose** also invading at this edge, also hawthorn, birch, etc.

Some **stock doves** flying over.

There are several **larches** in the Scots pine belt, and I took some ♀ tassles and ♂ cones. Several of the pines are dead or dying, and one 10 ft. old bole at the south end has the upper part diameter circa 1 ft. lying inside the woodland edge, very rotted and fairly damp. 1442
Under the few feet of loose bark remaining was a nest of *Myrmica* with larvae that had been brought up to under the thin bark. I took some red-rotted damp wood about 1 inch below the surface, because it is full of very 1443 A

{reverse side}

24 APRIL 1960.

26 APRIL

24 APRIL 1960. WYTHAM WOODS ***

small insect galleries.

There is a huge beech just where the Singing Way beeches abut on Bowling Alley Plantation. It must have branched low down at first, and then rejoined to separate again above. Thus there is an alcove at about 5½ feet, in which a typical tree water-hole occurs, circa 8-9 x 3-4 in., and water 5 in. deep, full and seeping down a few inches, with alga slime on the seepage. The flourishing state of this hole suggests some very good source of water, considering that there has been a virtual drought for over two weeks. The alcove does give a partial "roof" that would reduce evaporation. Took some water, which was pale brown and had small fly larvae; also some dead leaf and mud from the bottom. 1444

In the beech grove on the edge of Sunday's Hill (by the Bowling Alley), I noticed a rather small dry beech branch, sticking out from the trunk of a big beech at 7 ft., identical in size, size of beetle holes and galleries with C.E. 1427, though it was too old to have any live *Grynobius* in.

26 APRIL 1960. WYTHAM WOODS.

Went to Wormstall Duck Pond with S.W. Hurry to collect stoneflies. Fine day, 9.50 a.m.-11.45 a.m. GMT. The Pond was running freely about the swamp water low enough to enable one to walk around in it below the ankles, mostly. The several tall (50-60 ft.) willows, now in golden catkin, are *Salix fragilis* that do not seem ever to have been pollarded. There are a number of young ones also, mixed with a few *S. alba*, and a lot of salallows (mostly *S. atrocinerea*) forming a 1445 A

{reverse side}

26 APRIL 1960.

- B. Kept in alcohol 6♂ 5♀ adults, 1♂ 2♀ pupae, 3 larvae
- C. Kept in alcohol: 8 adults.
- D. 2 kept: dry.

26 APRIL 1960.

[K.P.-S. 492] C.E. 1446.

20.4.60. C. Elton collected a group of dead, bone dry, brittle, stalked *Polyporus* species (later identified by K.P.-S. as ***Polyporus*** (probably) ***picipes*** Fr.) in "overhung hollow trunk, 2-7 ft., with much very old dry rotted wood, of 50-60 ft. *Salix fragilis*. Edge of Wormstall Duckpond." "Undoubtedly {sic} *Polyporus picipes* Fr. det. by D. Peglar, 1968, from alcohol specimen.

.....

Fungus examined at the time by K. Paviour-Smith. Some of the brackets were almost eaten out and some had little damage. The eaten ones were mostly damaged by Tinaeid moth larvae (much frass and many galleries) and by ***Cis bidentatus*** which was the most abundant beetle present (more abundant than in any other collection yet examined by K.P.-S. within the range of *Cis bilamellatus*). It was the most important beetle species in the destruction of these fungi.

.....

Most of the group of brackets was kept for about a month in an effort to get it identified, but J.L. Harley recommended that K.P.-S. should describe it carefully, then pickle it and later collect some new specimens from the same tree.

.....

On 1.6.60 the remaining small sample of fungus was examined and young insects noted while the adults were counted with care for an indication of the proportions of the different Ciid species. No distinction was made between live and dead animals as some may have died within the past month. All species of *Cis* had been breeding and developing meantime and newly emerged adults of all were present.

1446

Kept in alcohol 17♂ 14♀ 2♂ pupae, larvae. Dry 1♂ 1♀

- A. ***Cis bidentatus*** – larvae & pupae present. Adults: ♂ 46 + ♀ 48 = 94 (50% adult Ciids)
- B. ***Cis bilamellatus*** – larvae & pupae present. Ads: ♂ 31 + ♀ 38 = 69 (40% adult Ciids)
- C. ***Cis nitidus*** – newly emerged adults therefore had bred. Adults = 9 (5% adult Ciids)
- D. ***Astichus arithmeticus*** adults 2, one from remaining material of same fungus
- E. Tinaeid larvae and cast pupal skins. Adults 11
- F. A Tinaeid larval skin containing a pumparium. Put to breed.....1
- G. A hymenopterous larva like that of *Cephalonomia*.....1
- H. Lathridiid adults..... 3
- I. Large dead adult Hymenopteran..... 1
- J. Red Cecidomyiid larva.....1

26 APRIL 1960.

[K.P.-S. 491] C.E. 14467.

24.4.60. C. Elton collected collected 6 brackets of *Trametes rubescens* “stems, field layer height, of young *Salix fragilis*, edge of Wormstall Duckpond. Willow-sallow scrub with large trees near”. 1447

.....

1 very old bracket, completely dead, dry and brittle, almost eaten out by

- A. *Cis bilamellatus*. A few adults and larvae still present. 5 younger brackets. 4 of them still very tough and almost untouched. Only one or two burrows of *C. bilamellatus* near the base. 1 friable soft damp bracket had paedogenetic fly larvae too (n.k.).
- B. 1 Lathridiid adult (k.)

{The third sheet of page 52.}

26 APRIL 1960. WYTHAM WOODS ***

high scrub zone. The whole of this reserve is under scrub or tree canopy or both. Under this again is a rather confused mosaic of vegetation which cannot yet be exactly described. Roughly, there is

(1) main, quite narrow, stream running on firm sandy silt

(2) intricate delta branchings of this making most of the area below the square bank zone into a swamp, with some plants standing in flowing or seeping water. The plants are chiefly *Epilobium hirsutum* and a large *Carex* with triangular section leaves (just coming into ♂ ♀ flowers). (The sallow is generally interspersed in patches, but is presumably marsh rather than “reed-swamp”?). Other plants in patches are brooklime (*Veronica beccabunga*), mint (*Mentha aquatica*), water figwort (*Scrophularia aquatica*). 1445 B

(3) In the marshy edge there is a lot of moss, *Juncus inflexus*, meadow-sweet, etc. 0-18 in.

(4) Higher there is grass etc. with a few flowering cowslips.

The whole area is covered with all kinds of fallen branches and some trunks, mainly of cracked willow, I think. Under rotting bark of a very soft old branch, lower half in the swamp water, was a youngish larva of *Melanotus*! 1445

☐ Inside the hollow trunk of one of the tall *Selix fragilis*, some very old) fungi had live beetles in; and some wiggly-gilled *Trametes rubescens*, very hard and dry, on sallow stems also has some. Both in field layer zone. 1446 see across 1447 see across

{reverse side}

26 APRIL 1960.

Records from *Salix fragilis* are a-T (willow) *S. atrocinerea* “marsh”
sweeping = A-T small stream
sweeping = “swamp” = a small stream emerging vegetation

See letter from H.B.N. Hynes 27.5.60. On he collected nymphs from Wormstall Pond and “found a lot of *Nemurella (picteti)* and some *Nemoura cinerea* (= *variegata*) and *erratica*, and I bred many of these out...”
He also got a nymph that looked different and bred it out to ♀ *N. dubitans*, and has the nymphal skin.

26 APRIL 1960. WYTHAM WOODS ***

On *S. atrocineria* leaves (some of which were perforated) were *Chalcoides fulvicornis* (Fab.) (2 kept). Field layer height. 1448 A

At the north corner there is a clump of **English elm** and tall cracked willow, in which there is a **rookery** (7 nests), though the birds seemed very restive.

On stems of young willow and *S. fragilis* on marsh "islands" in the swamp, were some (20 or more) ladybirds, nearly all in the field layer zone (in A-T willow), black hemispherical flanged with large red spot on each wing-case = *Chilocorus renipustulatus* (Scriba) (2 k.) 1448 B
This genus is said by Fowler to have larvae that feed on gall insects, and Donisthorpe records it from sallows, though it evidently has a wider habitat range.

The swamp was swept extensively for stoneflies, the vegetation being below 18 in. and much of it still sprouting lower than 9 in. The following adults were caught. (None seen on willow and sallows stems or trunks, though searched for carefully). 1449

Swept, swamp, 0-18 in. (S.W.H.):

2 ♂♂, 1 ♀ *Nemurella inconspicus* Pictet (now *N. picteti* (Klapálek))
1 ♀ *Nemoura variegata* Olivier
1 ♀ *N. dubitans* Morten. Confirmed H.B.N. Hynes 1960.
17 ♂♂, 17 ♀♀ *N. erratica* Claassen latter confirmed H.B.N. Hynes 1960

A
B
C
D

Swept, swamp, < 6 in. (mainly brooklime) (C.S.E.):

1 ♂ *Nemurella inconspicus* Pictet

E

Swept, marginal marsh (zone 3 above) (C.S.E.):

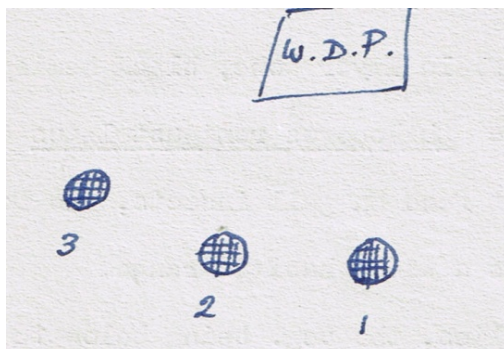
1 ♂ *Nemoura dubitans* Morten. Confirmed H.B.N. Hynes 1960
1 ♀ *N. erratica* Claassen Confirmed H.B.N. Hynes 1960

F
G

{reverse side}

26 APRIL 1960.

1450 ♀ *Ptychoptera albimana* (Fab.) K.G.V. Smith det. 1960.



26 APRIL 1960. WYTHAM WOODS ***

I also collected by sweeping T/2 marsh a ♂ ***Ptychoptera*** (*Liriope*) (Zone 3 above, but not the *Juncus*), S.W.H. collected various other insects. 1450

Several times heard **green woodpecker** from the ant-mounded pasture at the head of the Park.

The trees left in the Park range from fine old healthy trees, through highly decayed ones to completely dead standing or lying ones. Ash, oak, English elm.

There are three curious round copses standing and fenced on the north slope of the Park above Wormstall Duck Pond.

- (1) 4 big ash, 1 very high hawthorn, 1 old partly collapsed **crab apple**, 1 maple, and a lot of fringing elder scrub.
- (2) 2 big ash, to very high hawthorns, 1 ? maple, plus elder scrub.
- (3) Group of intermingled large ash, 3 very high hawthorns, 1 ? maple, plus elder scrub.

No field or ground layer (cattle action, I think) but much fallen (small mainly) wood.

We visited Trough 4, Spring 8 and Marsh 9. Spring 8 had numerous ***Gammarus*** all concentrated in the roots of a grass tussock fallen in; and some *Tubifex* in the mud of the trough.

Near the edge of Mount Wood and Marsh 9 there is quite a lot of lesser **twayblade** in flower bud.

{reverse side}

26 APRIL 1960.

A pair of **partridges** (*Perdix*) in the grass.

28 APRIL.

26 APRIL 1960. WYTHAM WOODS ***

The original Mount Wood, now represented by park oaks and elms standing in the pasture field that contains Spring 8 (I shall call this Mount Wood Field), is a distinct “savannah” unit, within field fences. There is a thick hawthorn hedge by Stream 1 B at the bottom, and in some elms lower down this hedge are several more **rook** nests. The grass has hundreds of **cowslips** and ***Luzula campestris*** in flower. One sign of the original woodland perhaps is some flowering **bluebells** growing in the grass locally.

In Mount Wood the thinning several years back has allowed a rich field layer to develop – *Mercurialis*, *Circaea*, red campion, ground ivy etc. A pair of **bullfinches**. Cherry laurel in full flower below.

28 APRIL. WYTHAM WOODS.

In the afternoon, took Professor and Mrs. George Salt, of the University of California, Davis, California to see the north hill. **Gorse**, which still forms a good mature patch, in flower at My Lady’s Seat. **Sycamore** just coming into full flower. Drought has somewhat delayed tree and shrub leafing, and the woods are still thin and bare. On Rough Common the **cherries** are in full flower: two on woodland edge at the Chalet side (besides the two actually in the Chalet Woods), to near the *Calamagrostis* patch on the west side. By the latter are one or two quite young ones.

{reverse side}

1 MAY 1960.

1 MAY 1960. WYTHAM WOODS.

Rob and I went out on May morning to look for warblers in Marley Wood, 5.40-7.15 a.m. GMT. At first it was overcast and fairly cool, though calm, but a little sun came through later. The woods are only half clothed with green, mainly **hawthorn**, **wayfaring trees** (flowers nearly out), **elder**, **sycamore**, and very early stages of **oak** and **elm**. Large stretches of **bluebell** flowers.

We heard and saw a pair of **blackcaps** in woodland glade edge, tree canopy; and two **garden warblers** (1 ♂, 1 ♀) in different places, but similar habitat (the one, of course, easiest to observe!). Also heard and saw one **willow-wren** and one **chiffchaff**, former in woodland edge tree canopy; latter in woodland tree canopy of Marleywood Plantation. Heard others. No **whitethroats** or **nightingales** heard or seen, and no **grasshopper warblers**, though H.N. Southern heard several of the last on Radbrook Common about two days ago. **Great spotted woodpecker** drumming heard, and a **green woodpecker** flew up from the succession-scrub field by Marley Lodge into an oak tree. This field is mostly impenetrable hawthorn-rose-bramble now.

A pair of **jays** in the scrub canopy zone of Marleywood Plantation, and a flock of **wood-pigeons** flying apparently from a roost near streams 5 and 5 A. Several **jackdaws** on standing dead beeches (and neighbouring live trees) "LOGS 29 & 30".

Other birds heard or seen in the woodland of Marley Wood were **wren** and **robin**, **blackbird** and **song thrush**, **blue** and **great tits**; and in glade edge with birch, elder etc. a pair of **marsh tits**; these were seen, together with a **great tit** and a cock **reed bunting**, in the tree canopy of a flowering sycamore on the

{reverse side}

1 MAY 1960.8 MAY

1 MAY 1960. WYTHAM WOODS ***

woodland edge by (*Phragmites*) Marsh 2.

There is a zone of wooded grassland east of the track between Marley Wood/Park and the arable fields i.e. a sort of historical spread of open wood and park that is not being cultivated. Presumably these trees are preserved like the rest of the Park? Mostly oak and elm and hawthorn.

There is a large patch of open hawthorn scrub at the lower end of the Park. This is perhaps part of the ancient area called "Bushy Ground" and may have escaped cultivation because of the irregularity of the ground, but also escaped complete scrub thicket by cattle browsing.

8 MAY. WYTHAM WOODS.

We visited Pond 1, 11.45 a.m.-2 p.m. G.M.T. to collect water-mites for Ian Efford. Spoke to H. Probitts at his house and confirmed that he has certainly seen no **hornet** nests in Wytham Wood in the last few years,

{reverse side}

8 MAY 1960.

8 MAY 1960. WYTHAM WOODS ***

and of hornets none or “only the odd one.” He had also seen no larch *Sirex* in this period. Voles of some sort have been ring-barking a good many **Lawson’s Cypress** e.g. below Sundays Hill.

Sycamores are in full flower, and a **hornbeam** on the Singing Way just coming into flower. The **wayfaring trees** on Rough Common are in full flower, but **hawthorn** only in flower bud. Grassland is dry after a warm and mostly dry week and accumulated drought of a fortnight or more. **Bluebells** in flower.

Pond 1. *Potamogeton natans*, bulrush and *Typha* not yet in the leaf. Surface much covered by masses of light green filamentous alga. Large numbers of water-mites swimming in the water (which is not weedy below the surface) within a few feet of the dam, (also *Daphnia pulex*). Collected (R.A. & C.S. Elton) about 30 water-mites, of which 25 put in to Viets solution for examination by Efford.

1452 A

Only one or two were bright red, mostly dull colours, except for one brownish species with a bright yellow-brown patch on the back.

1 adult *Limnesia fulgida* Koch
1 ♂, 18 ♀♀ *Piona nodata* (Müller) 17 ♀♀, ♂ lost
1 ♀ + eggs *Pionopsis lutescens* (Hermann) Lost
4 ♀♀ *Tiphys ornatus* Koch

I.E. Efford det. 1960

{reverse side}

8 MAY 1960.

- A. This beetle belongs to a genus of four species found in damp places, and covered on thorax and elytra with dense silky pubescence. This species occurs on Port Meadow etc., and the other (*vestitus*) was found at King’s Weir (Walker). It gave off a strong musky odour (described in Fowler as “ammoniacal”).

8 MAY 1960. WYTHAM WOODS ***

A smaller number of mites (including the quite small green *Arrhenurus*) was collected by scraping the moss-alga sides of the dam with the net. 1452 B

In this habitat there are far more large cyclops, and some Chironomid larvae, including a large red *Chironomus*. Also here were a lot of small snail egg masses.

1 adult *Piona nodata* (Müller)

1 ♂ *Arrenurus bruzelii* Koenika

2 ♀♀ *Arrenurus* sp. a, + 1 ♀ *A.* sp. b. may include ♀ of *bruzelii*

I.E. Efford det. 1960

One newt embryo (*Triturus vulgaris* or *palustris*) still in its egg was caught in the general netting.

I did some marginal collecting:

1453

On wet A-T mud (with patch below vegetation of *Mentha* etc.) by *Carex* swamp a purplish and green carabid beetle *Chlaenius nigricornis* (Fab.) A

Swept from the emergent (to 18 in.) *Carex* swamp – rather the narrow leaves just beginning to produce flowers:

1 ♀ *Tetrix subulata* (L). B

Abundant young *Tetragnatha* species n.k.

1 small globular spider *Araneus* sp. M. Lloyd det. 1960 n.k.

2 *Kateretes* n.k. E

1 ? dead-wood weevil F

{reverse side}

8 MAY 1960.22 MAY

8 MAY 1960. WYTHAM WOODS ***

Pond 1 ***

This *Carex* swamp is fringed by both A-T sallow from 2-3 ft. to full-size, as well as by terrestrial scrub on the bank, but I avoided sweeping the sallows.

On the damp wall, there is a wet zone of two or three inches where the water-level has recently dropped leaving alga. Here were some small golden-winged caddis flies running about, some large Chironomid flies (many empty fly pupa cases on surface water), and a small dark bug, *Chartoscirta*

1454

Three **mallard** (♀, 2 ♂♂) rose from the Pond; we heard a **moorhen** but no sign of **dabchicks**. One or two **whitethroats** were seen in the scrub canopy near the pond, and at least one **nightingale** was singing in dense hawthorn scrub little way off. One or two ***Cardamine pratensis*** in flower on “damp” (now very dry) meadow patch where the soft thistle occurs.

22 MAY. WYTHAM WOODS.

Went with Rob 10.15-11.30 a.m. GMT to Marleywood Plantation to take colour and some other photos of habitats. Warm with calm and diffuse sun through clouds. **Heard great spotted woodpecker** in wood, and **green woodpecker** in distance. The foliage is all cut, including ash. By the oak-ash-sycamore

{reverse side}

22 MAY 1960.

24 MAY

22 MAY 1960. WYTHAM WOODS ***

wood edge of the drive, where *Rubus caesius* is abundant, a large leaf of *Arctium lappa* had many holes made by the caterpillar of the plume-moth *Alucita galactodacyla* (Schiffermueller) (took colour photo). One caterpillar of it on the underside of leaf, very beautiful cryptic green and hard to see.

Hawthorn about to peak of flower, also *Anthriscus sylvestris*. On a drive to Uffington, Berks., later in the day, the whole countryside seemed white with hawthorn hedges in some places. I noticed that *Anthriscus*, although widely tolerant seemed often to do very well in partial shade of hedgerow trees like English elm. The whole stretch of rather flat farmland between Frilford and Uffington has enormous dominance of **English elm** in hedgerow trees, and not much sign of elm disease.

The chalk grassland round the White Horse itself has few flowers yet except a lot of deep blue milkwort.

24 MAY. WYTHAM WOODS.

Went up to Rough Common in the afternoon, brilliant sun and fracto-cumulus, to take colour photos of habitats. The Common is still being intensively trapped by Dennis Chitty & Ellen Phipps for

{reverse side}

24 MAY 1960.

25 MAY

A pair of magpies in the woodland edge of The Singing Way above Radbrook Common.

24 MAY 1960. WYTHAM WOODS ***

Microtus, but by keeping chiefly to regular narrow paths they have avoided over-trampling. Since the beginning of this month they have been kept off the north-west bit where bramble control has been tested. Saw a fresh **green hairstreak** on the *Brachypodium pinnatum* area sitting on grass in ground-zone where path trampled). Heard **cuckoo**. The **hawthorn** still full flower.

25 MAY. WYTHAM WOODS.

Went with Stephen Hurry to Nealings Copse area, 9.15-11.45 a.m. GMT., taking a few habitat photos on the way. Hot and sunny on the lower slopes, but cool breeze on top.

Sundays Hill grassland has obvious thorn and bramble invasion going on from the Hatchett's Lane woodland edge, also a number of small hawthorns out in the open grass, that really ought to be cut out. Many must be since Duffey's time.

From flowering hawthorn on this edge (probably not on the flowers) I beat a small Coniopterygid lacewing with grey wings. *Coniopteryx tineiformis* Curtis C.A. Elbourn det. 1963

1455

Nealing's Copse was a wood in mediaeval times, but most of what survives as a strip, on the lower side of the path bounding the young plantings, is very smashed up deciduous woodland in which the taller (but not very old) trees are mostly ash and **wych elm**, with some oak, sycamore, **black poplar** etc. The chief interest lies in the abundant dead wood, both

{reverse side}

25 MAY 1960.

Later, I wrote to Major Mills who arrange to have this place sealed off to prevent accidents to children.

25 MAY 1960. WYTHAM WOODS ***

on the trees (branches; and standing dead elders) and on the ground; and the amount of really enormous understorey shrubs and trees – as hawthorn, maple, hazel coppice and spindle. Other shrubs are elder, **wayfaring tree**, **privet**, **rose**. Though not at all natural or with a typical structure, it has obviously not been touched for years. It would be a useful reserve.

We especially looked at the D/D Wood of a wych elm on the edge.

The pasture of Woodend Farm outside this, is rough with dark “cowpat tussocks”. **Badger** tracks (evidently from the Nealing’s Copse set {sic = sett} above) crossed a damp ditch from the wood into the field. (Colour photo).

We looked into the north-west corner of Bean Wood, where there is a large group of not very stout but fairly tall **aspens**, a good many dead or dying, but some healthy. No sign of longicorn damage (**Saperda**).

Just above here we discovered a new spring (S 19) inside an old pumping station, now quite derelict. But the roof is on the brick shed which has two sunken rooms in which stands 4-5 feet of water, visible through open door gaps. We collected 3 ♂ (inferred), 1 ♀ **Velia caprei** Tamanini on water surface; also a drowned ♂ **Leistus terminatus** (Hellwig) floating (S.W.H. collected). (Latter det. from Kevan’s 1949 key).

1456 A B

WYTHAM AREA

GENERAL FIELD NOTES BY C.S. ELTON.

Book 15.

19 June - 19 October 1960. {actually 3 February 1961}

C.E. 1463- 1515 {actually 1519}

Red ticks²⁹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles³⁰ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

Editor’s notes:

²⁹ Shown as **bold** in edited version.

³⁰ Edited to A or 00

19 JUNE 1960. WYTHAM WOODS.

Took lunch up to The Ridge, very hot sun, 12.30-2 p.m. G.M.T. The grassland in the two easterly units (i.e. east of the sycamore isthmus) is mainly *Brachypodium pinnatum* with a good many huge old partly grass-covered *Lasius flavus* mounds. But it is not so dense and high as to exclude other species which (like the **rock-rose**, **salad burnet**, *Briza media* and *Lotus* – all in flower) may be mixed with it, or else occur in small T/2 areas, together with such things as *Veronica officinalis* (pale lilac flowers). Meads has evidently cut out young **hawthorns** which were lying in places, but more needs doing. There are quite a lot of little **oaks** <1 foot, in the grass, and in the scrub edge was a taller (5-6 ft.) oak and a 3 ft. **beechn**. Except for some **spindles** which are dead (? deer), the shrubs that I selectively “liberated” in April 1954 are well e.g. a buckthorn (there is another one not far off also), a dogwood clump, and a pink rose that is now large and apparently protecting a growing spindle. Sycamores need cutting, but I am afraid of bracken taking over, as it has on so much of the elder belt to the west. It might be worth digging up some turves with young oaks and planting them in the bracken area?

A 1960 young **grey squirrel** was exploring the scrub canopy by the big **horse chestnut**. This tree shows some sap leaks, but no insects were noticed near them.

{reverse side}

19 JUNE 1960.

1463. ♀ *Andrena chrysosceles* (Kirby) I.H.H. Yarrow det. 1960

♀ *A. haemorrhoa* (Fab.) I.H.H. Yarrow det. 1960

19 JUNE 1960. WYTHAM WOODS ***

There is a good deal of the small-flowering **white bramble** at the scrub or scrub-wood edge of the grass, but in one place **bracken** has certainly replaced it since 1954 (? aided by Meads' bramble-cutting). The **elder** was in full flower, but seems not to be visited by insects, a fact also noted elsewhere in Wytham by S.W. Hurry.

The **dogwood** flowers were beginning to go over. They have a strong unpleasant carrion smell, and were being visited by *Anaspis fontinalis*, *A. maculata*, *Byturus*, *Grammoptera ruficornis*, small bees (2 kept), a small squat dusky moth with fore and hind wings at angles like a skipper, etc. 1463 = Hym.

The rose flowers also had *Anaspis fontinalis*, also a yellow and black longicorn (*Strangalia maculata* (Poda)). 1464

Lower Seeds is in an interesting state. The new farmer has no **sheep** pasturing, but has allowed all the lower bit to grow into hay. The lower pasture zone where the sheep mostly grazed, and which had much *Bromus mollis*, is now quite a good mixture of mostly wild grasses, including such calcareous species as *Trisetum flavescens* (said by Hubbard to be good food for sheep and cattle). The middle zone has a lot of *Bromus erectus* in flower. The Reserve above is mostly *Brachypodium pinnatum* in its upper parts, but more mixed on the rest. Large patches of *Galium pumilum* in flower.

{reverse side}

19 JUNE 1960.

19 JUNE 1960. WYTHAM WOODS ***

Rob and I visited a **kestrel**'s nest site in a large English elm in the Follies, and I photograph the tree. Christopher Perrins told me about this. A huge limb about 2 ft. or more diameter had broken off some time ago from circa 30 ft., and lies sterile, hard, barkless in the pasture. The scar is deep and evidently makes a sort of shelf or big pocket mostly concealed by the foliage (the tree seems healthy). We saw the kestrel fly away from the tree.

Perrins also reports a **kestrel** near the Park, also 1 pair of **great-spotted** and 2 pairs of **green woodpeckers** nesting in the trees there. This year he has found about 10 pairs of **redstarts** in Wytham, some in natural rotten holes.

{reverse side}

15 JULY 1960.

{Pages 4-9 are missing.}

15 JULY 1960. WYTHAM AREA.

With S.W. Hurry, explored some springs etc. on the farmland of the southern slopes at accessible from the Eynsham Road, 9.15-11.30 a.m. G.M.T. Sunny and warm.

Pond 5 lies in an area of parkland type with many large **black poplars**. We did not examine it further, but it is essentially a woodland pond. Apparently not on University land.

Hill End Camp, an educational area of huts in large fields, with pure farmland to the east. On the older, six-inch, map it is called Hill End Farm.

Flushes come out at two points in the upper field, both of them partly shaded by willows. They come to a large out-door swimming bath, partly underground, and continued down as Stream 14, which crosses the main road and eventually gets to the Thames, if not now cut off by new gravel workings at Filchampstead.

Marsh 13. The upper one, lying in a shallow valley in a large cattle pasture from which it is not fence. It is about 150 yd. long, with several lines of small pollarded willows – ***Salix fragilis*** (not pollarded for some years) which only shade about 1/3-2/5 of the marsh which is about 13-15 yd. wide. There is a tiny trickle of stream in a quagmire with much iron-staining of the water. There is much brooklime (***Veronica beccabunga***) in flower in the wettest parts. The marsh is like the one at the head of Stream 5A (= M 6) in Lower Follies: ***Juncus inflexus***, ***Epilobium***

{reverse side}

15 JULY 1960.

A (1) 1 ♀ 1 ♂ 2 queens 1 kept

A (2) 1 ♀ 1 queen Separate nests All ***Lasius niger*** (L.) A.J. Pontin det. 1962

B 2 queens ***Myrmica scabrinodis*** Nylander var. *sabuleti* (Meinert) (as *M. sabulati*)
A.J. Pontin det. 1962

15 JULY 1960. WYTHAM AREA ***

parviflorum (flowering), *Equisetum palustre* (flowering), also a little *Epilobium hirsutum* (flowering) *Scrophularia* species

Just below the bottom of this marsh the stream goes underground. Below this, in the open patches is a closed tank and at the surface a pan of 2 in. iron-stained trampled water 5 yd across, with *Tubifex* in the mud. This flows to a grass marsh, but goes below ground, suddenly re-appearing as a strongly bubbling spring (S 22) with *Gammarus*, that flows down to the rest of Stream 14 (running by a hedgerow with some willows).

Three **green wood-peckers** in the willows.

Just above Marsh 13 the ground rises rather, and there is a scatter of Coral Rag lumps (possibly rolled down from the arable land above). The pasture is close grazed. Under these lumps were very flourishing nests of *Lasius flavus*, which also have a number of active nest mounds here; also of *Lasius niger*, with queen pupae, winged teneral fawn-coloured and one or two darker queens, and winged males; and one of a *Myrmica*. 1473 [A]

In a *flavus* nest I caught a staphylinid (*Paederus litoralis* Gravenhorst), common on grassland, while S.W.H. saw *Platyarthrus hoffmannseggii* in nests of both *Lasius*. [B] [C]

{reverse side}

15 JULY 1960.

15 JULY 1960. WYTHAM AREA ***

Marsh 14 is more complex. Its surroundings are non-grazed ley grass from which it is not fenced. At the head is a metal tank, probably piped, but water not running and pea-soup green with many small *Helophorus* on surface. I imagine it is "improved" pasture and the tank not in use. Mosquito pupal cases.

The marsh outside the *Salix fragilis* that shade the main lower bit, starts below a zone of meadow with *Pastinaca*, passes through a zone with much *Cirsium arvense* in flower (being visited by bumble-bees, syrphids, *Empis*, *Rhagonycha fulva*, (in copulation partly) etc., mixed below with thin *Phragmites*. 1 kept 1473 D

Other flowers were *Epilobium hirsutum*, field scabious, *Heracleum*, etc. there is very little litter or moss on the ground below this 3-5 ft. marsh, and no water. In the wood below it develops a seepage stream, which at present consists of very shallow iron-stained puddles. The vegetation is poorer than outside.

Tilbury Farm.

Two spring sources supply the farm. S 20 is in a closed tank under an enormous **black poplar**, and below there is a small stream (Stream 13) develops and runs in a deep ditch by a hedgerow. Above there is a now-dry ditch by a hedgerow which has, however, a great deal of *Equisetum telmateia* on the edge. This comes down to the farm, where what was once a small farm pond

{reverse side}

15 JULY 1960.

15 JULY 1960. WYTHAM AREA ***

Tilbury Farm*** is now a marsh = Marsh 15 full of flowering water-cress (*Nasturtium* species), shaded by willows.

Spring 21 and Trough 21 start in a cattle pasture just west of S 20, and a shallow former channel is marked by a few pollarded **willows** (*S. fragilis*) marking the way to its "junction" with Stream 13. The main spring source has just been enclosed in a concrete tank piped to a large concrete trough (T 21). This has, besides debris from the willows shading it, some filamentous green algae, and a thin muddy bottom with abundant small holes of worms or chironomids (none seen). A good many dytiscid larvae (of ? *Agabus*). There is a small seepage pool adjoining, water a few inches in cattle-trampled mud and dung with some battered grass. On the wet mud and water surface were two kinds of metallic dolichopodid flies (a) larger greenish with white wing-tips =

(b) smaller light metallic green.

The air photos show several flushes just above "Stimpson's", which should be looked at.

{reverse side}

12 SEPTEMBER 1960.

15 JULY 1960. WYTHAM WOODS.

In the afternoon 1.30-2.30 p.m. G.M.T., went to Marleywood Plantation with William Murdoch (a Glasgow student who is just starting a field study of *Bembidion* etc. at the B.A.P.), with Rob.

The vegetation is notably rank after the very wet months, and Stream 3 is almost covered with *Carex pendula*, bramble etc. Stream 5, being under a thick canopy is pretty clear, and has much wider and more open flat yellow-brown mud margins than any other Marleywood Plantation streams. Stream 5 A is rather overgrown with *Carex pendula*, bramble, etc. except in the upper bit (but below the lane), which has not had the canopy thinned. The central block of wood is still not thinned, though scheduled to be, under the Forestry Working Plan. Streams running well, a bit turbid.

We saw only one *Bembidion*, no other Carabids, and otherwise only one or two *Lycosa*, small flies and Saldid bug, on the mud margins.

Rob noted a group of titmice by the wood age onto Lower Follies, including **long-tailed**, '**marsh**', and a **willow-wren**.

Ivy is common on the woodland floor in the Stream 5 area, and climbs the trees, on which was flowering* sparsely at the lane edge.

1495

{reverse side}

18 SEPTEMBER 1960.

18 SEPTEMBER 1960. WYTHAM WOODS.

In the evening, about 4.30-5.30 p.m. G.M.T. I visited Common Piece. It was fine, cooling, calm. I beat and swept ride-edge bracken, shrubs, sycamore, also the 6 ft. hemp agrimony in Marsh 1, but the catch was extremely meagre, only very few spiders, bugs, aphids, psocids, flies. I kept one orange fly swept off bracken at deciduous ride edge, field layer. 1497
We visited the small badger earth at First Fork, which was occupied apparently, and found large and small tracks on the muddy rides near.

{reverse side}

27 SEPTEMBER 1960.

27 SEPTEMBER 1960. WYTHAM WOODS.

Monte Lloyd and I visited the flowering ivy on the walls on the Lane to Wytham Abbey from the village, and inside the old farm yard there, 10-10.40 a.m. G.M.T. It was sunny most of the time, but with a cool breeze. Collecting was done from 3-9 ft. and flowers, as at Cumnor (see non-Wytham Area notes of this date, also O.E.S.412-417), were in three stages, the anther stages being the most popular. 1499

Vespula were very abundant, there being more *vulgaris* than *germanica*:

Queen *V. vulgaris* (L.) C.E. collected 7 (2 kept), M.L. collected 9 Total 16

Queen *V. germanica* (L.) C.E. collected 4 (2 kept), M.L. collected 4 Total 8

♂ *V. germanica* (k.) C.E. collected 1.

A

B

One Crabonid wasp M. Lloyd collected

C

The flies were not very numerous, and we noticed a few small ones. *Callophora* were common, very few *Orthellia*. Both these were much more abundant in the Cumnor place. A few hive bees. For detailed collection see below (lumped together as by M. Lloyd and C. Elton). Beating gave two spiders (C.E. 1499 N). There were webs on part of the ivy, but only occasional. Otherwise, there seemed to be virtually no predation going on at this massive concentration of insects.

1 *Mesembrina meridiana* seen n.k. Field observations/det. C.E.

6 *Eristalis*-type Syrphids all ♀ *Tubifera pertinax* (Scopoli). K.G.V. Smith det. 1960 (as *Eristalis p.*) 2 kept.

D

{reverse side}

27 SEPTEMBER 1960.

27 SEPTEMBER 1960. WYTHAM WOODS ***

- 3 yellow and black Syrphids 2 ♀♀ ***Syrphidis ribesii*** (L.) 1499
 1 ♀ ***S. vitripennis*** (Meigen) K.G.V. Smith det. 1960 (as *Syrphus r.* and *v.*) E
- 2 *Orthellia* ♂♂ ***Orthellia caesarion*** (Meigen) K.G.V. Smith det. 1960 F
- Bluebottle ♂ ***Calliphora vomitoria*** (L.). K.G.V. Smith det. 1960 G
- 4 Blueish metallic ♂♂ ***C. erythrocephala*** (Meigen) K.G.V. Smith det. 1960 2 kept. H
- 1 ♀ ***Pollenia rudis*** (Fab.) K.G.V. Smith det. 1960 J
- 8 speckled Muscids K.G.V. Smith det. 1960 K
 1 ♀ ***Morellia*** spp. (“♀s not possible”)
 1 ♀ 3 ♂♂ ***Pollenia rudis*** (Fab.) 1 ♀ 2♂ kept.
 2 ♀♀ 1 ♂ ***Musca autumnalis*** Degeer
- 1 ♂ ***Lonchaea lauta*** Collin (presented to Hope Department) K.G.V. Smith det. 1960 L
- 1 small Muscid fly ♂ ***Opsolasia roederi*** Kowarz K.G.V. Smith det. 1960 M
- Beaten from ivy (in flower), 2 spiders N

{reverse side}

27 SEPTEMBER 1960.A. Brick (***Agrochola circellaris*** (Hufnagel))

27 SEPTEMBER 1960. WYTHAM WOODS ***

Rob and I went after dark to the same **ivy** walls in the Wytham Abbey lane (7.15.-7.40 p.m. G.M.T.), to look for moths. The night was clear, cold and starry with a little moon, and a slight cool breeze. There was very little life on the ivy flowers, and only on the staminate ones. We took one moth, sluggish on flowers at circa 5 ft. 1500 A

No "day flies", but quite a lot of small spiders active with slight webs (2 k.). B

One ***Porcellio scaber*** (small) and one ***Oniscus asellus*** (young) on flowers. n.k.

A good many mosquito or gnat-like flies, also some delicate flies of type caught by Lloyd at Cumnor Hill:

5 ♂ mosquitoes ***Theobaldia annulata*** (Schrank) K.G.V. Smith det. 1960 C

6 speckled-winged 'gnats' 2 ♀♀ 4 ♂♂ (2 of each kept.) ***Anisopus punctatus*** (Fab.) D
K.G.V. Smith det. 1960

A yellow-spotted black '*Otiorhynchus*' was beaten off this flowering ivy. ***O. sulcatus*** (Fab.) Mark Robinson det. 1980 E

30 SEPTEMBER 1960. WYTHAM WOODS etc.

With William Murdoch to look at water margins on the University Farm and 10-Acre Piece, 9-11 a.m. G.M.T. Cloudy, damp, east wind. Very little signs or activity of insects on mud margins of Seacourt Stream (above Farm) or on R. Thames in Summerford Mead: but on these banks the riparian zone is almost all vegetated either by cattle trampled grass or a thin surviving zone of marsh and reed-swamp, and there is little bare mud, certainly very little that is not trampled.

{reverse side}

30 SEPTEMBER 1960.

1501

A. *Sium latifolium* L.

C. Confirmed E.F. Warburg 1962.

1502

A 3 ***Isotomurus palustris*** (Müller) C.A. Elbourn det. 1971

30 SEPTEMBER 1960. WYTHAM WOODS ***

We walked up Hagley Pool north side and found that the vegetation, though exposed to cattle is much better than elsewhere, partly because the fairly deep channel (which I think has been dredged during or since the War) is full of under-water rosettes of *Hottonia*, and also some **white water lily** *Callitriche*; and reedswamp of *Phragmites* & *Scirpus lacustris*; [1501]
a marginal swamp-marsh zone with *Glyceria maxima*, *Rumex hydrolapathum*, a large umbellifer in fruit; and a riparian marsh with **forget-me-not** (in flower), [A]
water mint, willow herb (*hirsutum*), **marsh marigold**, a fair amount of bog-bean [B]
(*Menyanthes*) leaf, and a large society of *Veronica catenata* in fruit and a few terminal flowers, but no visible galls or weevils (*Gymnetron*). [C]

I think the cattle are partly kept off parts of this edge by the soft and treacherous mud. There is a lot of moss in this marsh zone. "Inland" it turns to coarse T/2 pasture grass and on the transition between the true marsh and this there is a good deal of undisturbed mud, an inch or so of brown silt over black sulphurous mud. It has many small holes. [1502]

The only insects were small flies, a an olive brown *Isotoma*-like springtail quite common. [A]
There were some *Planorbis* lying still and withdrawn on this mud, presumably washed there by flood, but they revived in water.

4 *Planorbis carinatus* Müller [B]

{reverse side}

30 SEPTEMBER 1960.

1502 C. Attached to one of the *Planorbis* shells was a transparent 6 mm. flat case containing a spiral of green filamentous algae in its structure, and the active larva of a caddis, which corresponds to descriptions by A. Nielsen (1948), Wesenberg-Lund, etc. of *Agraylea*, of the family Hydroptilidae (small species that suck filamentous algae). They occur in non-flowing water, two British species, *multipunctata* and *pallidula*, separable on genitalia. The habits and structure of the former are given by Nielsen. Mosely places only one other species *Allotrichia pallicornis* near to *Agraylea*, and this comes in running water. I find no description of its case. *Agraylea multipunctata* is recorded from Blenheim Park Lake (V.C.H.).

30 SEPTEMBER 1960. WYTHAM WOODS etc. ***

Hagley Pool runs for about 1/3 mile, then becomes a much narrower ditch after turning sharply south. This is fenced from cattle and has a very different vegetation. There is abundant *Hottonia* underwater; the reedswamp is **bur-reed** and **water plantain** and a large *Carex*; the riparian marsh has **purple loosestrife**, **fleabane**, **hemp agrimony**, **comfrey**, ***Epilobium hirsutum***, ***Lycopus*** – just the sort of thing found on the River Thames bank where not over-grazed. The ditch turns southwest and peters out. 1502 C

Just south of Hagley Pool is a huge field of maize.

The T/2 grass flood-pasture has a flock of **lapwings**, **starlings**, some **skylarks**, **swans** grazing near the Thames, and two **herons**. The newly dug ditch between 10-Acre Piece and Summerford Mead has water in it, not visibly flowing, and is about 2 ft. wide and 3-4 feet deep, with clean-cut almost vertical sides cutting successively through top-soil-alluvium, river gravel and down into Oxford Clay with *Gryphaea* shells. It joins onto the lower (disjunct) stretch of Stream 8 and by it to the river. There is a similar deep drain running all down the field outside 10-A Piece, Thorny Croft and Common Piece from the top of the rise, and this was only damp. Below it joins the Stream 8 outlet system. The big field adjoining east of here has still some standing wheat (now being cut). I collected heartsease in flower on the earlier stubble: 1503

Viola arvensis (short, cream flowers).

{reverse side}

30 SEPTEMBER 1960.

seedling or sucker??

A 2 ♀♀, 1 ♂ *Tipula signata* (Staeger). K.G.V. Smith det. 1960

B 1 *Rhynchaenus quercus* (L.) Mark Robinson det. 1980.

30 SEPTEMBER 1960. WYTHAM WOODS etc. ***

While Murdoch search the margin of Stream 8 (where he only found one or two *Agonum ruficorne* on the wet mud), I worked in the **wych elm** grove, which has elms of many ages originally from the big one in the centre. There is a scatter of very young stuff, up to 5 ft. high, springing up in a reticulum probably of lighter canopy patches. Do these date from the decline of the rabbit, or do they mark an age-decline of the old parent (as indicated by work in European beech forests, *vide* Iversen's paper 1960)? I swept this high field layer of thin young elm, at 1-5 ft., (leaves still on but turning and brittle) and to took 2 ♀, 1 ♂ of a *Tipula*, and one *Acanthosoma haemorrhoidale* (L). 1504 [A] [C]

On similar habitat at the edge of shaded Stream 8, I got a small weevil. The rest of the field layer consists of rather thin *Deschampsia caespitosa* tussocks with some flowers, patches of *Mercurialis*, nettle, bramble etc., or rather poor except the mercury and young elm. [B]

The abundant small wych elm logs have some purple rather gelatinous fungus, wavy veined, flat on the wood but in later stages growing a turned over oyster-zoned grey top – *Auricularia mesenterica*. On a 2-3 in. diameter branch of wych elm at field layer height were two brown brackets of *Trametes rubescens*. (K. Paviour-Smith det. these).

Brought in a 10 in. length of very soggy rotten wych elm log (3-4 in. diameter) to keep in lab. But in 5 weeks it yielded almost nothing and was demobilised.

{reverse side}

6 OCTOBER 1960.

6 OCTOBER 1960. WYTHAM WOODS.

Visited Pond 1 with W. Murdoch 10-11.45 a.m. G.M.T. Warm, cloudy, quite sheltered in the pond area, with its thick scrub and woodland (mostly rising) ground. Leaf colours turning a bit, but full canopy still. **Giant horse-tail** still standing and green.

The damp meadow has still a lot of **devils-bit scabious** in flower (6 in.-2 ft.) and visited by ***Bombus agrorum*** and a few syrphid flies. Some plants of *Chlora* (= ***Blackstonia***) *perfoliata* in flower on drier spots.

A pair of **mallard** rose from the dense reedswamp of ***Scirpus lacustris***, up to 6 ft., which is the most prominent thing in the pond. ***Potamogeton natans*** and ***Hippuris*** growing among it. The area of open water is longest opposite the outlet, and extends along the dam. Here are only scattered

{reverse side}

6 OCTOBER 1960.

A number of beautiful transparent rhabdocoel flatworms, with very pale brown tinge, narrow head, "mucronate" tail, dark brown-red winter eggs, brown straight gut. Flat, not rigid. Black eyes (2). Corresponds to *Mesostoma* of which H. Mellanby says there are two British species. It cannot be *tetragonum*, which she figures and I have seen, because this is folded into longitudinal ridges. It exactly fits Ward and Whipple (1918) and Pennak (1953) for ***M. ehrenbergii*** (Focke), which the former give as also European, where it grows up to 15 mm. The Pond 1 ones are 4-5 mm. M. Laurie recorded *Mesostoma* species here in September 1944, January 1946 and "v.c." in May 1948.

1506C 1 ***Limnesia maculata*** (O.F. Müller). I.E. Efford det. 1962

A. 1 immature ♀ ***Singa pygmaea*** (Sundevall) M. Lloyd det. 1960.

1 immature ♀ ***Dictyna puella*** Simon M. Lloyd det. 1960.

B. ♂ ***Limonia autumnalis*** (Staeger) K.G.V. Smith det. 1960.

6 OCTOBER 1960. WYTHAM WOODS ***

plants of *Potamogeton* (dying down) and green *Hippuris*. These I swept and scraped with the tube-net. The water itself still has *Daphne pulex*, but not in large numbers like the summer population, with many black ephippia). 1506

A lot of large *Cyclops*. 1 red water-mite. Several *Corixa* (1 adult, 1 young).
Very many small mayfly nymphs.

☐ C A
B

The *Carex* marsh at the inner edge grades into *Carex-Scirpus* swamp, and today it was not very easy to decide which was which because there had been very heavy rain in the night. From damp *Juncus inflexus* there is inside it and open marsh of a smaller *Carex*, *Lythrum salicaria*, etc. with mostly a closed ground cover of moss and small flowering plants, 1507 including a great quantity of brookweed (*Samolus valerandi*) still in flower or seed, and with many young non-flowering plants as well. Sweeping this did not produce much but spiders, of which I kept two small pied ones. 1508
I also took a small Tipulid fly, and a small reddish? Nitidulid beetle. ☐ A B C

The damp ground, with a little mud showing had numerous *Lycosa* running, but no beetles at all. Under separate bits of

{reverse side}

6 OCTOBER 1960.

- D. *Agonum viduum* (Panzer). W. Murdoch det. 1960.
- E. *Piezodorus lituratus* (Fab.). A stray from gorse, to which it is herbivorously attached.
- F. 1 immature ♀, 1 immature ♂, 1 adult ♀ *Tibellus oblongus* (Walckenaer)
- G. 1 immature ♀ *Xysticus* sp. (n.k.) M. Lloyd det. 1960.

6 OCTOBER 1960. WYTHAM WOODS ***

very wet rot wood lying in the marsh were as small black Carabid beetle and a Pentatomid bug.

1508 D

E

Just where this marsh turns to reedswamp I collected abundance of a pale brown spider and one pale crab spider;
also two small *Succinea*: *S. pfeifferi* Rossässler.

F

G

H

On the dry bank above the marsh, in thin meadow by sallow scrub, there is an old iron drum about 15 cm, diameter and turned upside down. Under it a large colony of *Lasius niger*, 2 queens, A.J. Pontin det. 1962, have done some impressive construction, their nest being of clayey grey silt with numerous ramifying chambers at levels up to about a foot and galleries with half-inch diameter. There were many workers, also some adult guest woodlice (*Platyarthrus hoffmannseggii*).

1509

On scrub edge on Rough Common were **yellow-hammers** and **goldfinches**.

{reverse side}

19 OCTOBER 1960.

19 OCTOBER 1960. WYTHAM WOODS.

Took W. Murdoch out to Marleywood Plantation for him to collect grass tussocks near Streams 5 A and 5, to look for wintering A-T Carabid beetles, 9.45-10.45 a.m. G.M.T.

The leaf-fall is still quite slight though most trees and shrubs are turning colour and leaves e.g. the sycamore coming off easily. One sees a scattering of leaves falling all the time. **Dog's mercury, bramble, nettle**, wild goose-berry still in leaf. The wild gooseberry bushes (*Ribes uva-crispi*) are under canopy a few yards from Stream 5A, near an impoverished **crab-apple**. The leaf shape varies on the plant. 1511

The **bramble** under the canopy of the wood that was thinned several years back is certainly weaker and thinner than it was.

A flock of **jackdaws** in high canopy near e Stream 5 A.

On trunks of ash, oak and sycamore I found almost nothing except *Clausilia rugosa*, and there were about ten of these in the shallow bark grooves of one large ash, thickly covered but especially in the grooves with *Pleurococcus*-lichen, on which the snails were presumably grazing. This was both field layer and scrub height. (The 1 ft. or more moss zone is well-marked on the older oak and ashes). One or two also at field-layer height on oak trunks, none on sycamore or on other ashes examined.

One fly on oak trunk at 15 in.

♂ *Stratioborborus nitidus* (Meigen) K.G.V. Smith det. 1962

1512

{reverse side}

19 OCTOBER 1960.

1513 *Tachypodiulus niger* (Leach). M. Lloyd det. 1960.

19 OCTOBER 1960. WYTHAM WOODS ***

Small midges (*Culicoides*) were biting during heavy rains, under canopy and on the track.

LOG 20, the big live beech, has a smaller fallen branch, with this year's leaves dead on it.

From quite dead *Epilobium hirsutum* patch on the woodland edge by track, I swept *Coccinella septempunctata*, one earwig, and a black iulid millipede – 3-5½ ft.

1513

I also swept a good deal of low 3-6 ft. high new sycamore coppice shoots in the oak-ash-sycamore-beech wood, with full leaf, rather brittle with fungus infections:

1514

Large winged psocid *Stenopsocus immaculatus* (Stephens) (2 k.) common E.
Broadhead det. 1962

A

1 smaller psocid *Caecilius flavidus* (Stephens) E. Broadhead det. 1962

B

1 black fly ♂ *Stratioborborus nitidus* (Meigen) K.G.V. Smith det. 1962

C

1 fawn small fly *Cnemocanthera norida* (Fallén) (as *Sapromyza n.*) K.G.V. Smith det. 1962

D

1 fungus gnat (*Limonia* (e.g. *Rhipidia*) *maculata* Meigen (as *R. m.*) K.G.V. Smith det. 1962

E

1 dark smallish harvestmen adult ♂ *Oligolophus tridens* (Koch). M. Lloyd det. 1960

F

Heavy moss growth on the limestone lumps of the road culvert by Stream 5 A was brought in to sort:

1515

Moss *Thamnium alopecurum* (Hedw.) B. & S. A.R. Perry det. 1962

A

Only a few animals recorded from abundance of small life. No Carabid beetles at all.

{reverse side}

19 OCTOBER 1960.

19 OCTOBER 1960. WYTHAM WOODS ***

False scorpion – dark brown above, yellow-white below, red chelicerae. 1515

1 *Neobisium muscorum* (Leach) M. Lloyd det. 1960 B

1 *Nemastoma lugubre* (Müller). n.k.

{reverse side}

9 NOVEMBER 1960.

9 NOVEMBER 1960. WYTHAM WOODS.

Went up in the morning, 10.30-12.30 a.m. G.M.T., with W. Murdoch to visit Pond 1. Dane Meads came too and subsequently inspected some grassland areas on the top, with me.

Pond 1. The level has risen, with recent heavy rains, to cover the “*Carex* marsh” i.e. where the ***Samolus*** grows, with an inch or two of water. At present the level is only held by an old rotten barrier of boards that leaks a good deal. The new sluice-gate has not yet come into use and at present would be too high. Agreed with Meads that he should arrange (1) to get it into a movable state (2) lower the top of it and substitute several adjustable metal slats on top, each 2 in. deep. (3) finally control the present pond level about an inch or two below the present one, to bring the edge of surface water to about the present outer edge of the *Scirpus lacustris* zone.

Meads has on one occasion found a **moorhen**’s nest at the pond.

He has done some scrub cutting on and at the edge of the damp scabious meadow here. He showed me where the big **elecampane** (*Inula helenium*) patch is – plant stems dead. It is on some uncleared and unplanted Forestry Department land not far outside the Pond 1 Reserve, and bracken and surrounded by scrub and trees.

On the vertical ride down from 5 Sisters to the cross-ride above Pond 1, where the

{reverse side}

9 NOVEMBER 1960.

9 NOVEMBER 1960. WYTHAM WOODS ***

foresters had done some turf-scraping there is at the moment quite a jolly spring flush flowing down! Meads says there is a good **badger** earth on the plantation below 5 Sisters.

We visited The Ridge, where Meads has done careful **hawthorn** control i.e. of smallish plants and one or two large clumps, the old stuff being thrown down into the wood. The grassland enclaves are pretty good, except for the post-myxomatosis densification, especially noticeable for the decrease of **rock rose** and its replacement by *Festuca rubra* etc.

Agreed to remove all small **sycamores** (1) forming the central isthmus (2) where they endanger wanted scrub. These trees are mostly very damaged by past rabbit damage.

Lower Seeds. Most of this thorn, as well as two large **bramble** patches, are well under control. Much **nettle** is coming up in the bramble areas, though they are still a dense ground layer of bramble less than 10 in. high.

The farmer has no longer got **sheep**, and there is no grazing below the Reserve. This winter the permanent fence will be put up.

Upper Seeds. All this except the small meadow reserve by the Chalet Woods, is to be fenced, and a bulldozer has been "cleaning up" the Forest edge in rather ghastly fashion. The farmer will graze cattle here.

{reverse side}

9 NOVEMBER 1960.

13 NOVEMBER

9 NOVEMBER 1960. WYTHAM WOODS ***

We saw **fallow deer** tracks everywhere today.

A **green woodpecker** has been pecking holes in the gable, wood-shingled, roof of the Chalet, and Meads has warning "mobiles" to scare them off. The beak holes are quite impressive, but seem rather futile. Meads did have a big infestation of "cluster flies" (?) at one of these points, inside the loft.

Local Wytham farmers are cooperating in facilities for **house sparrow** work by _____ of the E.G.I.

The *Cepaea* pens below Probitts' house, that A.J. Cain is having made, have been under construction since last March, in appalling wet soil above an *Equisetum* flush, and are not yet finished.

A **kestrel** hovering by the pasture hedgerow between Wytham and Godstow.

The **hawthorns** (*C. oxyacanthoides*) that Meads has several times slashed have sent up "coppice" stems 1-2 ft. high, and many of them have small terminal galls on them now. 1516

13 NOVEMBER. WYTHAM WOODS.

In the morning Rob and I visited Brogden's Belt and I walked round Upper Seeds to look at the fencing preparations. The ground is everywhere still wet and tracks excessively miry. Rob got successful plaster of Paris cast of badger footprints on the margin of the track between Lower and Upper Seeds. In Lower Seeds we

{reverse side}

13 NOVEMBER 1960.

14 NOVEMBER

13 NOVEMBER 1960. WYTHAM WOODS ***

saw large flocks of finches in the grassy stubble, which flew up into the trees when alarmed: **house sparrows**, **linnets**, **greenfinches** and probably others.

The notes on Upper Seeds boundaries are combined with those from tomorrow's visit.

14 NOVEMBER. WYTHAM WOODS.

In the afternoon, 2.30-4 p.m., we did an inspection tour of Upper and part of Lower Seeds boundaries, with the Assistant Land Agent, Major Mills, his assistant, and the fencing contractor Mr. Eatley (who was intelligent and helpful). One had to accept the fact that (1) the bulldozer of the contractor had pushed away all scrub in the fields, up to an old hawthorn hedge or to the old hedge bank (2) the farmer Bilsdon had, with Mills' permission cut down all the old (perhaps more than 50-year old) big **hawthorns** on the boundary, from My Lady's Seat round most of the Chalet Woods, thus exposing the woodland edge to wind. It is intended to let these hawthorn stumps coppice up along the fence. It is however, a lamentable loss of good habitat, and a good windbreak (3) all the **bramble** patches above the path at the top of the Dell have been bulldozed.

The following matters were agreed, however:

(1) to leave uncut a small length of old **hawthorn** hedge outside the scrub "peninsula" corner in Monte Lloyd's beech grove in the Chalet Woods (2) Also leave unfelled the old **hawthorn** hedge on the Lower Seeds edge

{reverse side}

14 NOVEMBER 1960.

14 NOVEMBER 1960. WYTHAM WOODS ***

of Brogden's Belt-Elder Belt (3) Leave about 6 ft. grass verge between Upper Seeds fence and the path above the Dell. (4) Pull out several large heaps of scrub debris that the bulldozer had pushed into the wood by [2], also one in the Chalet beech grove. (5) Include the Snakepit, its banks and a small bit of edge that has young hawthorn, **beech** and **oak** coming up naturally, in the Brogden's Belt strip, though this is actually part of the field as shown on the 25 in. map. (6) Take the fence line along route pegged today with survey poles from the Dell to the Ridge where no serious bull-dozer work has been or will be done. The only exception is slight trimming of some hawthorns at one point in the Belt edge (by the larches).

There will be a fenced channel for the cattle between Lower and Upper Seeds, which will completely protect the reserve unless the gate is left open. It is suggested that we shall need some stiles when the fence is up.

One of the large beeches near Log 4 in Brogden's Belt has big limbs broken off from circa 23 feet, leaving a large scar and two fallen branch units. Not very recent. Branches already bark-split.

{reverse side}

14 DECEMBER 1960.

14 DECEMBER 1960. WYTHAM WOODS.

Walked in the woods on the North Hill, with R. Ghelardi and W. Murdoch, 10.30 a.m.-1 p.m. G.M.T. R.G. and I went on from Common Piece right to the end of Lower Ride and back along the boundary between the Reserve and Comps. 15 and 14, to Stream 8 and the wych elm grove in Ten-Acre Piece; thence we returned to First Fork. Weather cold but not raining, though the ground very miry, and rides appallingly so. The Oxford Clay surface retains the rainwater easily and the ground surface (and small dead wood) in the elm grove was very soggy. Streams 11 and 8, and outlets (now cut as drains) from S 35 and S 36, running strongly. Stream 11 is highly calcified – twigs and so on. S 35 stream-drain has a lot of leaf litter, oak and sycamore mainly, a little skeletonised. Superficial search at the culvert disclosed no *Gammarus* or stoneflies, but some

{reverse side}

14 DECEMBER 1960.

14 DECEMBER 1960. WYTHAM WOODS ***

small straight grit-case caddis larvae. The colonisation of this drain will be worth watching.

In the oak-ash-sycamore woods e.g. in Comps. 13 and 16, the **bramble** cover is very thick in many parts, and the green leaves still on the bushes. If, as I think is so, these leaves fall by the spring, they may be an important reinforcement to the seasonally dwindling litter supplies – that is, if they are edible or provide ground cover. But R.G. suggests that both bramble and bracken stay off the ground at first, rather than forming a damp winter solid litter. Snow may be important in knocking and compressing bracken.

The whole of Comp. 15 and 14 have now been given the full forestry “planting” treatment, the west end in previous recent years, the east end now in progress. 14 has all the large trees (mainly oaks) lying fairly new-felled. The scrub is all out, but for a few patches. Patches of bracken cut or rolled. The planted trees on 15 are growing to the 6 foot height range – rows of spruce, oak, beech and some ash, with the occasional border of Lawson’s cypress. 4 pheasants rose from here. Only a few minor groups of young trees are left. And this is the treatment that had been planned for a further 200 or more acres, at the rate of 12 acres a year; but this may be averted now.

{reverse side}

14 DECEMBER 1960.

14 DECEMBER 1960. WYTHAM WOODS ***

The woodland reserve has some nice cover, by contrast. Not only are there a good many trees, but also old **hazel** coppice groups, large **hawthorns**, **sallow** and **spindles**; and furthermore there is much regeneration e.g. of **ash** and **sallow**. The densest canopy in the region of Stream 11 has hazel coppice and **maples**, and almost excludes the dog's mercury etc. **Sallow** is abundant all over the Oxford Clay parts of the North Hill, being damper ground than higher up.

Under the **hazel** maple litter there are castings and burrows of large earthworms (presumably *L. terrestris*).

The scrub species observed along the upper edge of the woodland reserve are **hawthorn**, **elder**, **sallow**, **blackthorn**, one **guelder rose** hung with red berries, **spindle** and **privet**. **Maple** is abundant all along.

Dying old hazel coppice stems (standing) along the oak-ash-sycamore edge of the Comps. 13 and 16 in Lower Ride are often plastered with an orange-yellow encrusting fungus (a species of *Stereum*, K. Paviour-Smith says). There is also abundance this winter of various of the smaller bracket fungi of the *Polystictus* sort, not only on dead tree stems and branches, but also on some of the fence-posts.

{reverse side}

14 DECEMBER 1960.

14 DECEMBER 1960. WYTHAM WOODS ***

In the wych elm grove, Ten-Acre Piece, I collected two separate lots of small dead branch from field layer height and kept them in tins.

Nothing came out by 25.4.61 (when demobilised) except a few collembola and 2 very small beetle larvae (not kept).

{reverse side}

11 JANUARY 1961.

1517

- A. *Eurhynchium praelongum* (Hedw.) Hobk. A.R. Perry det. 1962
E. swartzii (Turn.) Curn. A.R. Perry det. 1962
Cirrhophyllum piliferum (Hedw.) Grout A.R. Perry det. 1962

The great elder thicket on the south side of The Ridge is still very impressive as a monument to the selective pressure of rabbits in earlier years. But many of the trees (some of which rise over 15 ft.) are dead or dying, perhaps from old age or the effect also of the 1959 drought. Under the closer canopy there is nothing but a thick layer of moss + liverwort an inch or two thick, but where the elders are dying to make glade, bracken comes in more or less strongly. The soil is a shallow brown soil and partly over rubble of Coral Rag, partly over clay patches in hollows. I collected 1 square foot of moss, which took little soil with it:

Shook out the following animals:

11 JANUARY 1961. WYTHAM WOODS.

To Rough Common in the morning to see what Dennis Chitty and Ellen Phipps are doing on *Microtus* and *Clethrionomys* there. At present (this winter) trapping is all on about 2 acres of grassland on the south side of the road. Most of this is *Brachypodium pinnatum* thick tussock, mixed in places with some other coarse species, and flanked by blackthorn/hawthorn/bracken towards the edges, except by the road. The work has been done as far as possible along fixed tracks that have of course much modified the ground, and one notices that the grassland on the north side is also fairly trampled and seamed with tracks, but least of all on the north-west quadrant that we are keeping for *Brachypodium*. Down in the south-west quadrant is a group of large white wooden nest-boxes about a foot high, which the voles visit but have not permanently occupied. Some Lake Vyrnwy voles were put in the quarry area this year, to test a cycle theory. The maximum number of *Microtus* on the south side has been of the order of 100 or 50 to acre, of which about 10%, being mature males, control fairly large territories.

I visited the Ridge to see two jobs done in December by Meads. He has felled and cleared about 50 small **sycamores** in the centre, that were blocking path and view and were not good trees. This leaves an open space about yards across. (The stumps will no doubt attempt to coppice up). He has also planted 8 very small *sessilifera* **oaks** from Probitts, nursery (!) less than 1 ft. high in wide-

1517 A (moss)

{reverse side}

11 JANUARY 1961.

1517 (cont.) E. ♂ spider

F. very small ♂ spider

G. very small ♂ spider

The moss was put in a tin, but nothing emerged by 23 January.

11 JANUARY 1961. WYTHAM WOODS ***

spacing on the open bracken-covered area among dying elders on the right as one enters from the road. This is to test whether the oak wood could be produced, though slowly, at negligible cost on our reserves. The bracken will be kept clear just round the trees, each of which is marked with a stick.

1517

I saw **bullfinch** pairs in three different tall scrub or scrub/wood edges today.

It had hoar-frosted heavily last night, and roads were icy after a day of rains.

{reverse side}

3 FEBRUARY 1961.

10.30-11 a.m.

3 FEBRUARY 1961. WYTHAM WOODS.

To Pond 1 area with W. Murdoch, 10 a.m.-12.15 p.m. GMT. Today was one of the rare warm sunny days of this winter, with small cumulus racing in a blue sky before a north wind. It was always fairly sheltered down by the Pond.

Two pairs and a single ♀ **mallard** rose up. Later I watched a brilliantly coloured **grey wagtail** running on the drifted rafts of dead *Typha* or *Scirpus* stems by the “reedswamp”, i.e. over the open water: a new species for the water surface!

W.M. showed me where he is finding the T winter hibernacula (several habitats like clay round saplings, spruce litter, tussock) of certain A-T carabid beetles – especially ***Agonum fuliginosum*** – that are presumed to return to the marsh in the breeding season. At present *Bembidion* are scarce in Pond 1 area.

From the pond I netted (1) open water with no dead plants near, down to circa 1 ft., not close to the outlet, which is running over at the top of the old sluice gate, and is about 3 in. from the top of the dam. No *Daphnia* swarms yet.

(2) Scraping round alga-covered stems of rotting ***Scirpus lacustris*** standing in situ. A good many ***Asellus***, which in the lab. settled to crawl and I suppose feed on the surface of *S.l.* stem fragments. , 1518 A

2 ♂, 4 ♀ ***Asellus meridianus*** Racovitza I.E. Efford det. 1962

{reverse side}

3 FEBRUARY 1961.

C also 1 ♀ ***Cyclops bicuspidatus*** (Klaus) not kept.

3 FEBRUARY 1961. WYTHAM WOODS ***

Pond 1..... (2)

1518

Some *Cyclops*, one a dark one (? *fuscus*) with egg sacs, the other a very small transparent one, some with egg sacs.

4 ♀ *C. fuscus* (Jurine) C.A. Elbourn det. 1962.4 ♀ *C. agilis* (Koch, Sars) C.A. Elbourn det. 1962B
C

Vast numbers of small brown globular ostracods, probably the same as C.E.

n.k.

1 *Daphnia pulex* (Degeer) not kept C.A. Elbourn det. 19621 *Eurycercus lamellatus* ♀ with many eggs C.A. Elbourn det. 1962

D

A few fly and mayflies stages

n.k.

1 *Dendrocoelum lacteum*

n.k.

1 small dragonfly nymph

n.k.

(3) Scrape-nettings off alga-fur-covered side of dam, not near outflow. The chief feature is a rich algal-diatom flora (not large filamentous forms) among which great numbers of small brown ostracod could be seen under the microscope to be busily grazing.

F

I then explored the wild wood below the Pond which extends from the present reserve right down to the boundary of the Wood, and has not yet been tackled at all by forestry. The big standards are scattered very thin – **oak** and **ash**, but there is in place is a solid, partly impenetrable high scrub rising well above 25-30 feet. And with some big understory trees of maple and hawthorn. The lower part on the north side has much well-grown but not huge **birch**.

{reverse side}

3 FEBRUARY 1961.

1519

A. 1 ♂, 1 ♀ *Anaspis maculata* Geoffroy in Fourcroy. “emerged” 25-27 February C.E. examined very carefully. ♀ O.K. ♂ damaged part abdominal appendages O.K. and small dark mark on mid elytron.

B. 1 ♂ *Anaspis rufilabris* Gyllenhal “emerged” 28 February C.E. checked presence of characteristic ♂ appendages on ventral side

C. 2 very young *Meconema thalassina* (Degeer) These must have emerged from eggs laid in the late autumn, when ♀♀ are known to resort to tree trunks etc. The small ones did not emerge but when inside the damp tin. (N.k.)

D. 2 largish *Sciara* 2 more emerged 13 March

E. 1 very small parasitic Hymenopteron

F. Collembola 17 *Isotoma arborea* (L.) C.A. Elbourn det. 1971 n.k.

G. Small beetle larva, not Mordellid, possibly Staphylinid

H. Small? Cantharid larva

3 FEBRUARY 1961. WYTHAM WOODS.

An interesting feature is that between the stream and the main part of Rough Copse there is dense hawthorn-blackthorn scrub through which some **birch** and **ash** is rising successfully. Under this scrub are dead, and vegetated mounds of earth, the relics are very large ***Lasius flavus*** mounds when the place was a field (and cf. ridge and furrow shown north of here on air survey photos).

On the reserve a few yards below the dam is a whole big fall and ash. The rotted barkless stump 3-4 ft. across is on the right bank of Stream 10 C, the rest is thick scrubby wood of maple etc., and including tall rose. The bark is on but not loosened by any visible bark-beetle attack and thickly moss covered. It has a main fork, and from one arm are apparently growing up some live "pollard shoots", though there is no connection between the fallen trunk and its stump. (A good deal of ***Daldinia***). I took specimens from two places:

Rotten branch at 5-7 ft., diameter 1-1½ in.

1519

A few patches of very rotted bark, but mainly bad, often alga coated. No obvious insect galleries. Collembola. Tinned.

On 2 March the branch fragments were moist, heavily infected with small mound-like fungi and *Pleurococcus*.

{reverse side}

3 FEBRUARY 1961.

Under microscope there was seen a dense culture of one kind of small ? flagellate, a few large **ciliates**, a **bdelloid rotifer**; and a good many ***Vorticella*** attached to bits of debris.

3 FEBRUARY 1961. WYTHAM WOODS ***

Pond 1 Reserve Ash log ...

Tree hole. On one arm of the log is a nice tree-hole full of leaves and brown debris and rain-water, in the rotted base where a branch came out, and broke. A sort of bowl 4-5 in. deep and 8-9 in. across. Apart from a rotifer, I have only seen Protozoa in the material, but in huge numbers. 3 ft. from ground.

Young **maple** growing up in places.

There are also by the stream, only a score or two of yards from the dam, two quite large old **oaks** that have **ivy** on them, covered with berries, and with entire pointed kind of leaves. One has less ivy, inside the reserve, the other just below has a great deal (also a small bird-box number 169; and Southern says **tawny owls** have often roosted in this tree). It would be an excellent place for an ivy flower survey in the autumn, as it is inside a real wood, yet evidently covered with flowers. 1521

Stream 10 C in this wood has a fair amount of big *Carex* at the edge, is shaded, full of calcium sinter on objects in the water, has clay banks, and is running fast and full. Supplies of soft leaves include hazel and ash. The hazel is the very ragged old remains of coppice.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 16.

26 February 1961-12 October 1961

C.E. 1523- 1549

Red ticks³¹ mean ready to be indexed. Crossed red ticks mean indexed.

Circles³² round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

³¹ Shown as **bold** in edited version.

³² Edited to A or 00

26 FEBRUARY 1961. WYTHAM WOODS.

We drove into Wytham Woods for a short time. Noticed some **primroses** coming into flower.

{reverse side}

14 MARCH 1961.

14 MARCH 1961. WYTHAM WOODS.

Visited Pond 1 and "Pond 2" with W. Murdoch, 10 a.m.-12.30 p.m. A hot sunny day, one of the warmest even in this very early spring. On the sandy ride up from Pond 2, which is in T/5 young mixed plantations and flanked by solid edges of Lawson's cypress that prevent the natural development of a real edge habitat, **coltsfoot** were in full flower on the damper patches, growing in tractor-and feet-flattened T/2 with bare soil areas or scattered grass mats. Collected a green-bottle on coltsfoot flower. 1523 A

A few **primroses** in flower near the ride edges. This steep ride has much bare sandy soil, also small ruts & "cliffs" a few inches high at the edge. Took an *Andrena* on this bare soil. 1523 B

Some of the tractor ruts were water-filled, apparently from seepage, as there has been no heavy rain for ten days.

{reverse side}

14 MARCH 1961.

14 MARCH 1961. WYTHAM WOODS ***

Pond 1. A pair of **teal** flew up from the open water. **Blue tits** feeding at A-T willows. Several **jays** in deciduous wood.

The marsh above the pond is fairly complex, and very much surrounded with trees. The units W.M. is concerned with are mainly

(1) the *Carex-Equisetum-Epilobium* area between the two streams, and well above the "Carex" marsh round the pond itself. The format has flowing seepage water, the latter the pond water (mainly sub-surface, but still flooding a little at the moment).

(2) a similar but drier and more sloping marsh on the west side of Stream 10, with a good deal of **Rubus caesius**, and (as it is just outside the reserve) planted with some young ? black poplars.

The sluice has not yet been modified; the pond level is 1 foot below the top.

"Pond 2". No longer a pond, but a flowing swamp *Carex-Equisetum-Epilobium*, with two flowering stems of **Typha latifolia**. The marshy part above the water level is rather narrow. Under and in the litter of *Carex* etc. were **Arianta arbustorum** (L) shells. No beetles seen!

A ♀ willow on the mixed spruce etc. plantation (T/5) near the pond had very few flower visitors. One **comma butterfly**. 1 ? hive bee*, and 1 **Pollenia rudis**. 1524 A B

{reverse side}

21 MARCH 1961.

21 MARCH 1961. WYTHAM WOODS.

Went up to Upper Ride, Comp. 18 woods, and Rough Common, 10.30 a.m.-12.30 p.m. GMT, to collect aculeates from flowering willows. But although it was fine, dry and sunny (as for the last ten days) there was a cold north-east breeze. Many *Salix caprea* are in flower and some ♂ trees almost going over, as a result of the warm weather in the last week or two (with temperatures up to 60-70 °F.). But as yet very few insects are out. Today I saw one hive bee (I think) on ♂ willow, and one small bee on bare sheltered soil on Rough Common. 1525

Upper Ride is kept open as a mown grass ride 4-6 feet wide and still has some of its former character, and *Hypericum tetrapterum* survives. It has not so far been wrecked by tractors. There is a good deal of willow along the edge (*S. caprea*).

Compartment 18 is having its going-over by contractor bandits, who have felled a large number of larger trees, **oaks** especially, and the place is in a mess. But it is not in any degree a clear-felling, but a cutting out of older trees disapproved of by forestry. It is on this region of the north hill that Perrins this year has had a number of tit nests-

{reverse side}

21 MARCH 1961.

1525 A 1 *Anaspis humeralis* (Fab.) (= *geoffroyi* Mueller) "emerged" 29 March

B ♂ *Elipsocus hyalinus* (Stephens) C.A. Elbourn det. 1970

1525 demobilised 2 June

21 MARCH 1961. WYTHAM WOODS ***

boxes wrecked and roosted in by woodpeckers, apparently owing to their own trees having been removed.

Rough Common is having extensive interference, nest-hole digging, feeding quadrats, etc. in connection with **vole** work, and must soon be given a long rest.

Arranged with Meads (a) no further operations on The Ridge this year, without consulting me (b) **pine seedlings** and recovering young **birch** to be dealt with on The Bowling Alley, subject needs of Dr. Woodell's botanical work.

From thin oak-ash-sycamore wood just below Rough Common on the steep slope, took a 2 in. diameter hawthorn rotting branch at 4-6 ft. It was old white-rotted and had alga-covered patches of bark, in which old holes 1-2 mm. of some borer. Tree alive, circa 20-25 ft. 1525

{reverse side}

21 MARCH 1961.

21 MARCH 1961. WYTHAM WOODS ***

From Lord's Common I took 2 ft. of 2-3 in. diameter dry barkless dead elder branch, on a nearly dead tree at 6-8 ft. 1526

In scattered elder-spindle-hawthorn scrub mixed in bracken-*Mercurialis*. Hollow and blackish inside: in here some *Porcellio scaber*. Several more "emerged" later. n.k.

6 *Proteriulus fuscus* (Am Stein) 1 adult ♀, 1 each stages IX, VIII, VII, VI
"emerged" E. Meyer det. 1981, and 1 *Lithobius*

1 small *Lithobius*

2 ♂ *Ptilinus pectinicornis* (L.) 1 "emerged" 15th, 1 19 April C.E. det. 1962

5 *Aleochara diversa* Sahlberg J.H. Frank det. 1966

1 *Coryphium angusticolle* Stephens J.H. Frank det. 1966

2 *Eustalomyia* sp. A.E. Stubbs det. 1975

1 ♀ *Epiphragma ocellaris* (L.). A.E. Stubbs det. 1975

A
B
C
D
E
F
G

Demobilised 2 June. 2 dead Cabrionids in residue (Kept). N.B. A. Stubbs said *Eustalomyia* parasitic on wasps. The Two hollow bits kept to show "desert fauna habitat".

{reverse side}

4 JULY 1961.

All Psocids det. E. Broadhead 1961.

4 JULY 1961. WYTHAM WOODS.

Dr. Edward Broadhead came to make a survey of Psocoptera living on larches, on which he is an authority. 9.30 a.m.-2.30 p.m. GMT, fine weather with gusty wind.

Visited 3 Pines, Plantation 2, Thorny Croft, Upper and Lower Seeds and Brogden's Belt.

Plantation 2 (west one in Comp. 4). The upper half is a thinned plantation of mature **larches**, planted apparently in 1922 (see first Forest Plan) and now 40-50 feet high. There is a thick needle layer on which is in most parts a surprisingly dense field layer of **rosebay willow-herb, nettle, bramble, bracken, male fern** etc. Here and there in this rather open plantation are seepage patches (about on the same contour as Stream 9 in Interplantation) with a little ***Equisetum telmateia***, tall *Juncus* etc. In places the field layer rises over 5 ft. Nearly all these larches are deficient in lower branches, live or dead, and there is a great deal of old brash lying on the ground still.

On a small glade of **dog's mercury** field layer, in mixed larch-deciduous edge, I swept 1 young ***Leptophyes punctatissima*** (Bosc) and 1 adult ***Pentatoma rufipes*** (L.) 1537 A, B

E.B. chose one mature larch in this glade, and beat insects onto a large beating tray as follows:

(1) Dead branches, 5-6 ft. 1538

Mesopsocus immunis (Stephens) Frequent: last instar and adult 1 ♂ (winged), 7 ♀♀ (wingless), 2 nymphs kept.

Peripsocus subfasciatus (Rambur) 1 adult ♀ (winged)

Elipsocus hyalinus (Stephens). The commonest species. 5th & 6th instar and adult. 3 adults (winged) ♀♀ and 6 nymphs (5th and 6th) kept.

Cerobasis (= *Hyperetes*) ***questfalicus*** Kolbe Frequent.

Philotarsus picicornis (Fab.) 1 adult ♀

A
B
C
D
E

{reverse side}

4 JULY 1961.

1538 F ***Humerobates rostralamellatus*** Grandjean. D. Macfarlane det. 1962. "This species has been studied by Mr T.J. Martin, until recently a student under Dr P. Murphy at Sutton Bonington: all stages feed on algae such as *Protococcus* and it is absent on fruit trees (Masse "The Pests of Fruit and Hops", – under the name *Sphaerozetes lapidarius*). It occasionally invades dwellings (Scott, 1958, *Entomologists' Monthly Magazine* 94:69-70."

G 2 ***Hypocyrtus apicalis*** Brisout. J. Balfour-Browne det. 1962.

All Psocids det. E. Broadhead 1961.

R. helvimacula is a lichen feeder (communication from E. Broadhead 11th July 1961)

4 JULY 1961. WYTHAM WOODS ***

(1) Plantation 2 ... 1538

Black globular mites abundant. F

Very small blackish staphylinid, *Tachinus*-shaped, with light legs and antennae.

Frequent. 2 kept. G

(2) Plantation 2, as 1538, but dead brash on ground, 1-2 ft. 1539*Loensia fasciata* (Fab.) 1 ♀ (winged) A*Peripsocus subfasciatus* (Rambur) 1 ♀ n.k.Thorny Croft. In quite dense mixed deciduous wood with thick young growth were two tall hollies close together. Beaten from live + dead leaves, at 3-6 ft. by E.B.: 1540*Stenosopus immaculatus* (Stephens). 2 adults 1 ♂, 1 ♀ kept (both winged) A*Trichopsocus dali* MacLachlan very abundant 3 ♀♀ (winged) kept. B*Mesopsocus immunis* (Stephens) n.k.Brogden's Belt. On the western edge between the Snake Pit and the Dell track, there are some mature larches mixed with old beeches etc. with unpruned lower branches. E.B. beat here.(1) Living branches, scrub canopy height 1541*Cerobasis* (= *Hyperetes*) *questfalicus* Kolbe v ery abundant n.k.*Elipsocus hyalinus* (Stephens) Common. n.k.*Mesopsocus immunis* (Stephens) A few. n.k.*Reuterella helvimacula* (Enderlein) 1 adult ♀ A

1 very fragile small heteropteran bug with thick antennae B

1 Anobiid beetle *Dryophilus pusillus* (Gyllenhal) C

(Recorded below conifers by Walker, 1907, for Wytham Woods; Broadhead has bred it from leaf- or flower-base lumps on larch twigs, near Harrogate, but not sure whether dead or alive tissue.) Brown teneral form. Det. E.B. 1961.

{reverse side}

4 JULY 1961.

All Psocids det. E. Broadhead 1961.

E *Humerobates rostralamellatus* Grandjean. D. Macfarlane det. 1962 (see page 37).
For small staphs, see (probably) 1538 G.1543 *C. taraxacifolia* Thuill. Mark Robinson det. 1979

4 JULY 1961. WYTHAM WOODS ***

Brogden's Belt, larch, live branches...

1541

1 ♂ *Ptilinus pectinicornis* (L.) C.E. det. 1961

Also mites and very small staphs. (n.k.) as 1538, former very abundant

(mites)

D
E

(2) As last, but dead branches:

1542

Cerobasis (= *Hyperetes*) *guestfalicus* Kolbe. Very abundant

n.k.

Elipsocus hyalinus (Stephens) Common.

n.k.

Mesopsocus immunis (Stephens) A few.

n.k.

Summary of larch psocids: 6 species, of which *Loensia* only on trash. 3 species occurred both at Plantation 2 (two others only here) and Brogden's Belt, two of them abundant: *E. hyalinus* and *C. guestfalicus*. On holly were two different species, plus one (*M. immunis*) also common or occasional on larch.

In grass just outside cattle fence, a mixed wood edge of Brogden's Belt, one large plant of milk-vetch (*Astragalus glycyphyllos*), just coming into flower. (Recorded for Wytham only by H. Bowen a few years ago, for Upper Seed; and by me seen (1 plant) on grass verge of track from Botley Lodge to Follies, years ago, before I was keeping records.)

n.k.

The cattle-fences round Lower and Upper Seeds are complete except for some gates and styles. It is four strands of barbed wire on wood posts. Upper Seeds seems to have no cattle on at present, but the meadow is low and thin (cut when?) and has masses of yellow flowers of *Crepis taraxacifolia*, some going to seed, about 12-15 in. high.

1543

A trench has been dug from the Snake Pit (now still inside our reserve) to outside (south) down Upper Seeds along the fence to a small new cattle trough. There is an overflow pipe

{reverse side}

4 JULY 1961.

Song-thrush had already taken advantage of the rubble pile as an anvil for smashing *Cepaea nemoralis* (L) shells.

4 JULY 1961. WYTHAM WOODS ***

at about 5 ft. from the closed-in tank, falling on to the ground at the larch-beech edge. The soil here is solid coral rubble, with a few fossils discernible.

Rough Common is very trampled by vole-workers, but D.H.C. tells me they stuck to special paths. There is a great abundance of flowers among the rather poor growth of taller grass e.g. *Hypericum hirsutum*.

{reverse side}

26 JULY 1961.

5 AUGUST

26 JULY 1961. WYTHAM WOODS.

Rob and I went to the badger-watching platform in Comp. 13, and stayed there 7-8.45 p.m. GMT. No badgers came out, though we waited till it was too dusky to see much under the trees (canopy of oak-ash-sycamore with glades near from recent spot-fellings of oaks). A **tawny owl** flew and alighted on a thin sycamore branch at 15 ft., when dusk was just beginning. **Hedge sparrow** hopping for a long time at sandy entrances of the badger setts. Rather windy, fine, fairly warm.

5 AUGUST. WYTHAM WOODS.

To Marleywood Plantation with P.A. Larkin 8.40-10.45 a.m. G.M.T., to look at LOG sites etc. in order to plan his investigation of the microfauna in small and large D/D WOOD, and in the latter on and above the ground. Fine between heavy showers. The thickening up of the part of the Plantation that was thinned several years ago is very striking, especially the growth of young **ash** saplings in places.

{reverse side}

5 AUGUST 1961.

5 AUGUST 1961. WYTHAM WOODS ***

Marleywood Plantation*** e.g. LOG 22 or 23 had at first some coarse **bramble** growing over the prostrate trunk in what was a big glade. The high canopy still has this gap, but there is a dense young **ash**, **sycamore** etc. below up to over scrub canopy height, heavily shading the log, and the strong arching bramble is nearly dead though still *in situ*.

From a mature **oak** near the road and not far from LOG 32, several branches had recently crashed (probably in high winds of the last day or two). The highest had come from circa 50 ft. and broken off one or two 30-40 ft. in its fall. I chopped some of the 3-4 in. diameter branch. Some very rotten in the outer zone, with stringy white-rot, but with hard heart core 1-2 in. Bark still on. Only a few frass tunnels of some larva in the rot wood, and no living signs – very sterile both under bark and in wood. This is the source-type of “Fager’s logs.”

The field layer of bramble etc. makes access to LOG 32 very difficult.

Visited Streams 5 and 5A: virtually no dead leaves on the silt, except some oak and beech. Still heavy shade. This centre section is due for forest thinning this winter, and some large trees are numbered for removal by contractors.

LOG 29 still standing, side damp “Field layer height” with a few pin-holes north-east side with a few bore holes (through bark still!) in one of which was a ♀ ***Ptilinus pectinicornis***. Huge *Ganoderma*. There are still red cheesy old logs on the ground

{reverse side}

5 AUGUST 1961.

1546 ♀ ***Bombus pratorum*** (L.). C.E. det. 1962

5 AUGUST 1961. WYTHAM WOODS ***

Marleywood Plantation*** dating from about 1940, all damp and under heavy shade. Took a bumble bee (one yellow thorax band at front, and reddish tail) from an inch or two in the butt. 1546

By the road edge, but very shady, near Stream 5, is a large patch of umbellifer in flower and fruit, which seems to be the greater burnet saxifrage (***Pimpinella major***). I noticed this in , but had no specimen to verify it at the time. Its habitat is normal, by the books but it is very local, and Druce does not record Wytham, only “between Botley and Cumnor”, also Binsey (besides some other localities round Oxford). 1547

{reverse side}

12 AUGUST 1961.

12 AUGUST 1961. WYTHAM WOODS.

Rob and I went on Michael Smyth's trap round in the lower west part of Marley Wood, on a warm fine afternoon 3-5.40 p.m. G.M.T. He caught a number of bank voles and a few common shrews, R. keeping the records. All this area, a triangle of 100 traps lies inside the reserve, one or two points being in marsh. It seems to me that the exact distribution of Marsh 5 and its smaller neighbouring flushes needs mapping properly, which the stems of the large *Equisetum* would enable us to do in early winter. The marsh edges in places have willow-herb (*Epilobium hirsutum*) in full flower up to 9 ft. high – some Field Layer! The main marsh 5 is very full of various tall flowers among the dense *Carex*, horsetail, etc.: **meadow sweet, purple loosestrife, yellow loosestrife** (collected), **hemp agrimony** (collected) – a lot of this in one patch –, marsh valerian (*V. officinalis*), *Angelica sylvestris* etc. At the edge a lot of large white convolvulus (*C. sepium*) climbs on the marginal scrub/wood edge. 1549AB

At trap-point 46 a very old fallen **elder** trunk has sprouted into a scrub-height “fence-line” of vertical shoots. A **badger** earth by the old root, and the bare bole had badger claw marks.

A lot of this quadrant of Marley Wood (where it is not marsh or dense birch wood) is an oak-ash wood with quite large

{reverse side}

12 AUGUST 1961.

This dense vegetation in the open glades and glade edges is where the bank voles chiefly live.

12 AUGUST 1961. WYTHAM WOODS ***

trees, but containing many large spaces filled with very high **bracken** (e.g. 6 ft.), bramble and herb mixtures. A lot of the big old **elders** are dying.

On the field with Stream 3 in Lower Follies **green woodpecker** flew up from the **ant-mounded** pasture to a hawthorn tree. The pasture is rather shaggy at the moment; though accessible to cattle it is the furthest from Lane's farm. Very dense tall vegetation is growing along the new ditch margins, with much flowering **teasel** and a great **horsetail**.

{reverse side}

18 SEPTEMBER 1961.

Aquatic worms collected Brinkhurst and Kennedy and det. Kennedy 1961. [See Identification File, letters C.R. Kennedy 3 and 9 October]

	Stream 5	Seacourt	Thames
LUMBRICIDAE:	(1)	(2)	(3)
<i>Eiseniella tetraedra</i> (Savigny)	-	2% 4	-
LUMBRICULIDAE:			
<i>Lumbriculus variegatus</i> (Müller)	100% 4	-	-
<i>Stylodrilus heringianus</i> (Claparède)	-	94% 212	10% 3
TUBIFICIDAE:			
<i>Psammoryctes barbata</i> (= <i>Tubifex barbatus</i>) (Grube) -	-	-	10% 3
<i>Tubifex tubifex</i> (Müller)	-	2% 4	36.6% 11
<i>Limnodrilus hoffmeisteri</i> (Claparède)	-	2% 4	40% 12
<i>L. udekemianus</i> (Claparède)	-	-	3.3% 1
Total specimens	4	224	30
HIRUDINEA:			
<i>Piscicola geometra</i> (L.)	-	+	-
<i>Glossosiphonia complanata</i> (L.)	-	+	-
<i>Helobdella stagnalis</i> (L.)	-	-	+
<i>Erpobdella octoculata</i> (L.)	-	+	-

NO SPECIMENS AT B.A.P.

18 SEPTEMBER 1961. WYTHAM AREA.

Went out in the afternoon with two young ecologists from Liverpool, C.R. Kennedy and Dr. R.O. Brinkhurst, who are working on freshwater Tubificid worms. They took collections at three stations (1) silt bottom of Stream 5 inside heavy woodland canopy (2) gravel and mud shallow bottom of Seacourt Stream just south-east of Wytham village (no submerged vegetation)

{reverse side}

18 SEPTEMBER 1961.20 SEPTEMBER 1961.

18 SEPTEMBER 1961. WYTHAM AREA ***

(3) Gravel and mud shallow edge of R. Thames near Godstow Bridge (in OXON.), near but not in *Glyceria maxima* clumps.

In Marleywood Plantation there is virtually no leave-fall yet in spite of severe winds at the weekend. But one or two ash leaves in the litter-less Stream 5, green and fresh, were already partly eaten, and had *Gammarus* etc. on them.

20 SEPTEMBER. WYTHAM WOODS.

Went to take photos of cowpats etc., with Rob, in the afternoon. There were black and white cattle in the permanent pasture just below the Forester's House, and still flies visiting the fresher cowpats. A small flock of **rooks** rose up, and I found many of the older cowpats partly pecked open – ones which had a firm dry crust but were wet and “active” inside.

{reverse side}

26 SEPTEMBER 1961.

26 SEPTEMBER 1961. WYTHAM WOODS.

Brilliant calm weather with some haze in distance. Photography morning, on sycamores damaged by **grey squirrels**, and the early signs of leaf-fall. **Sycamore** damage is very evident and conspicuous in many places, the brown dead leaves standing out against the green canopy, and closer inspection showing the bark, peeling by squirrels, which seems to occur at all heights. It can be seen at the edge of Lower Seeds, and of Rough Common, and in the Chalet Woods, and elsewhere.

There is little leaf-fall as yet, and I think some of it at any rate is from partly damaged sycamores. One finds it difficult to get a place where bare ground exists under canopy, except under beech, and the continual thinning encouraging a very strong growth of herbs, some tall grasses, and especially bramble. The litter (or its absence) is anyway hard to photograph under dense shade, so one compromises by taking it on path "edge" in sunny patches.

The north side of Lower Seeds is now **cattle pasture**, fenced across in two fields, the lower of which extends also to the south side. The **sheep** were discontinued by the new tenant a year or two ago, so the dung community is now based on cattle-dung, not sheep-dung. There is quite a variety of herb species mixed in with the dominant tussocks of cocksfoot, which are luxuriant though with few flowers, – the other species

{reverse side}

26 SEPTEMBER 1961.

29 SEPTEMBER

30 SEPTEMBER

26 SEPTEMBER 1961. WYTHAM WOODS ***

also having their flowers much suppressed. Nevertheless one can see ploughman's spikenard (*Inula conyza*) six inches high (instead of 2-3 ft.) in flower here and there. Spear thistles are scattered in flower or seed, – about 1-1½ ft. By contrast, the Reserve on Lower Seeds stands out as a massive coarse meadow. There is one solid block of **bracken** on it now, near the north end.

A **hare** in the upper cocksfoot pasture.

29 SEPTEMBER. WYTHAM WOODS.

Went up to take some more habitat photos, in colour. The whole of Lower and Upper Seeds is now entirely **cattle pasture**. The former **lucerne** area in Upper Seeds still looks different from the former rough meadow, both now being rough grazing < 1 ft. except for scattered thistles etc. The two tall meadow reserves form a vivid contrast. The woods are still essentially in full canopy, with little leaf-fall, also **elder-hawthorn** scrub.

30 SEPTEMBER. UNIVERSITY FARM, WYTHAM.

I gave a 20 min. talk about the ecological work in Wytham Wood, to a group of visitors from the London area of the Institute of Biology. Dr. Bunting, at the Field Station, told me that September is the month that **badgers** from the Woods attack their maize fields. This year they pulled down and ate a plot of early-seeding maize.

{reverse side}

12 OCTOBER 1961.

12 OCTOBER 1961. WYTHAM WOODS.

Went up to the Ridge and north end of Brogden's Belt to take habitat photos. Brilliant cloudless sun. LOG 10, a fallen beech branch, which was photographed to show non-bark-beetle loose bark succession, had hard rather distorted lumps of black knobby fungus under the edges of loosening bark, det. by K. Paviour-Smith as *Daldenia concentrica*.

There is still very little leaf fall – mainly a scatter of sycamore. Ash is turning yellow but only a few leaves down. Oak, beech and elm in full leaf. Many elders on the Ridge almost bare, but many of these are dying off. Dog's mercury in full leaf. Some patches of leaf damage in Brogden's Belt are not quite like ordinary *Hermaeophaga* holes, being larger and more ragged eating (of the under side, not at the edge either like

{reverse side}

12 OCTOBER 1961.

18 OCTOBER

12 OCTOBER 1961. WYTHAM WOODS ***

Barynotus work).

Since the singling of these sycamore coppice either side of the Belt at the north end by the foresters several years ago, with consequent thinning of canopy, the original *Mercurialis* carpet has been a good deal overgrown by larger field layer species like bramble etc. But where tree canopy is still dense and there is dominant *M.* with moss below, on the Coral Ragged shallow soil. New tank-overflow at the Snake Pit running steadily.

A bullfinch in forest edge on Keeper's Hill.

The Forestry Department has illicitly or carelessly permitted trials of an Allen motor cutter on Rough Common. A swathe has been cut 5-7 ft. each side of the metalled road, and across from the old *Calamagrostis* patch to make a wide "cart-track" connecting with the columbine path. Neither patch of *Calamagrostis* has been harmed.

18 OCTOBER. WYTHAM WOODS.

Visited Pond 1 in the morning with Anne Trotman and C.A.B. Elbourn. Sluice is not quite water-tight but there is about 15 in. of water in the pond at the dam now. No ducks today.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 17.

26 October 1961-13 April 1963

C.E. 1557- 1596

Red ticks³³ mean ready to be indexed. Crossed red ticks mean indexed.

Circles³⁴ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

³³ Shown as **bold** in edited version.

³⁴ Edited to A or 00

26 OCTOBER 1961. WYTHAM WOODS.

Went a round of the reserves on the top from Lord's Common to the Bowling Alley in the morning, with C.A.B. Elbourn.

Lord's Common. Great abundance of dead *Gentiana amarella* stems with old seed vessels, (noticed also the other day on the barest old quarry area of Rough Common).

The Ridge. Many **elders** noticeably dying. Two groups of flattish, or slightly concave (convex y. {? = yellow}) brown toadstools in coarse grass edge. <1 ft. of entrance path from road, scrub edge. *Armillaria mellea* (note yellow stalk bases). No sign of old stump or wood at surface, but K. Paviour-Smith (who det. this) went out and by digging found the fungi were based on a buried rotten stick of wood < 1 in. diameter. 1557

Brogden's Belt. Several groups of pale brown *Coprinus*-shaped close-packed smallish toadstools, brown gills turning black after a few hours, on shaded track under beeches, and with thin leaf litter. There {sic = they} were det. by K.P-S. as either *Coprinus miceus* or *C. atramentarius*. 1558

The Dell. Much larger **nettle** patch has spread out from the original old rabbit bury (say 1952). (Can be seen on air photos) Many **elders** in surrounding scrub are dying.

Spring 2. Much filled with dead poplar leaves. Fallen elder branches across it.

Ant reserve in Park. Most of the felled scrub still *in situ*. Bull-dozers left some quite bare earth patches, with scattered plants colonising. Others not bare but bramble covered. Some damage by dragging trees partly from below onto reserve, half of

{reverse side}

26 OCTOBER 1961. WYTHAM WOODS***

26 OCTOBER 1961. WYTHAM WOODS ***

which is newish ploughed to some way down (by Wormstall D.P.). Other half not ploughed so far, but apparently not grazed. Future of reserve very perilous if grazing stops. **Green woodpecker** in wood near.

Bowling Alley. Four large green canvas screens, presumably for Woodell's work.

{reverse side}

8 NOVEMBER 1961.

8 NOVEMBER 1962{sic}. WYTHAM WOODS.

Went out to Holly Hill (Comp. 5) with P.A. Larkin and C.A. Elbourn, to look at Larkin's artificial log experiments. These are "Fager boxes" with oak sawdust in, wired onto mature oaks at (1) Field Layer height (2) 12-15 ft. (3) a few special sites. This is in the area of wood thinned fairly drastically several years ago, and beyond (north of) Jones' Enclosure (which is no longer enclosed but still unthinned). It is mostly high sycamore coppice that has been singled, with scattered large spreading oaks with a good deal of dead wood on. A few ash and maple and 1 pine. Practically no scrub, though the canopy is not closed. Mixed field layer with less bramble than usual.

{reverse side}

6 DECEMBER 1961.

6 DECEMBER 1961. WYTHAM WOODS.

Went out on a very clear, sunny, cool morning 10.15 a.m.-noon G.M.T., with C.A. Elbourn, to the north-east corner of the Wood. Now leafless but green-ness of mosses shows very bright on trunks and ground.

Some recent branch-falls (not very big) after heavy gale, in wych-elm grove in 10-Acre Piece.

Met G.R. Gradwell and C. Perrins in this general area, getting small titmouse sample (under Nature Conservancy's permit) to find if they eat ♀ winter-moths on the oaks (but ♀ emerges evening, climbs tree at night and has laid half its eggs before accessible to tits in daylight). Blue and great tits have crashed in numbers this autumn. C.P. told me that **blue, great, marsh tits** use already-made or -existing holes in trees, but **willow tit** always excavates its own e.g. in rotten **elder** and will not enter nest boxes. The American equivalent (chickadee) is persuaded to use boxes filled with sawdust which the birds remove! He also said a dozen or so of his boxes in this part of Wytham Wood were invaded by **tree-sparrows** this year – the first time.

Nearly all his many tit boxes are between 6 & 15 feet, but he thinks they go higher as well naturally and sometimes lower.

{reverse side}

6 DECEMBER 1961.

6 DECEMBER 1961. WYTHAM WOODS ***

The recently cut-out old ditch on the northern edge of wood Wytham mead has a foot or more of water in, and initial plants of carry ***Callitriche*** and water ***Ranunculus*** (crowfoot). The fence is on the farm side.

Outside on the pasture of the floodplain was a single patch of **mole-hills** about 30 yd. across (photographed), representing presumably a single mole territory on a drier patch (water standing in near-by hollows), – with no future.

{reverse side}

12 DECEMBER 1961.

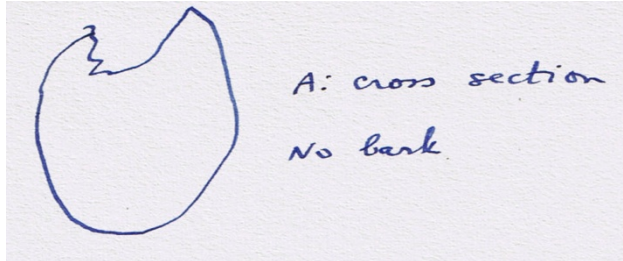
B	9 <i>Orchesella cincta</i> (L.) n.k.	C.A. Elbourn det. 1967
	4 <i>Mydonius nivalis</i> (L.) n.k. (as <i>Entomobrya n.</i>)	C.A. Elbourn det. 1967
	6 <i>Isotoma arborea</i> (L.) k.	C.A. Elbourn det. 1967

F 7 ***Orchesella cincta*** (L.) (combined with B) n.k.

G Small *O. cincta* & *I. arborea* n.k.

12 DECEMBER 1961. WYTHAM WOODS.

Went up to the Chalet in the morning with Professor L.A. Harvey. From open scrub on Lords Common I collected two bits of same rotting **elder** branch from 3-5 ft., on a dying tree. The wood is partly hard and partly rather soft brown rotted 1560



B was completely round, barkless, and broke easily into several longitudinal bits, revealing some old Crabronid wasp galleries with old fly prey remains at end, and empty wasp and a parasite pupa cases. Both logs were galleried by some largeish fly or beetle.

Banging in tray produced

1 spider	A
Collembola of several species	B
1 small black staphylinid beetle <i>Coryphium angusticolle</i> Stephens J.H. Frank det. 1966	C
1 hibernating Ichneumonid	D
1 small <i>Porcellio scaber</i> . Another emerged later.	n.k.

Extracted later:

Many mites	E
large woolly springtails	F
small springtails	G

{reverse side}

19 DECEMBER 1961.

19 DECEMBER 1961. WYTHAM WOODS.

The last day or two has been an extraordinary hoar frost, or rather cold fog frozen on the ground, and all vegetation. On the 18th the whole country from Oxford to London could be seen from the train frostbound and rather misty, and every surface – trees etc. covered with a heavy encrustation of frost crystals. Wytham was the same today, except where the pale sun had melted the frost off some branches or small patches of Rough Common. I took photos of Common Piece, Lords Common and Rough Common.

{reverse side}

22 APRIL 1962.

22 APRIL 1962. WYTHAM WOODS.

Rob and I visited Marley Wood soon after dawn (5.15-6.30 G.M.T.). It was rather overcast until just before we left, and life was rather inconspicuous. The only warblers encountered were several **chiffchaffs**, one singing on a branch at scrub height on the deciduous wood track edge near enough for the dark legs to be seen. **Great spotted woodpecker** drumming was widespread, and a **green woodpecker** also heard. Inside the deciduous wood were **robins**, **great** and **blue tits**, **blackbirds**, **song thrush**, **wood pigeons**, **jackdaws**. **Dog's mercury** in flower and $\frac{1}{2}$ grown, **primroses** abundant in flower even under rather dense scrub, **ground ivy** begin into flower. **Haw** just sprouting, **elder** $\frac{1}{4}$. Canopy of trees bare. We saw a ♂ and ♀ **fallow deer** run from the Pasticks field into the Pasticks wood. The latter is still untouched, the former has grass tussocks with strips of very young oak, beech, larch and spruce.

Marleywood Plantation is looking rather wrecked on the Botley Lodge half,

{reverse side}

22 APRIL 1962.26 APRIL 1962.

C. E. 1561

From Sundays Hill broke off fragments of circa 2 ft. of **elder** branch, 3-4 in. diameter, lying as last debris of tree Duffey remembered standing in the open *Festuca rubra* sward. Damp, rather hollow inside, outside hard, inside rotting and partly crumbly, with some insect galleries.

- A Several yellow *Lasius* (25 April)
- B Sciarid flies (25 April -).
- C Small caterpillar, kept in wood frass. (25 April).
- E 1 live *Clausilia rugosa* and fresh shell of *Marpessa laminata* (n.k.)
- F ♂ *Dysdera erythrina* (Walckenaer). C.E. det. (28 April)
- G Small sphaerocerid fly (31 April {sic})

22 APRIL 1962. WYTHAM WOODS ***

with many large tree-trunks (out of the 61 being taken out by a contractor) still lying in the wood, and the usual tractor mess. But the other half had little bad treatment, only some thinning e.g. singling of coppice sycamores by the forestry staff. But the **sweet chestnuts** by the track, halfway down, have gone. Thinning has much opened up the thick central bit which was one of the few closed canopies in Wytham. But as far as could be seen from the road, the LOGS and the streams are unharmed.

25 APRIL 1962. WYTHAM WOODS.

Went out with Rob (who went off separately to look for birds), Eric Duffey and Michael Morris (from Monks Wood Station of the Nature Conservancy). Walked from the Chalet to the Bowling Alley and Sundays Hill where Duffey did his spider work about ten years ago. D. heard **grasshopper warbler** on scrubby plantation mixture on Radbrook Common below the Singing Way, also a **common whitethroat**; and also a **grasshopper warbler** at the scrub edge of Sundays Hill. (On the Radbrook Common Plantation area Rob reported **chiffchaff**, **willow wren** and **common whitethroat**). **Marsh tit** (heard and seen) in Bowling Alley deciduous wood.

E.D. thought the Bowling Alley little changed, but the ***Brachypodium pinnatum*** had spread somewhat into the former *Festuca rubra* area of Sundays Hill. We verified this fact afterwards from the aerial photos.

A lot of dying old **elders** at the edge of the Sundays Hill grass and scrub slope to west.

{reverse side}

29 APRIL 1962.3 MAY

29 APRIL 1962. WYTHAM WOODS.

Rob and I went to Marley Wood from 5-6.30 a.m. G.M.T. It was overcast and cool with a northeast breeze, and small birds were not singing much. We heard and saw several **willow wrens** but only heard **chiffchaff** and no other warblers. **Song thrushes** and **blackbirds** singing, **great spotted woodpeckers** drumming, one or two **nuthatches** calling (one was in tree canopy of an oak standing above T/5 birch-hazel), occasional **robin** song. Saw **wren**, **hedge-sparrow** etc. By the edge of Marsh 4 a **fox** sneaked along and stopped to look at us. **Cuckoo**. Saw a cock **redstart** on a fence post at the woodland edge on the Pasticks field, which flew into the deciduous wood near a huge sycamore (bird-box 80 on it).

Marley Wood, as distinct from much of Wytham Wood, has very large amounts of **birch**, which is regenerating in some open spots, (but not through bracken), and also a sprinkling of **wych elms**. N.B. Find out what species of old big trees were removed by the foresters over 10 years ago.

3 MAY 1962. WYTHAM WOODS.

Went to complete a survey and stock-taking of reserves on Lord's Common, Ridge, and Lower Seeds, with C.A. Elbourn, 1.30-3 p.m. GMT. Fine, dry, warm. Found one of the largest wayfaring trees (***Viburnum lantana***) I have seen in Wytham Wood – a huge lump of scrub with many new straight shoots from near the base. This is in Lords Common.

On the Ridge elder scrub was a **redstart**.

{reverse side}

25 MAY 1962.

25 MAY 1962. WYTHAM WOODS.

C. Perrins (E.G.I.) told me that a **long-eared owl** had been seen in the conifer plantation by Interplantation (the first ever in Wytham Wood); also a **nightjar** (not here for some years) on the open part of northwest hill; also a family of young **woodcock** also in that area. These records are by Roger Bailey (E.G.I.).

C.P. noted **Lathraea squamosa** in flower on a large beech or lime near the Chalet (in the deciduous wood between that and Lord's Common). R.B. is hatching out 17 **pied flycatcher** eggs in blue-tits nests (boxes) at Wytham, part of a test to see if Bruce Campbell's Monmouthshire population could be introduced permanently for study near Oxford.

C.P. has had several colonial wool web moths in tit nest-boxes – almost certainly *Aphomia sociella*.

{reverse side}

28 MAY 1962

1564 ***Poa annua*** L. E.F. Warburg det. 1962.

28 MAY 1962. WYTHAM WOODS.

Went, with Rob, to the North Hill at dusk 8.20-10 p.m. GMT. Sunset about 9, but it was quite light until after 9.30. We walked along Middle Ride, down fox path, and back by Lower Ride.

At Second Fork a **badger** was out in daylight at 8.30 and we saw its head clearly from a short distance as it scuffled noisily into the brambles. It was close to an earth which had many young badger footmarks in the sand. The earth system here is in the usual Calcareous Grit sand, among trees (oak-ash-sycamore) and near a dense holly, about 20 yd. in from the track.

It did not become at all really dark until 10 p.m. and even then one could see the path, without moon.

There are many shallow pools 1-3 in. deep and often several yards long in the deeply tractor-rutted Middle Ride, and often the remains of oak leaves in. Although there were heavy thunder showers two days ago, some looked older than that. No *Daphnia* etc. seen, in a dozen pools examined

Maples in flower in Ten-Acre Copse edge.

On Middle Ride, where quite a lot of bare earth is exposed, there are **deer tracks** and some signs of browsing of the stronger grasses and no rabbit signs, or badger tracks. There is also a lot of small **Poa** in flower.

1564

{reverse side}

28 MAY 196230 MAY 1962

28 MAY 1962. WYTHAM WOODS ***

Where the track (in oak-ash-sycamore woods still not badly damaged by forestry) turns down to join Fox Path, huge numbers of small black Bibionid flies were floating in dead swarms on the water surface of pools in ruts; also very abundant hanging on to young grass tussocks, say 0-12 in. Most of these were *Dilophus febrilis* (L.) (2 ♀♀ confirmed from 4-6 in. in lab., one kept); but a male turned out to be one of the smaller *Bibio*, near *venosus*. 1565 A B

30 MAY 1962. WYTHAM WOODS.

Went to Radbrook Common at dusk (8.50-10.15 p.m. GMT) with Rob, to look for a reputed **long-eared owl**, which we did not encounter.

On the road just below the Ridge was a running **leveret**.

The **wayfaring trees** on Rough Common are in exceptionally fine flower, and the blossoms have large numbers of pale brown *Isotoma*-like Collembola, as well as small beetles.

The Nursery at the west end of Rough Common is above a very steep escarpment from which one can gaze down at the tops of canopy of trees in Comp. 1 as well as 2 panoramic country beyond, and (tonight) and enormous red sun sinking behind horizontal cloud. In the woodland here is a patch of **sanicle**, close to the Nursery hut.

There is not much *Calamagrostis* left at this corner of Rough Common.

{reverse side}

30 MAY 1962

10 JUNE

= *Viburnum lantana*

30 MAY 1962. WYTHAM WOODS ***

We walked down the two long cypress-bordered rides on Rough Common. There is a bewildering patchwork of young trees at or above scrub height. In one area of Comp. 29 there is quite a large flush area with field layer of large (not coarse) *Carex* and dewberry, on which young ash and oak are doubtfully trying to grow.

On the main ride from the gate down, dusk began properly about 20 mins. after sunset i.e. 9.30, and we then saw a **fox** cross the ride into thick plantation. Two **pipistrelles** were patrolling between the cypresses, mainly at scrub canopy height; there were a good many small moths flying; and one **cockchafer** (scrub height) flying also. We saw a pipistrelle also on the other main ride. They use quite short hunting 'beats' < 50 yd.

On the edge of the main grass ride down **wild strawberry** and **white comfrey** in flower.

10 JUNE. WYTHAM WOODS.

Visited Rough Common to collect some scrub flower visitors, 10.20 a.m.-12.10 p.m. G.M.T., warm and cloudy-sunny and very dry. **Rock rose** in flower on T/240 patches, also mixed with grasses where not too thick T/3. **Wayfaring trees** on (a) mixture of scrub and grassland (b) scrub at woodland edge between Chalet Woods and grassland – rather a broad belt of hazel-hawthorn-*Viburnum*-privet etc., but counted here as T/5 (deciduous) (edge). The flowers are nearly all beginning to go over, though some

{reverse side}

10 JUNE 1962

1566 *Mydonius nivalis* (L.). A. Macfadyen det. 1962. (as *Entomobrya* n.).

1568A *Ceruraphis eriophori* (Walker) H.L.G. Stroyan det. 1962.

{Copies of two letters, from A. Macfadyen 27 June 1962 and H.L.G. Stroyan 31.10.62, pasted here, shown as page 28A.}

COPY

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD,
Plant Pathology Laboratory, Hatching Green,
Harpenden, Herts. 31.10.62

Dr. C.S. Elton,
Bureau of Animal Population,
Botanic Garden, High Street, Oxford.

Dear Elton,

Many thanks for your letter of 26.10.62 enclosing a tube of aphids from curled leaves of Viburnum lantana at Wytham Woods. These are Ceruraphis eriophori (Wlk.), a species that migrates from Viburnum to species of Carex, Eriophorum, Luzula and Typha. After Aphis fabae Scop. and A. viburni Scop. living on V. opulus it is the commonest Viburnum aphid in this country. Aphis lantanae Koch, which lives on V. lantana, is so far only known here from the North Downs and Kentish coast*; and probably needs a more continental climate. Theobald (1927, Plantlice of G.B., 2) described eriophori twice, once under its proper name from Eriophorum and once from Viburnum as Aphis lantanaella Theob.

Yours sincerely,

Signed..... H.L.G. Stroyan

* and once from Herts. (Theobald); but I never saw it there.

[Letter 6 Nov. '62 added that Carex flacca has been recorded as a host, but Luzula pilosa (which is in Chalet Woods) not.]

[Letter 6 November 1962 added that Carex flacca has been recorded as a host, but Luzula pilosa (which is in Chalet Woods) not.]

COPY

Department of Zoology, University College of Swansea.

Singleton Park,
Swansea.
27th June, 1962.

AM/NH

Dear Charles,

Thank you for the chance to look at these springtails. I don't know very much about the shrub forms, but with the aid of South's key:-

SOUTH, A. (1961) The taxonomy of the British species of Entomobrya (Collembola)
Trans. R. ent. Soc. Lond., Vol. 113, Pt. 13, pp. 387-416.

there seems no doubt that it is Entomobrya nivalis (L.). This has been checked by Ian Healey who is a much better collembolist than I am. South says:-

Observations on the habitat:- E. nivalis was found on shrubs and on the bark of trees. The species was very common on 14 species of shrub, especially Ulex europaeus and was found most frequently on the older mature foliage where the branches supported an extensive flora of Fungi Imperfecti. Specimens were taken from the bark of 14 species of tree, the insect occurring usually on the surface of the bark. E. nivalis was found in smaller numbers on low vegetation, including Clematis vitalba L. and Rubus sp. So evidently it is not so unusual to find them on shrubs.

Signed..... A. Macfadyen

Mr. C.S. Elton, F.R.S.,
Bureau of Animal Population,
High Street, Oxford.

10 JUNE 1962. WYTHAM WOODS ***

still fresh and white, others being already green fruit. These flower cymes occur low to high field layer, and up to 10 ft. or so (scrub limits of *Viburnum*). All my collecting was 2-6 ft.

(a) On the actual scrub examined on 30 May, shook from flowers pale brown *Isotoma*-like Collembola from a number of umbles, but little else occurred. 1566

(b) Here also on flowers a few of these Collembola (n.k.), and a number of very small thrips, and three beetles. 1567

1 <i>Meligethes</i> (' <i>aeneus</i> '-like but with yellowish legs)	A B
1 <i>Byturus</i>	C
1 Lathridiid, very small	D

At the scrub on woodland edge, some of the wayfaring trees had dying branches or sectors, on which dwarfed sprouting leaves were curled up with aphids in, though the damaged leaves were much more conspicuous than the number of live aphids indicated. Some were winged black and some were wingless greenish-brown. (see across) 1568 A

Associated with this aphids supply (as shown by beating affected twigs into net) was a thin but quite varied fauna of aphid predators: T/5 (EDGE)/3

1 adult <i>Chrysopa perla</i>	B
1 adult <i>Hemerobius humulinus</i> L. C.A. Elbourn det. 1963	C
2 adult <i>Coccinella 7-punctata</i>	D
2 small yellow syrphid fly larvae	n.k. n.k.

Beating here also gave 1 ♀ earwig (*Forficula auricularia*). n.k.

{reverse side}

10 JUNE 1962

10 JUNE 1962. WYTHAM WOODS ***

On Wayfaring tree leaves (upper side), circa forefoot, one Tachinid fly. 1569

Beating hawthorn flowers in (b) habitat produced very few insects (2-6 ft.). But the blossom is extremely profuse and dense on the twigs, so that presumably with visitors are more thinly spread than in a year when only local trees are in flower or flowers are thinly spread. I saw no *Grammoptera ruficornis* nor *Anaspis maculata* or *frontalis*. Caught: 1570

3 *Byturus*

1 ♂ *Malachius bipustulatus*

1 *Cixius*-like, darkish bug (possibly from leaves, not flowers) *Cixius pilosis* (Olivier)

J.B. Whittaker det. 1963

A

B

C

On hazel scrub at circa 4 ft., on the deciduous wood edge on the north side of Rough Common, I collected two muscid flies in copulation. 1571

Searched over the T/2 areas on and near the quarry area looking for **green tiger beetles** (absent) and ground-nesting aculeates. It was warm and sheltered. Saw very few aculeates, but collected tiny red bee or wasp flying close to limestone gravel/moss/scattered low grass tufted area. 1572

On some T/2 *Brachypodium pinnatum* here, collected a hairy black fly with smoke patch on wing, also flying low (1 in.) over. 1573

Lotus corniculatus in flower in T/2 area, and mixed T/2 and T/3. ♂ and ♀ **common blues** flying over these and T/3 grasses. Also **small heaths**: ♀ *Ematurga atomaria* (L.) n.k.

{reverse side}

10 JUNE 196216 JUNE

10 JUNE 1962. WYTHAM WOODS ***

Examined some **sycamore** leaves at the field layer height, edge of oak-ash-sycamore wood near "3 Pines", also inside mixed deciduous wood in problems Belt. Leaves very fresh and fully expanded, hardly any fungus spots starting. A thin aphid population only (winged and unwinged and young) and these mostly on the leaf stalks, where some were crowded. Could this be a result of cold late spring plus very dry spell? Practically no predators – one or two small spiders and one adult *Hemerobius*. Aphids have dropped honey-dew on upper leaf surfaces, but I saw no insect attracted to it.

Oaks just about in fresh leaf, not darkened yet.

16 JUNE. WYTHAM WOODS.

Went up to The Ridge and Lord's Common, with Rob, 2.15-3.45 p.m. GMT. Sunny and very hot. The **hawthorns** have had quite heavy flowers this year and are now going over i.e. the petals are quite loose and knock off into the sweep net, or (in some cases) are slightly pink, a few have dropped altogether, while a few trees, on the unsunny sides, have still mature flowers. Beating hawthorn flowers on scrub edge along the Ridge and Lord's Common, 2-6 ft., produced only very small numbers of insects, seldom more than 2-3 per sweep of several branches. Results as follows:

1574

1 *Clytus arietis* (L.).

7-8 adult earwigs, *Forficula auricularia*

A

n.k.

{reverse side}

16 JUNE 1962

16 JUNE. WYTHAM WOODS ***

3 ♀, 8 ♂ *Anaspis frontalis* (L.). (Total catch; males examined for abdominal
 appendages: 3 ♂♂ k. (of which 2 mounted upside down) and 2 ♀♀ k. 1574 [B]
 1 ♀ large black *Anaspis* without brown on head C
 11 small pale brown *Anaspis*. These run very fast, but *frontalis* also flew easily. (Total
 catch).
 1 ♀, 1 ♂ *A. regimbarti* Schilsky (♂ mounted upside down to show appendages) [D]
 4 ♂, 5 ♀ *A. maculata* Geoffroy in Fourcroy. (2 ♀ k. 2 ♂ mounted upside down to
 show appendages, all 4 k.). [F]
 3 *Grammoptera ruficornis* (Total catch) n.k.
 Several small cantharid beetles n.k.
Byturus, one or two or three in most sweeps i.e. the commonest beetles. n.k.
 2 *Meligethes* (total catch) n.k.
Phyllobius parvulus (Olivier). Next commonest to *Byturus*. One pair was in
 copulation kept. [E]

Little else in the net, but there were a few Collembola like the ones on wayfaring tree
 blossom (C.E. 1566).

Flowers of **spindle** open, but **dogwood** and **rose** not, and no insects seen on dogwood flower
 buds. **Elder** just beginning to flower here and there.

Green woodpecker flew up to trees in oak-ash-sycamore wood at edge of road track, below
 "3 Pines".

{reverse side}

30 JUNE 1962

30 JUNE 1962. WYTHAM WOODS.

Went up to Lord's Common and the Ridge, with Prof. Ralph Audy, 2.30-3.45 p.m. GMT.
Warm and sunny, close in sheltered spots.

I was looking for *Anaspis* on flowers. **Rose** bushes in bloom (one on Lord's Common, by the road-track, two on the Ridge, but inaccessible for beating). **Elder** flowers out about midway in their season, scent strong. But the dying of many trees is conspicuous and few have a complete flowering all over the scrub. **Dogwood** partly in flower (The Ridge) but not still in bud. **Hawthorn** completely over and performing green fruit. **Spindle** in full flower but many already over. No **bramble** flowers yet. Ground everywhere baked hard after 2 months drought, only broken by a few showers recently. Notable scarcity of Diptera and Hymenoptera on flowers, and only very few Hemiptera.

(All records below: 2-6 ft., though many flowers also above)

Elder flowers, scrub edge, both areas. A tiny thrips very abundant on one tree (L. Common) and seen everywhere. 1575 A

Several *Byturus* (1 k.).

Anaspis widespread but only in small numbers (all kept to look at).

B
C

7 *Anaspis maculata* G. in F. 2 ♂ 5 ♀ (one of each kept)

{reverse side}

30 JUNE 1962

A 1 ♂ small black

29 small spotted fawn *Anaspis maculata* Geoffroy in Fourcroy 6 ♀ (1 k.), 23 ♂ (2 k.)

Dogwood flowers (The Ridge, scrub edge). 1 *Grammoptera ruficornis* (n.k.)

30 JUNE 1962. WYTHAM WOODS ***

Spindle flowers. These have not been mentioned in literature as visited by *Anaspis*, but I found a both on T/5 edge on the Ridge with a number on it. 1576 [A]

Also a few on another bush in scrub edge on the Ridge. B

The latter was watched before beating, and an *Anaspis* "*maculata*" was seen immobile with its head on the base of the flower below where the stamens stick up. It could have been (a) sucking nectar as insects on ivy do in a similar structure (b) eating pollen caught on this surface (c) ? ? eating the tissue – but it was not moving its head. Later I saw an *Anaspis* "*frontalis*" behaving like this in a dogwood flower (lost).

A very small cantharid occurred also at 1576 A. C

A clump of 2 ft. *Dactylis glomerata* with purple-anthered heads had on it 1 ♂ *Anaspis frontalis* (mounted upside down). At elder scrub edge on the Ridge. 1577 [A]

2 ft. nettle in flower here had a few micro-moths *Micropteryx aruncella* (Scopoli) (1 kept). [B]

I also swept the flowers of *Heracleum sphondylium* which is abundant in roadside meadow at woodland edge by the road-track by and below the Forester's House. 1578

Vast numbers of a very small pale brown staphylinid (*Eusphalerum*), mainly on half or just-opened pinkish-stage flowers e.g. would sometimes be clumped on central florets. A

{reverse side}

30 JUNE 1962

1578 B 1 ♂ *Anaspis pulicaria* Costa. Mounted to show ♂ appendages.

1 JULY

30 JUNE 1962. WYTHAM WOODS ****Heracleum* flowers

1578

A few *Meligethes* etc. (not kept). Only one *Anaspis*, a small black one, apparently ♂
pulicaria, – new to Wytham Area. B

Sweeping the general roadside vegetation here, 1-3 ft., – grasses like *Dactylis*, ***Ranunculus acris*** (flowers), *Heracleum* leaves, nettle etc. produced little at all – the scarcity is terrific. One fly, ***Platystoma seminationis*** (L.) kept. Deciduous wood edge of Mount by the road-track. C

1 JULY. WYTHAM WOODS.

With Rob and R. Audy to Marley Wood, 2.30-4.30 p.m. GMT, warm and fine. Very dry still. Beat various flower shrubs at the field layer height; also collected on bramble flowers which are just starting. T/5 (edge)/3 Spindles were over here. Elder is very hard to get at because of undergrowth. All deciduous woodland edge:

On white bramble flowers:

1579

- 1 ♂ ***Anaspis frontalis*** (L.). Mounted upside down. No others seen. A
 2 *Byturus*. Others seem, not abundant. B

On pink bramble flowers:

- 1 ♀ ***Anaspis frontalis*** (L.). Ovipositing extended at death. C

On wild rose flower:

- 2 ♀ ***Anaspis maculata*** Geoffroy in Fourcroy n.k.

On dogwood flowers:

- 1 ♂ ***Anaspis frontalis*** (L.). n.k.

{reverse side}

1 JULY 196222 JULY

Lord H. knew Wytham Woods when he was a boy at Oxford (his father was manager of Wolvercote Paper Mill) and a student at St John's – before the first World War. **Red squirrels** were then abundant.

1 JULY 1962. WYTHAM WOODS ***

The scarcity of *Anaspis* is very noticeable.

By the margin of Stream 3 in Marleywood Plantation, both above and below the road-track, yellow *Iris pseudocorus* was common and in flower.

22 JULY. WYTHAM WOODS.

Took Lord Hurcomb (lately Chairman of the Nature Conservancy) to see the hill. Several *Orchis pyramidalis* growing on the mown grass strip at the edge of Rough Common (not yet mown this year). They are about half the ordinary height, owing to the long drought (only broken about a week or so ago).

{reverse side}

24 AUGUST 1962

24 AUGUST 1962. WYTHAM WOODS.

Went along the south margin of the northern woodland reserve, with C.A. Elbourn, 9. a.m. - 11 a.m. GMT. There is a 20 ft. mown fire ride all along the boundary, mostly grass, separating the reserve from the devastated area of forestry – which ranges from underplanted open ground on Hither Clay Hill, to very recent mixed tree seedlings at the east end, and 6 ft. or more at the Further Clay Hill end.

C.A.E. kept detailed notes for an account of the reserve. In summary: the western tip has a nice closed canopy of high **hazel** coppice and **maple** and hawthorn, with some oak trees, and dog's mercury or mixed field layer with bramble – or nothing, below. From the middle of the F.C.H. bit, or through to nearly the east end of the H.C.H. bit, is a variable “savannah” or mixture of small trees (**maple** and oak mainly) and shrubs (much *Salix caprea* and *atrocinerea*), and bracken. The openness of this has evidently been accentuated by the 1956 fire, and some dead trees and shrubs still stand.

Ten Acre Piece is, apart from Varley's oak glade, a very solid wood varying from dense high scrub with some taller trees (oaks, ash, and locally others), to more open ground below the trees (closed canopy).

The scrub contains everything of Wytham species except (I think) wayfaring tree, and I did not see any buckthorn. Saw 2 willows, hawthorn, **rose**, blackthorn, elder, **guelder rose**, **spindle**, **privet**: also some 6 ft. **oaks** coming up at the edge, and one or two **beeches**.

At the scrub/woodland edge of the fire-ride, a few plants of *Hypericum tetrapterum*, in flower. (Upper Ride is almost the only locality for it that I knew before).

{reverse side}

24 AUGUST 1962

1584 A

B queen *Vespula norvegica* (Fab.). C. Elton det; confirmed E. Taylor 1962.

1585 In woodland glade, oak-ash-sycamore wood, North Hill: *Arctium vulgare* (Hill) A.H. Evans.

E.F. Warburg det. 1962 (a/c new addition of Flora = *A. minus* subspecies *vulgare*)

24 AUGUST 1962. WYTHAM WOODS ***

At the edge of the oak-ash-sycamore wood above the open forest area on Hither Clay Hill, I saw *Rhagonycha fulva* on 5 ft. flowers of *Angelica sylvestris*, also two queen *Vespula* 1584

1585

In an open patch of glade north of Middle Ride, and above Marsh 3 but not apparently on completely waterlogged ground, was *Angelica*, *Epilobium hirsutum* and *Eupatorium cannabinum*. The latter seldom occurs in Wytham Wood outside developed woodland marsh. Conditions just here must be intermediate and the ride itself frequently is very wet from flush water.

{reverse side}

30 OCTOBER 1962

30 OCTOBER 1962. WYTHAM WOODS.

Did some survey of Ponds 2 and 1 on Radbrook Common, with C.A. Elbourn, 10 a.m. – noon G.M.T.

Electricians were engaged in laying a line to the Chalet, which runs from Probitt's {sic} house up Lower Seeds, across Brogden Belt (where a narrow cutting has been made), up Upper Seeds, and a long and narrow cut through the Chalet Woods.

Scrub. A good year for berries: **hawthorn, spindle, privet, black bryony.**

Trees. **Ash** and **sycamore** leaves mostly down, **oak** still on. Acorns and ash keys abundant.

Pond 2. Mapped by C.A.E. The dam has a cut in the centre that drains water out a foot or two below the top of the dam, running (by the concrete

{reverse side}

30 OCTOBER 1962

30 OCTOBER 1962. WYTHAM WOODS ***

culvert under the cross-ride) as Stream 10 B to Pond 1. Stream was running fast, also in at the head of the "Pond" (Stream 10 A).

The central part of the basin is water-logged and today it had water at the ground surface (an inch or two only). The contour where this water shows is clearly shown by scattered ***Typha latifolia*** (perhaps a dozen or so, several with "flower heads" still on) on most sides. The rest (not examined carefully) of the central part is ***Epilobium hirsutum*** and tall *Carex* in dense stands, while ***Scirpus lacustris*** occurs in the lower part.

Outside this except along the centre of the dam there is also much tall *Carex*, together with ***Epilobium hirsutum***, ***Scrophularia aquatica***, nettle, ***Mentha aquatica***, a little ***Eupatorium cannabinum***, a few ***Cirsium palustre***, and in places a good deal of ***Equisetum telmateia***. No *Iris* or dewberry noticed. This zone has water-logged ground but (even after a night of heavy rains) no surface water. It is therefore A-T, while the centre forms a "stream swamp" without any open water and with very shallow surface water.

{reverse side}

30 OCTOBER 1962

- 1591 (A)
1. Cast skin and one live, 1st instar larva of ***Leistus*** species "emerged" 1 Nov. Larva has huge flat head and large sickle jaws. W. Murdoch det. 1962.
 2. Small fly, "emerged" 19 November.
 3. 4 Small flies, "emerged" 21 November apparently same species
2 Small flies, "emerged" 22 November apparently same species (1 kept)
1 Small fly, "emerged" 23 November apparently same species

1591 (B)

30 OCTOBER 1962. WYTHAM WOODS ***

In the marsh there are patches of bryophytes on the ground, and some rodent runs.

Outside this again is either (a) bracken – some of it 7-9 ft. high! or (b) *Salix atrocinerea* marsh-scrub occasionally higher than 15 ft. Underneath this scattered *Angelica sylvestris*, nettle, *Epilobium hirsutum*, etc., with many huge *Equisetum telmateia*, some 6 ft. high. Much of the sallow is rotten or fallen, and I took two one-foot lengths that has each a bracket of *Trametes rubescens* (det. K. Paviour-Smith): 1591

(A) 2 inch diameter, full bark on, from rotting limb at 4½ ft. White-rotted inside, presumably with *T. rub.* mycelia. One fresh bracket (surrounding a twig). Some moss and a thin greenish white lichen film on the bark, which had fine cracks in surface.

(B) 2½ in. diameter, full bark on, covered thickly with moss, from circa 1½ ft. from ground. White rotted. One older bracket.

Kept these in separate tins.

{reverse side}

30 OCTOBER 1962

30 OCTOBER 1962. WYTHAM WOODS ***

Above these marsh zones (the shallow marsh must have flushed water though it is on more of a slope) is, on the south-east corner, a strand of very leggy trees of *Salix alba* of T/5 height. One large fallen trunk has new vertical stems growing out of it. Next to it is a patch of *Rhododendron ponticum* growing densely. Under the willows is a thin undergrowth of meadow-sweet, *Rubus caesius*, hemp agrimony (*Eupatorium*), *Angelica sylvestris*, woundwort (*Stachys sylvatica*) bracken, one or two hazels, and some young hawthorns and sycamores. This flora is a mixture of marsh/damp glade and terrestrial species. At the top edge of the reserve are a large oak and several large ash. Most of the interstitial space not mentioned here is bracken with scattered shrubs: **hawthorn, *Salix caprea*, blackthorn, spindle, dogwood, elder, privet.**

Pond 1. Recent rain has filled the springs, and the water level is now about a foot below the dam. Water running through holes made in the sluice, also at its base under the timbers. The aquatic vegetation is *Potamogeton natans* (still green; the leaves very elongate), *Hippuris* (submerged and emergent), and in the centre above the dam an extensive patch

{reverse side}

30 OCTOBER 1962

30 OCTOBER 1962. WYTHAM WOODS ***

of *Chara*, long stems with distant whorls: this seemed to be a new arrival this year, since the low water period – ? duck-borne. 1592

The water level just covers the outer *Carex* marsh at this moment.

On a piece of floating timber were many very small *Limnaea pereger*.

{reverse side}

21 MARCH 1963.

21 MARCH 1963. WYTHAM WOODS.

Went out with Rob, 10 a.m. – 12.15 p.m., by Rough Common, Singing Way, Hatchetts Lane, (via Bowling Alley), Nealings Copse to Woodcroft Copse and back after visiting Beacon Hill.

The snow has completely gone, yet the place still looks very beaten about, and spring growth is very little yet. Quite a lot small branches have been broken off trees like **oaks**, and a few larger ones. In the thick woods towards Woodcroft some of the tall old **blackthorn** has been laid by snow. A forest worker said the bracken smashed down by snow had broken some young trees in the plantings. On Rough Common the grass showed some green among the dead, and **vole** runs were numerous and had some recent grass cuttings. Under Cotton's asbestos corrugated sheets lying on rough grass near the Five Sisters was a **bank vole**, and a large ***Microtus***.

{reverse side}

21 MARCH 1963.

21 MARCH 1963. WYTHAM WOODS ***

In the woods, **dog's mercury** just pushing out of the ground, bluebells 2-3 in. high, a few fully expanded **Arum** leaves, **ground ivy** leaves, green moss. Grass tussocks. No **elder** or **honeysuckle** leaves yet. **Hazel catkins** everywhere. No other growth on tree or shrub.

Upper Seeds has been ploughed and re-seeded with ?wheat. One large beech branch fell in Chalet Woods. Woodell's screens on Bowling Alley are derelict and should be removed. Very many **pine** seedlings up to 1 ft. should be cut out. One large broken pine branch (live) there needs attention.

There is quite a satisfactory belt of untidy deciduous wood all the way from Hatchett's Lane to Woodcroft, and even below the 9 acre clear-felled patch (1962) below Pond 1, they have staked and left a strip or screen of wood.

All over that lower, western, part of the Wood there is a great profusion of closed canopy deciduous wood, mostly very untidy and also on wettish soils – just now especially obvious as the snow-melt and recent rains have made many quagmires, and some old ditch hollows that must normally dry in summer are running stream trickles.

I looked carefully for large rotting stubs and branches of oaks and only saw one. Practically all are small ones not more than about six inches diameter. In the lower part of Woodcroft Copse there was a coppiced very small **oak** relic with a live and several dead stems. One was

{reverse side}

21 MARCH 1963.

1593 A 2 Mycetophilid flies emerged 2 and 3 April

☐ 1 *Scolytus multistriatus* “emerged” 14-15 April (presumably chance hibernator)

☐ 1 *Anobium punctatum* (Degeer) (= “*striatum*”, the furniture beetle) “emerged” 22 May.

☐ When tin last looked at on 25 Feb. 1964, after some weeks, one dead dry rather small *Tillus elongatus* (L.) found (usually associated with *Ptilinus*, and not previously found in Wytham Wood).

Nothing more emerged, so demobilised 15 June 1964. {sic}

21 MARCH 1963. WYTHAM WOODS ***

c. 10 ft. high, rising from stump at ground level, white rotted, barkless, and I took an 8 inch length from c. 5-6 ft. This in section was 4 in. diameter, the outer inch being dry white rotted wood full of old frass-filled small galleries, the core being 2 in. diameter very hard sound wood. The surface wood had been partly pecked and eroded by (small) birds – ? tits or nuthatches. The good parts of the surface had some pin-holes of beetle, 1 to 2.5 mm diameter, also one big one of 4 mm. 1593

Near Woodcroft Copse, in the oak-ash wood, a very old dead pheasant remains had many Sphaerocerid flies underneath, of which I collected 4, not all the same species 1594 A
There also were one or two *Catops*, two in copulation (n.k.)

In same area, a large tangled rose clump had a midden of comminuted **rose hips** beneath, of the type said to have been seen by Perrins and apparently made by **haw-finches**.

In Woodcroft Copse there is a permanent woodland stream, not yet mapped by us. It runs by a dead large hawthorn, LOG 151.

At the north-west corner of the Copse is a large **wych elm** which is forming a colony of young ones. There is much **maple** round it also.

Birds. **Blue tits** at various points on our walk. Noticed stringed peanuts that E.G.I. had hung to help them during the cold spell. A few **great tits**. No **robins** seen or heard. There was little song. **Great spotted woodpeckers** drumming in the thick western woods.

{reverse side}

21 MARCH 1963.

25 MARCH

21 MARCH 1963. WYTHAM WOODS ***

Went through the gate onto Franklin's Farm and up through cattle pasture to Beacon Hill. This rises steeply from Oxford Clay pasture grass to a slope of bracken with two large **elder** thickets (and a few hawthorns) on the sand zone, to a narrow ploughed field at the top on which a few bits of small Coral Rag are scattered. The thicket at the Eynsham end has a huge **badger** colony with 4-5 active earths from which much new sand and litter had been thrown, and at one a number of badger bones, rather old, including a skull and one lower jaw, also clavicle, leg bones etc. Southern decided they were remains of three individuals, one a young badger.

An open pit, a badger lavatory, with very large fresh dung, near one of the earths, had a Helomyzid fly under the dung pile. 1595

On an oak by the Singing Way, two **tree pipits** were in the canopy. Woodland edge.

25 MARCH. WOLVERCOTE-WYTHAM AREA.

Rob and I stopped for lunch on the side of the Wytham by-pass by the big (? 10-20 acre) gravel pit lake created during the last two or three years for making the bypass embankment. Several **tufted duck**, a pair of **pochards**, some **coot** and one **great-crested grebe** (not in breeding plumage). Two **redshanks** on damp pasture by a mud hole.

{reverse side}

2 APRIL 1963.

2 APRIL 1963. WYTHAM WOODS.

Rob and I visited the Bowling Alley today, in order to do some conservation work. We were at Wytham 9-11.30 a.m. G.M.T.

The farmer had got cattle on rough grass on the south half of Lower Seeds. The north half is fenced and ploughed. On a broad strip between, he has bullocks kept on the open side by an electric fence. They are greatly churning up the ground. Is this a device to obliterate the pathway to discourage walkers-through? On the grassy pasture **skylarks** are active.

The Dell has a dozen or so small **beeches** coming up (1-2 ft.) in the grass at the edge of Brogden's Belt beeches. We cut them down to preserve the grassland, but left a few that were doing well just where the path comes out of the Belt. These are all sown naturally.

Bowling Alley Plantation is in a nice fairly neglected state, and there are a good many logs, chiefly birch. One very old spruce trunk, lying, with some loose-bark areas, is a foxy-red-rotted. I found one small beetle in the wood = *Cerylon ferrugineum* Stephen. n.k.

Bowling Alley has a strong invasion of the young (6-18 in.) **pin**es that have appeared since the rabbits at Wytham became scarce. We started to pull up these, reaching 240. We also cleared a good deal of a big pine branch broken by snow but still attached at c. 16 ft. Piled the live and dead branches into a 2-3 ft. pile, behind the pines where the birch-bramble begins. Also a pile of thicker branch wood under the pines (LOG).

{reverse side}

2 APRIL 1963.

2 APRIL 1963. WYTHAM WOODS ***

Removed 2 of Woodell's *Brachypodium* shelter screens that had fallen, to behind the pine belt.

On the **Ant** Reserve at the head of the Park there is still some mess of felled scrub and tractor marks on the north side. The rest, as well as the long south slope outside the reserve looks in good shape and has cattle. We heard **green woodpeckers**. Elsewhere also heard **great spotted** drumming in the woods.

On the edge of the "Elder Belt" reserve and the Park (this north-west corner has a root-crop coming up), we watched a pair of **nuthatches** moving in the canopy, also inspected dying boughs in canopy of a group of ashes in the Park nearby. One bird kept flying out of the wood in a rather slow flattering manner that is part of its mating display.

On fallen trees etc. in the Park were three **tree sparrows**.

Cattle were gnawing the lower trunks of three large **lime** trees in the belt of trees between Lower Seeds and the Park. Damage great.

A **brimstone** was seen flying on the Bowling Alley and another on the edge of the Elder Belt wood.

Spring 2 was running strongly, though only an inch deep. Removed fallen elder from it. I think the mortality among **elders** is increasing annually i.e. old age of specimens established under heavy rabbit regime (pre-War). The snow (and frost?) smashing trunks gives a further impression of this.

{reverse side}

5 APRIL 1963.

On this branch, at say 12-15 ft. was an adult ♀ spider, c. 7 mm long, with pinkish-brown body and legs, and a bold black pattern down the back  It is long oval not spherical. Made a small woolly light cocoon-like web in glass tube. F.C. Evans collected.

Immature *Segestria senoculata* (L.)
J.A.L. Cooke det. 1963.

After a week or two in the lab. the water grew a culture of rotifers resembling *Philodina*, and some small short-stalked single Vorticellids, with a few ciliates.

5 APRIL 1963. WYTHAM WOODS.

Went up to the Bowling Alley to do some more management work, with Prof. F.C.Evans, Dr. H. Trapido, Clifford Elbourn, Janet Halliday and Tony Dunford. 7-11 a.m. Dull and rather cold. We finished getting down the big broken pine branch; slashed c. 200 very small hawthorns; and pulled up the remaining young **pin**es, which with those taken up on the 2nd totalled c. 1500. **Bir**ch is beginning to grow again thinly to 1-2 ft. on the strip cut several years ago (in front of the pines), of which a patch at the south end was preserved. 1597 Yes A few *Viola* in flower in the mat vegetation. *Lasi*us *flav*us and *niger* nests active under Pontin's old tiles. There are a number of very large grass-covered *flav*us nests (some, at least, actively occupied) nearly a foot high, on the western part of the Bowling Alley.

From an overflowing tree-hole in an old beech just south-west of here at c. 5 ft. took some tubes of smelly water. No mosquito stages, but one very small chironomid larva.

A quite old large (> 1 ft. diameter) fallen beech branch in Chalet Woods had big slabs of quite loose bark. Under this there were a good many animals, that had evidently survived the appalling winter: n.k.

Oniscus asellus, ***Porcellio scaber***; Iulid,
Lithobius variegatus and a small dark species
Goniodiscus rotundatus, ***Marpessa laminata*** & ***Clausilia rugosa*** and small slugs.
Small earthworms.
White (? mycetophilid or bibionid) fly larvae.
Collembola
Amaurobius atropos

{reverse side}

10 APRIL 1963.

10 APRIL 1963. WYTHAM WOODS.

Explored Woodcroft Copse Comps. 23 and 24, also Comp. 27 in Rough Copse, 9.15-10.45 a.m. GMT, with C.A. Elbourn. It was a mild damp morning with very little wind. This is a quarter of the Woods I have been into very seldom, and it will repay more attention, as its trees are entirely the natural ones (sycamore to be looked for later, seems scarce: ash, oak, **birch**, **English** and **wych elm**, **maple** common). The outer margin has a lot of **English elm**, and this was small fields in the 18th century, the rest probably common. There is a lot of tall sallow (probably mostly *S. caprea*), ♂ and ♀, now in full flower, in these woods, mainly where there has not been more severe thinning. The relation between the obviously thinned woods – mainly leaving ash and oak, and with little scrub and much bramble beneath –, and the thicker parts with a lot of birch, sallow, blackthorn etc. is not clear from the forest management point of view. Then there are also certain nice patches on the margin, where canopy is thick enough to leave fairly open bluebell-mercury beneath, or, where the canopy opens, *Deschampsia caespitosa* tussocks take over. These are on clay and resemble Marleywood Plantation and “Varley’s Patch” in 10-Acre Copse. When the ground is more water-logged, *Carex pendula* is abundant, with a little *Angelica sylvestris*, *Epilobium hirsutum*, etc. (but not *Equisetum*). cf. Marsh , marked today).

We mapped two woodland streams () that run mostly and the canopy, but join outside the wood, running between farm fields and the woodland edge. The latter is

{reverse side}

10 APRIL 1963.

1596 (A) Frass is a dense matted (with fungal hyphae) stuff, cuts like cake, plastered onto inner rotting surface of hollow trunk. At 5-6 ft.

A.1 Adult fast-running Empid fly ‘emerged’ 16-23 April

A. 2 young *Limax marginatus* ‘emerged’ 16-23 April. ` n.k.

(B) Rotting brown wood, partly wet, partly dry, at 6-8 ft., inner surface of trunk hollow.

[B.1] ‘emerged’ 12 April. 1 beech weevil, *Rhynchaenus fagi* (L.) (there are old insect galleries in the wood)

[B.2] *Dromius quadrimaculatus* (L.) ‘emerged’ 16-23 April

[B.3] Small Cantharid beetle ‘emerged’ 16-23 April. *Metacantharis clypeata* (Illiger) Mark Robinson det. 1980.

B.4 Small fly emerged 26 April

B.5 Small fly emerged 2 May

10 APRIL 1963. WYTHAM WOODS ***

of rather good natural structure, some actually on the field edge.

On the recently (< 2 year?) thinned areas of the smaller brash wood, branches from say 3-9 inches, has been piled up to rot instead of being burned. This was a recent innovation of Osmaston's. The ash branches have much old *Hylesinus fraxini* gallery. Larger dead wood is not abundant on such areas.

The western part of the proposed main "amenity ride" from Hatchett's Lane to Board Oak has a great deal of boggy ground and some grassy shallow pools. From one of the latter a drake **mallard** flew up; and there was a *Cyclops* population in one.

Birds were few. One or two **pheasants**, a pair of **hedge sparrows**, etc. No warblers seen or heard. Tracks of **badger** and **fallow deer** in the rides.

Primroses in flower (not abundant here).

At the Chalet I took samples of frass and rotting wood from the large live standing beech with open hollow trunk. It has *Polystictus* and *Ganoderma*. 1596

{reverse side}

13 APRIL 1963.

13 APRIL 1963. WYTHAM WOODS.

In the afternoon I went out to Thorny Croft, with the intention of collecting insect visitors to **sallow** flowers, but was frustrated by the cold weather, and later rain. ♂ and ♀ **sallows** are abundant here, and at the peak of flowering, though rather drenched by recent rains. The conditions must be a bit chancy for early spring visitors: virtually no other flowers except **primroses** and **celandine** are out so far. Some **sallows** are 20-30 ft. high. On few of them are accessible lower branches to be got.

WYTHAM AREA
GENERAL FIELD NOTES BY C.S. ELTON.

Book 18.

26 April 1963 - {3 April 1965}

C.E. 1598 - {1685}

Red ticks³⁵ mean ready to be indexed. Crossed red ticks mean indexed.

Circles³⁶ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

“n.k.” = specimen not kept.

‘Rob’ is my son Robert.

³⁵ Shown as **bold** in edited version.

³⁶ Edited to A or 00

26 APRIL 1963. WYTHAM WOODS.

With Ken Marsland and Clifford Elbourn, visited the Bowling Alley, 1.15-2.45 p.m. GMT, to set up some pine logs for bark-beetle "traps". We sawed off six 1 foot billets from the snow-smashed bough and set them each on short hazel stakes, held by a bolt onto the base, in a row under the shade of and at the back of the pines (with birches behind), where there are two dead old pine boles nearby (in one of which I once found *Myelophilus piniperda*). They are on a patch of grass with brambles around. Habitat T/5 (Mixed) (Edge)/3. The main heavy branch and a number of small bits were piled on the ground at another similar place, as "LOG 170".

Today was the warmest this spring, dry, hot sun. It has been dry for some days, just as light and warmth have given a push to vegetation. On the open Bowling Alley T/2 mat (which nowadays covers most of the Coral rubble, though *Brachypodium pinnatum* has some large slowly spreading patches) violets were in flower, scattered everywhere. Five randomly gathered plants turned out to be two *Viola hirta* and three *V. riviniana*. In Duffey's thesis the former was the only one to appear in a random quadrat survey for common species, and it was abundant. Has it decreased, with greater mat cover? Little animal life seen: *Lycosa* running on mat, a **brimstone** and a **peacock butterfly**, large *Bombus* queen. On dandelion flowers were one or two *Halictus* (n.k.) and an odd small fly. Stunted **cowslips** in bud. 1598

{reverse side}

6 MAY 1963.

1599 1 *Oniscus asellus* n.k.

1599 4 ♂♂ *Tipula* emerged May-July, pupa skins kept with them.

Demobilised 31 July

4 ♂ Meigen

The 2 specimens kept det. by expert A.E. Stubbs 1975 as *T. irrorata* Macquart. Latter is a D/DW breeder, other not. (Only one kept now).

6 MAY 1963. WYTHAM WOODS.

Went to the Chalet Woods, with Clifford Elbourn and Harold Trapido, to look at the latter's work on tree-hole communities. 1.30-3 p.m. G.M.T. He has a group of old beeches in the Beech Grove (in "Blenheim") where Monte Lloyd did his *Lithobius* research. Most of these holes are at a low level < 2 ft. In some were larvae of *Aedes geniculatus*, *Prionocyphon*, and one or two kinds of small fly larvae.

On his biggish beech E there is a splintered shoulder where one tall bole has broken off in the past (not very recently). At 6½ feet I took a bag of leafy-wood mouldy wet frass from the hollow exposed break. 1599

A scatter of **beech** seedlings coming up through the deep litter, 5 inch stalks, two twayblade-like the first leaves and growth point. 1600

The two old **cherries** on the edge of the Woods (near the Chalet) and Rough Common, now in flower, have a very large number of offspring growing up (to 5-6 ft.) and in flower over perhaps 1/5 acre. These will make a fine cherry grove. Perhaps they date from rabbit disappearance.

{reverse side}

23 MAY 1963

23 MAY 1963. WYTHAM WOODS.

Joined the Committee of Management at the Chalet for meeting; and a walk after lunch. Everyone agrees that the season is still backward and cold. **Cow parsley** not fully out; a few **red campions**; sheets of **bluebells**. 20 years ago flowering bluebell patches were less widespread and the perpetual thinning may aid them on areas unsuitable to the predominant bramble. *Galeobdolon luteum* in places, flowering.

There is a very fine group of large **wayfaring** trees behind the Chalet, in its "grounds". Flies but no beetles on the abundant flowers, whose musky scent is strong. Also many small thrips. Ditto on Rough Common. *Carex flacca* in flower in grassland where not too thick. On 1 I found a *Micropteryx calthella* (L.)

1603

The new Keeper is Mr. S.V. Beale, who has succeeded Dane Meads, who died suddenly at Christmas, and whose assistant he was.

A large patch of woodruff (*Asperula odorata*) in flower on the deciduous wood edge of Lower Ride in Comp. 13 *Alliaria* in flower by track near Forester's House.

In Common Piece, north end, fairly heavy thinning has been done lately, mostly singling of sycamore and ash coppice. The brash is now left lying and according to Probitts it rots down after three years. Until then it is a serious obstacle e.g. to trappers, and hinders natural vegetation growth.

{reverse side}

25 MAY 1963.

25 MAY 1963. WYTHAM WOODS.

Visited Bowling Alley on very hot sunny afternoon.

Collected a small bee on flowering *Viburnum* on Rough Common.

1604

No activity of insects on log. experiment or "LOG 170" under the Pine Belt on Bowling Alley except two suspicious holes by a knot on the centre billet (no. 3).

Cut some young **sycamore** and **hawthorns** (mostly < 2 ft.) on the Alley.

Little insect life yet.

Following flowers on the grassland;

Bellis, ***Veronica chamaedrys*** (covering some big and mounds), ***Myosotis hispid*** = *collina*, minute ***Sherardia*** on the mound, **wild strawberry**, **ground ivy**, ***Medicago lupulina***, ***Lotus*** (mainly in bud), **vetch** (specimen lost)

Carex flacca, ***Luzula campestris***, ***Festuca rubra***† (not expanded).

Flowers practically over: cowslip, ***Viola***, **dandelion**. A minute white "*Sagina*" on anthill not named.

1605

B, C

{reverse side}

27 MAY 1963.

{Page numbered as 9A}

27 MAY 1963. WYTHAM WOODS.

With Clifford Elbourn, to Comp. 5, Common Piece and Thorny Croft. He has “artificial log” boxes of oak sawdust set out on **oaks** in Comp. 5, in a series which continues the work begun by Larkin in 1961. There are not many logs in this area, and practically no scrub, after thinning about 5 years ago.

In the far end (north) of Common Piece the foresters have about finished the first of the new “mild management” pole thinnings i.e. singling or reduction of large coppice “poles”, ash and sycamore. Although brash is left lying, piles of cut branches will be taken away. Although part of the area looks bare and the remaining trees are very spindly, the programme has (a) not destroyed much scrub (b) not removed large trees; and (c) he has instructions not to fell dead ones. (d) no burning. Patches where brash was burned about 5-6 years ago on Comp. 5 are still very bare circles, *Fumaria* having gone.

Parts of the outer bits of Thorny Croft have been similarly treated, but much good habitat remains.

{reverse side}

27 MAY 1963.

27 MAY 1963. WYTHAM WOODS.

We looked at Marsh 1. It needs ash saplings removing, which Probitts says can be done in winter without damage. Marsh units rather dry and vegetation backward. Found a *Clausilia rolpheii*.

The upper part of Stream 7 is still unconnected with the lower stretch and appears not to have been dug by the foresters.

There is a sharp increase in **blackthorn** and *Carex pendula* (in full flower) as one goes down towards the wood margin of Thorny Croft (Oxford Clay).

The **oaks** and **ashes** are still only half out and ashes especially look very bare. **Black poplar** not more than this either.

I collected some very dry and rather hard inner rotten wood at 2-4 ft. inside a long split hollow of a very galled and almost dead oak (LOG), about 25 yd from track near the hornbeam in Common Piece before you reach 1st Fork. It stands in oak-ash-sycamore wood.

Nothing emerged and it seemed sterile of animal life (26 June).

{reverse side}

27 MAY 1963.

“*E. deleta* is one of those species which are found equally either in fungus or at flowers. I have never found it at flowering sap, which is attractive to some of the species.” (A.A. Allen, 15 October 1963).

27 MAY 1963. WYTHAM WOODS ***

We collected a small (7 x 9 in.) isolated ***Polyporus squamosus*** Fr. bracket, at 18 in. on a live coppice ash trunk, edge of oak-ash-sycamore wood, Common Piece, by track edge between Comps. 2 & 3. 1607

The top surface heavily eroded by slugs (not seen).

Hundreds of *Gyrophæna* staphs. Underneath, poking heads and bodies down the pores, no doubt after spores. At any rate two kinds (2 specimens kept of each):

Light brown and dark, look banded 2 ***Gyrophæna gentilis*** Erichson J.H. Frank det. 1966

A

Black, smaller 2 ***Gyrophæna joyi*** Wendeler (as *G. convexicollis* Joy) J.H. Frank det. 1966

B

Inside the pores were numerous very small fly larvae, probably ***Clythia*** (*Platypeza*) ***furcata*** Fallén (prov. det. K. Paviour-Smith). No *Gyrophæna* larvae.

C

Walking on the undersurface were a few larger beetles (all counted).

1 ***Triplax russica*** (L.) K. Paviour-Smith det. 1963

D

1 ***Mycetophagus quadripustulatus*** (L.) K. Paviour-Smith det. 1963. I watched it nibbling the hymenium, in the lab.

E

1 ***M. piceus*** (Fab.). K. Paviour-Smith det. 1963.

F

4 ***Dacne rufifrons*** (Fab.). 2 k. K. Paviour-Smith det. 1963

G

3 light variable brown ***Epuraea deleta*** Sturm A.A. Allen det. 1963. (2 kept)

H

{reverse side}

18 JUNE 1963.

18 JUNE 1963. WYTHAM WOODS.

With C.A. Elbourn, F.C. Evans and H. Trapido, 1.40-3.30 p.m. (G.M.T.). Strong south-west wind but little rain, cool. Ground very soggy.

Went first to Sundays Hill, noting on the Singing Way by the Chalet Woods path two large **hornbeams** that had (a) extensive insect damage to leaves (b) some large dense leafy galls in the canopy, about the size of footballs i.e. great brooms of twigs.

Inspected the "Evans trap" on Sundays Hill, which is a tent-like object radiating four vertical panels from a centre pole, pegged out in grassland; the flying insects hit it and walk into a trap at the top. He has had impressive catches.

Bowling Alley at this moment presents one of the most wonderful flower shows ever seen here in June. Birdsfoot trefoil (*Lotus corniculatus*) in full flower in patches the size of a large room; societies of flowering *Orchis fuschii*; and a mixture of less concentrated species in flower including **thyme**, **mouse-ear hawkweed**, another composite, *Cirsium acaulos* etc.

None of the pile of pine logs ("LOG 170") has any insect activity. The centre experimental pine billet (No. 3) has an additional hole near the two seen on 25 May. They are much larger than any that a bark-beetle would make.

Wild rose in flower in scrub between here and Sunday's Hill.

S.H. grass seems more mixed with *Arrhenatherum*, *Bromus erectus* etc. than earlier, and one gets the impression that *Brachypodium* is on the defensive. Some herbs among it e.g. **woolly thistle**, **lady's bedstraw**, *Pastinaca*.

{reverse side}

18 JUNE 1963.

[1611] Swept from path-side "meadow" at edge of mix scrub (plantation). Cantharid beetle with red wax secretions on sides.

2 *Malachius bipustulatus* (L.) Mark Robinson det. 1980

1610 A 1 ♂ *Anaspis regimbarti* Schilsky
 B 1 ♀ *A. maculata* Geoffroy in Fourcroy.
 C 1 small *Grammoptera ruficornis* (Fab.)
 D 2 Cantharid beetles

E 1 *Bruchidius*

18 JUNE 1963. WYTHAM WOODS ***

We walked down Hatchetts Lane to Nealings Copse and eventually round to Broad Oak, to look for the **adder's tongue ferns** reported by R. Bailey, E.G.I., to be extremely common, at any rate in the Rough Copse rides. 1611

But Beale had mowed all the rides close and to the edge, and we only saw two plants, both non-flowering. (These were kept for record, as spores must be very abundant). 1608

Made a visit also to Pond 1. A large guelder rose (*Viburnum opulus*) in abundant flower on edge of narrow ride below pond, in dense wood. 1609

Beat field layer (1-6 ft.) flowers, and scrub canopy (6-9 ft.) separately, and got abundant *Anaspis* etc. 1610

8 ♂ 1 ♀ *Anaspis frontalis* (L.) 1609 [A] n.k.

2 ♂ (one k.) 3 ♀ (n.k.) *Anaspis maculata* Geoffroy in Fourcroy [B]

2 ♂ *Anaspis regimbarti* Schilsky (the one mounted normally had genitalia checked) [C]

1 ♂ *A. humeralis* (Fab.) [D]

1 *Grammoptera ruficornis* (Fab.) [E] n.k.

{reverse side}

1612 A *Misumena viatica*

I kept a (white) one in the lab. for some days in 3 x 1 tube with yellow *Clematis farreri* flowers, but the colour did not turn.

18 JUNE 1963. WYTHAM WOODS.

The small meadow by Pond 1 has one good patch of the meadow thistle (*Cirsium dissectum*) in full flower. On three of them was in each case a large white crab-spider under the flower head. To look one of these, a spherical ♀, white all over body except several brown marks, with white legs. 1612 A

Very conspicuous on dark brown involucre crowned with carmine flowers. And it was, facing downwards, grasping by the face a dead ♂ *Bombus pratorum*, not much bigger than it. B

There were also some plants of meadow vetchling (*Lathyrus pratensis*) in yellow flower.

Many large *Listera ovata* in flower on this meadow, and some *Orchis fuchsii*.

In "open water" of the Pond (now about 15 in. below the dam top) is entirely covered with *Potamogeton natans* in flower, some leaves with chironomid mines (no defoliation at present). *Hippuris* and a few *Alisma plantago-aquatica* coming through it. *Chara* below.

The open patch hedged in by *Scirpus lacustris* reed-swamp; but along the centre line of current there is *Carex*, and at the deep end of this *Equisetum limosum*.

{reverse side}

25 JUNE 1963

It rained heavily most of the morning, but was not cold.

25 JUNE 1963. WYTHAM WOODS.

Visited Pond 1 with Rob, 9.30-11.30 a.m. G.M.T., No survey specimens were kept, but the following notes made:

Practically no *Daphnia*, a few *Eurycercus*, many egg-bearing *Cyclops* and very small ostracods.

Only 1 *Asellus*, a young one.

1 larval **newt** circa 1 in., in the water without *Chara*. None caught in *Chara* region.

Several young *Notonecta*, no adults.

Several *Corixa*, two in copulation, medium-size.

Several *Hydroporus*, but no larger dytiscids.

1 four-spotted Dytiscid:

Probably full-grown greenish demoiselle dragonflies nymphs. Several blue and black adult demoiselles on field layer of marsh below dam wall.

Some small mayfly larvae.

Two *Corethra*.

1 black *Polycelis*

No water-mites at all

1 duck **mallard** flew up from reed-swamp.

A scatter of 1 ft. *Epilobium* in the thin *Carex* marsh by the pond (where the brookweed grows) has severe leaf perforation by a *Galerucella* beetle, and many yellow larvae some yellow, some black on under-sides. 1630

Found one small greyish adult. But also a large brown marked one that fell off *Epilobium* (almost certain). A

Collected flowers 3 ft. stem of *Hippuris* from Pond 1.

1631

2 *Galerucella pusilla* (Duftschmidt) or *calmariensis* (L.) Mark Robinson det. 1980.

B,C,D

{reverse side}

25 JUNE 1963

25 JUNE 1963. WYTHAM WOODS ***

In the vague scrub edge of Pond 1 reserve was a common **whitethroat**.

The ***Cirsium dissectum*** flowers again had two ***Misumena*** on, one below and one on top of the flowers.

The ride-end (blind extension) in the plantation, at the bottom of the ride down from 5 Sisters, had a beautiful display of ***Orchis fuchsii*** in the grass, together with white **comfrey** and **meadow vetching** flowers.

On Rough Common, a **pyramidal orchid** in flower bud at the T/3 edge. **Kestrel** hovering in the high wind. **Cuckoo** rose from ground or near it.

{reverse side}

12 AUGUST 1963

12 AUGUST 1963. WYTHAM WOODS.

Went to Rough Common and The Bowling Alley – Sundays Hill 11.45 a.m.-2 p.m. G.M.T., with Rob.

Rough Common. I visited all the **wayfaring trees** on (a) edge of Chalet Woods (b) edge of Drive, in open (c) in Chalet grounds by Meteorological Station = woodland edge, looking for fauna to check on Side's account of it on North Downs. The ***Galerucella viburni*** occur at all three places, but larval damage to leaves has been slight this year. Took specimens of damage leaves. 1648 A

Have previously seen adult beetles at (b), and at all three found abundant traces of old "egg nest" cavities on older stems at field layer height, as described by Van Lengerken. B

No larvae or adults seen – would now be pupating in the ground. Much new growth as in all plants this year everywhere. No **aphids** on leaves. Looked for alternate phase on ***Carex flacca***, but negative. Most of this sedge had brown seed, though a few were green seed. Could find no *Luzula* flowers on the Common. Did

{Reverse side of page 36 is shown as page 36A.}

{Reverse side of page 36}

12 AUGUST 1963

- 1649 [A]. Another *M. piniperda* “emerged” 14 Aug. Sept. More emerged: 1 on 14th
 2 more 15 Aug. 1 more 23 Aug. Sept. More emerged: 2 on 16th
 1 more 16 Aug. 1 more 27 Aug. Sept. More emerged: 1 on 17th
 2 more 17 Aug. 1 more 31 Aug. Of total 15, 4 k. (12, 14, 17, 27th.)
- [C]. A much smaller but similar beetle “emerged” 12 Aug. Another 22 Aug. Another 28 Aug. 1 on 30 Aug. 2 on 31 Aug. 3 more 2-3 Sept. (alc.) One more 5 Sept. (alc.) One more 7 Sept. (alc.) = *Hylurgops palliatus* (Gyllenhal) 4 k. (22, 28, 30, 31 Aug.)
- [D]. Large chalcid emerged 14 Aug. 2 *Rhopalicus tutela* (Walker). R. Beaver det. 1965
 1 more 16 Aug.
- [E]. Two much smaller chalcids emerged 14 Aug. 1 ♂ *Dinotiscus* ? *eupterus* (Walker). R. Beaver det. 1965 (see 1649 N below), not kept, poor material. *Rhopalicus tutela* (Walker). R. Beaver det. 1965 Kept.
- [F]. Very small staphylinid “emerged” 14 Aug. 1 on 2 Sept. 2 *Phloeonomus pusillus* (Gravenhorst) P.M. Hammond det. 1969 (at B.M.)
- [G]. 3 black & brown yellow-legged flies “emerged” 19 Aug. 1 more 22 Aug. 1 on 29 Aug. 3 ♀, 2 ♂ *Clusiodes gentilis* (Collin). B.H. Cogan det. 1969 (B.M. (Nat. Hist.)) kept 3 Specimens = 2 ♂, 1 ♀
- H. Very small larva “emerged” 24 Aug. 5 more 28 Aug. and more in September.
- [J]. Larva (pink) of *Thanasimus formicarius* “emerged” 26 Aug. (alc.)
- [K]. Larger larva of ditto, put in a damp sawdust to pupate. Did not do so. Kept in alcohol + another emerged later. (not kept)
- [L]. Small delicate staphylinids different from F. 2 “emerged” 3 Sept. 2 ♀♀ *Gyrophana* sp. P.M. Hammond det. 1969 (at B.M.)
- [M]. 1 small staphylinid different from F & L. 1 “emerged” 3 Sept. *Oxypoda umbrata* (Gyllenhal) P.M.H. det. 1969
- [N]. Chalcid “emerged” 30 August ♀ *Dinotiscus* (K. & H. = *Pteromalus*) *eupterus* (Walker). R. Beaver det. 1965 (see letters 10 & 17.5.65)
- Q. Very small fly.

When demobilised, the bark had quite come away. The Log was kept. It has superficial gallery marks that are stains rather than cuttings, though shallow pupal chambers are clear excavations. The gallery pattern is weird and wanders widely, apparently from one entrance gallery by the top “knot”.

12 AUGUST 1963. WYTHAM WOODS ***

not look for *Luzula pilosa* in Chalet Woods, the only other possible host round here. There was very little sign of aphid damage – curled leaf “galls” on earlier leaves, so perhaps the winter eggs were killed by frost this year.

No other fauna was found except red leaf galls. Side mentions (a) mite galls with an entrance at base (b) cecidomyiid galls with a sort of exit on lower side of leaf. The only inhabited galls had a pale slow mite in.

Rob found a **blindworm** (large) under a corrugated asbestos sheet on grass near Five Sisters elms. (One reported by Beale to live near Chalet. H.N.S.).

N.B. The **wayfaring trees** had a heavy crop of red (even green and red) berries, of which only one or two racemes had turned black – very late, and no insects visiting yet.

Bowling Alley.

Examined the “pine traps”. The central billet (No. 3) now has a good many bark-beetle-size holes, so brought it in and tinned it. One *Myelophilus piniperda* (L.) “emerged” within minutes: it was pale brown, with blackish antenna club and odd marks, presumably teneral.

Very active and able to scale glass vertically and upside down, and tried to fly. 1649 A

Saw similar holes on main log by pile. Also “emerged” at once a very small staphylinid (escaped) and a green metallic fungus-eating beetle *Rhinosomus planicollis* (Fab.) J.

Balfour-Browne det. 1965. B

On 8 October the bark (which was partly loose) was stripped off and a few beetles and white larvae or pupae still there. Took visible insects in alcohol and put back billet and bark in tin.

(Start of experiment see page 1)

{reverse side}

12 AUGUST 1963

1650 Collected a green ♂ sawfly on *Pastinaca* flowers at 3½ ft.

12 AUGUST 1963. WYTHAM WOODS ***

Bowling Alley continues to be a riot of vegetation and flowers, now a mixture of patches of T/2 and T/3. The T/2 is mainly wild **thyme** in flower – huge sheets yards across or on large ant mounds, and scenting the air like an alley planned by Francis Bacon. Also mats of non-flowering ***Hieracium pilosella***, much ***Euphrasia*** 2-5 in. high in flower. Other conspicuous flowers were pink mallow, and medick. ***Lotus*** now all in seed.

Sundays Hill has changed dramatically, and instead of a monotonous grassland there is a wide stretch of ***Pastinaca*** and ***Cirsium eriophorum*** in flower, also large societies of ***Hypericum perforatum*** in flower. Among the grass, which includes ***Arrhenatherum***, are ladies bedstraw (seed) and ***Clinopodium vulgare*** (flower). 1650

At the woodland edge along the Singing Way the growth of herbs and big grasses is phenomenal – e.g. ***Heracleum*** 10 ft.!

Today Perrins told me he had found three large ***Epipactis*** in Bean Wood, one of which was in good condition and appeared to be ***purpurea***.

I beat hawthorns between Bowling Alley and Sundays Hill, and except for collembola and spiders the fauna was sparse. Kept the three winged greenish small hoppers seen. 1651

2 ***Chermes ?peregrinus*** (Foerster) (det. as *Psylla ? peregrina*) J.B. Whittaker prov. det. 1963
1 ***Typhlocyba ? crataegi*** Douglas. J.B. Whittaker prov. det. 1963 (specimens n.k.)

{reverse side}

19 AUGUST 1963

30 AUGUST

1653 12 September a small chironomid fly emerged, rather poor condition.

19 AUGUST 1963. WYTHAM WOODS.

While out with Christopher Mathews in the afternoon I noticed a **redstart** at the edge of Jones Enclosure and again at the edge of 3 Pines.

Much *Gentiana amarella* in flower on Lords Common. One fruiting *Anacamptis pyramidalis* on T/2 edge of Rough Common.

Recently lightening-blasted large **ash** by "car park", Marleywood Plantation/Marley Wood was riven right to the base and had top broken off.

30 AUGUST. WYTHAM WOODS.

With Rob to Bowling Alley, 12 noon to 1 p.m. G.M.T., very windy, rainy. The main pine branch at the log dump has many bark-beetle holes, but the remaining billets apparently none.

Flowers of wild **thyme** etc. finishing, but *Clinopodium* and luxuriant 2-5 in. *Euphrasia* in flower.

One **bee orchid** seen, in seed.

Collected half-a-dozen tubes of water from the beech tree-hole (at circa 5½ ft.) near the Monteray Bowl {sic}. It produced a good many small fly larvae also one Eristalid rat-tailed larva and a mosquito skin. Kept. 1653

{reverse side}

30 AUGUST 1963

1654 2 September large areas of smallish maggots, brownish coloured emerged into tube. Put overnight into tin with some crumpled cloth. Added sand into which most burrowed. After about a week most had emerged but there was a gap of a day or two and another smaller mass appeared. Evidently they migrate strongly before going down to pupate.

But in September some blue-green smallish bottles emerged from the original tin, also a few in the tin to which the many emergent larvae were transferred. On 30 September many larvae still moving in this tin and not pupating, probably incompletely fed. Some of the emergent flies in the second tin chewed by the maggots.

1655 2 more large and one small black iulids "emerged" = 3 *T. niger* n.k. see across. also 1 ♀ *Forficula auricularia* (n.k.)

1654 Sample named by M. Ackland 1965: *Lucilia ampullacea* Villeneuve
8 ♀♀ (of which 2 kept)
2 ♂♂ (kept: one with dissected genitalia)

30 AUGUST 1963. WYTHAM WOODS ***

Collected a wet but intact dead mole on the grass track of the Singing Way (woodland edge). Put in tin on a heap of sand. Nothing below it except one or two Sphaerocerid flies (n.k.) 1654

Brought in a bit of very dry dead birch bole circa 2¾ in. diameter, circa 5 ft., tunnelled by insect (old). One large black iulid “emerged”. (Mixed wood edge of Bowling Alley) 1655

The trees are starting to turn colour and even dropped leaves a bit – very early. The **sycamores**, after this very wet cold summer are more heavily infected with *Rhytisma* spots than I can ever recall, and they are dry and crinkled and quite a lot of leaves are on the ground and some saplings (it is especially these young T/4 stages) almost bare.

C. Perrins tells me that I. Newton in last week or two saw **crossbills** moving over the top. They were eating larch cones in the little round plantation in the Upper Seeds meadow reserve.

7 SEPTEMBER

Visited North Hill, with a Japanese visitor, Dr. H. Kawanabe of Kyoto University. Saw 3 **jays** flying in woodland edge on Rough Common. Large patch (several feet wide) of ***Astragalus glycyphyllus*** in seed pod in T/3 grassland near track over Rough Common.

{reverse side}

16 SEPTEMBER 1963

1656 C.A. Elbourn examining micro life found large bright green ovoid ciliates.

Emerged as adults after a few days

16 SEPTEMBER 1963. WYTHAM WOODS.

Visited the North Hill with R.S. Miller (who planned the Survey classification with me in 1952 and is now a professor in Saskatoon), on the hottest afternoon since about June – clear sky and dead calm.

On the Singing Way near and just south of the Bowling Alley Plantation, the ride is partly grassy but has a number of old deep ruts full of clear water over a silty mud. 1656
These must (in this cool wet summer) have been there for some time, because the mud was covered with little raised mud craters each containing a red chironomid – mostly larvae, but there were also a few pupae with white plume-like “gills” which were emerging or were moving in the water or lying still on the bottom, (i.e. about 2 in. below the surface). A
There were also large brownish ostracods cruising on the mud. In one pool two small eristalid larvae were moving on the bottom. Many small flies (non-chironomid) on surface. B n.k.

On the mid-Singing Way opposite Pasticks field is a large dying beech. The remains of trunk has scar rotting wood right to the top. One large bit of trunk + branch had split and fallen, opening a hollow in which “peaty” frass of rather firm consistency had accumulated. Took sample from 10 ft. (equivalent) height. Produced nothing: killed by cold spring?

The Pasticks Wood (where R.S.M. did part of his mouse-vole work in 1950-1; rest in Chalet Woods) is in a good state, heavy dog’s mercury (or nettle etc.) covering much fallen wood, Little bramble. Met Major Mills who said he wished to retain this copse as it is.

{reverse side}

16 SEPTEMBER 1963

16 SEPTEMBER 1963. WYTHAM WOODS ***

The Meadow reserve in Upper Seeds is very dense vegetation, dominated by cocksfoot grass etc. yet has a good many flowers including not so tall ones. **Field scabious** in flower with a **peacock butterfly**. Saw one **silver-Y moth**.

{reverse side}

16 OCTOBER 1963

16 OCTOBER 1963. WYTHAM WOODS.

In the morning, visited Marleywood Plantation and Rough Common, with Dr. David Sargent (Dominion Wildlife Service, Montréal). Stream 5 has silted up so much in the time since D.H. Eccles worked there, that the lowest stretch has spread out and made a swampy area. I dug a centre channel about 6 in. deep and 10 in. wide to guide the water back in this lower part. The silting has probably accelerated since the stream was connected to the drain outside and from the edge of Marley Wood. The brown surface silt has blackish mud some inches below.

{reverse side}

22 NOVEMBER 1963

22 NOVEMBER 1963. WYTHAM WOODS.

Looked at Streams 5 and 5A in Marleywood Plantation, with C.P. Mathews who is starting a study of *Gammarus* food resources there), Major J.W. Mills, and Bert Probitts. The lower bit of Stream 5 has silted up so as to overflow and make waterlogged a patch of wood (see 16 October 1963), and it was agreed that it should be dug out afresh from this point down to the edge of the wood, but in a fairly shallow channel several feet wide, not a deep trench. The upper part will remain untouched for the next three years. Stream 5 A will also remain untouched. As far as I can see, a good deal of canopy was left by the stream when the wood was last thinned. There is a fairly large glade now between LOGS 32 and 34. The ditch along the east side of the wood into which the two streams fall, is to be cleared and the outer margin cut back (i.e. remains of overgrown hawthorn etc.) to allow a barbed wire fence to be put along the inner side of the ditch. Care will be taken of the *Sambucus ebulus* patch.

{reverse side}

14 FEBRUARY 1964

14 FEBRUARY 1964. WYTHAM WOODS.

While writing my book, I needed some facts about the fauna of bracken litter, so visited the triangle between 3 Pines, Deer Pond and road up to Lord's Common. This is mainly oak-ash with elders and sallows (recently cut to the ground for Dr. Kettlewell's work) and a few sycamore. I collected three large bags of litter as follows:

{reverse side}

14 FEBRUARY 1964

A = hand-sorted all kept unless stated

B = Tullgren -day extract of residue all kept unless stated

1664 A. Oak litter.

Mollusca: 2 *Oxychilus cellarius* shells n.k.
 2 *Trichia striolata* shells n.k.
 1 young *T. hispida* alive n.k.
 3 *Cochlicopa* 1 alive, 2 shells
 Earthworms 1 young n.k.
 Enchytraeid worms
 Mites *Trichoniscus* "pusillus"
 very small spiders
 2 false scorpions
 Collembola
 Fly larvae
 1 small fly
 Beetle larvae 3 small brown ? silphids
 Small staphylinid 1 Lathridiid

All very few, even *Trichoniscus*

1664 B. Tullgren extract had

Enchytraeid worms
 1 small slug
 false scorpions
 very small woodlice
 1 spider
 mites
 Collembola
 1 small Carabid beetle
 larvae of beetles (some nearly ½ in.)
 larvae of flies
 etc.

14 FEBRUARY 1964. WYTHAM WOODS ***

- A. Under a mature oak. No bracken under the “canopy”, but a few dead stems of (I think) rosebay willow herb. No solid cover of litter – a lot of flat dry crisp oak leaves all uneaten or – broken down, plus empty acorn cups, twigs etc. In fact a very poor habitat. The bag of litter included a few small bits of loose top soil. All very dry. 1664 A B
- B. Bracken litter. From interspace between oaks which here do not have closed canopy. This sample had much broken bracken, stems and leaves, and otherwise a few bits of green ground ivy (*Glechoma*). The litter two or three inches deep and lower parts quite damp, the stems having largely decayed inside and hollow whole or split open. In one tube was a small *Lithobius*. 1665 A B
- C. Bracken litter. As last, but in an open area with a little bramble as well, but no bramble leaves in the litter (they stay on plants in winter), but a little moss. One of the *Tachyporus* was sheltering in a tuft of moss (in lab.). Otherwise depth and moist, as in B. 1666 A B

All three samples were sorted for visible fauna, then (after staying in tins for circa 48 hrs.) put in Tullgrens. No *Glomeris* were seen in any of them, *Trichoniscus* being far the commonest animal visible in all, and much more so in bracken than oak.

{reverse side shown as page 54A}

14 FEBRUARY 1964 ***

1665A. Bracken litter, hand sorted.

Mollusca: 1 *Oxychilus cellarius* old shell
 1 *Goniodiscus rotundatus* fresh shell
 1 *Trichia striolata* fresh shell
 1 *T. hispida* fresh shell
 1 *Marpessa laminata* fresh shell
 Enchytraeid worms
 Mites
 Tiny spider *Trichoniscus "pusillus"* some
 False scorpion
 2 small *Lithobius*
 1 *Lithobius variegatus*
 Collembola
 2 (? Cantharid) beetle larvae
 3 very small staphylinids
 1 small black weevil
 1 small gnat
 1 tiny fly
 1 Sepsid fly

1665 B Tullgren extracts had

Enchytraeid worms
 1 snail
 small spiders
 small myriapod
 very small woodlice
 mites
 Collembola
 1 Staphylinid, 1 Pselaphid, 1 Chrysomelid beetle
 larvae of beetles
 1 young Homopteron
 etc.

1666 B Tullgren extracts had

Mites
 no false scorpions, slugs or snails (1 *Cochlicella* shell)
 very small spiders
 1 ♀ unfed *Ixodes trianguliceps* (= *tenuirostris*), det. by H. Trapido 1964. n.k.
 Small woodlice
 Fly larvae (including Tipulid)
 Small dark grey-brown piebald Homoptera with pink eyes J.B. Whittaker det. as
 1st or 2nd instar Cicadellids.
 Beetle larvae
 1 adult *Stenus*
 small hymenopteran

14 FEBRUARY 1964. WYTHAM WOODS ***

1666A. Bracken litter, hand sorted

Mollusca: 1 *Oxychilus cellarius* shell
1 adult, one very young *Marpessa laminata*

Far more in this litter:

Trichoniscus pusillus abundant Enchytraeids
2 small *Lithobius*
2 small Polydesmids
mites
very small adult ♀ spider *Neon reticulatus* (Blackwall). E. Duffey det. 1964.*
1 false scorpion
collembola
1 Hemipteran Heteropteran
5 orange and brown staphylinids
6 small staphylinids
2 pselaphids
1 fly

E.D. writes (4.3.64): "It is a Salticid with a wide distribution, and occurs in a great variety of situations. It is a litter species particularly where the vegetation or soil is damp; but I have taken it on coastal shingles (grass tussocks), in grassland on heavy soil, in deciduous leaf-litter, and abundantly in northern and western *Sphagnum* bogs. It is always close to the ground in sheltered places and I have never taken it by sweeping or beating."

{reverse side}

25 FEBRUARY 1964

25 FEBRUARY 1964. WYTHAM WOODS.

In afternoon, with John Whittaker, visited grassland preserves to settle for cutting etc.

Lower Seeds has a good deal of young hawthorn in places, <2 ft., much of it coppice from earlier cutting. Huge spread of ***Brachypodium pinnatum*** has continued, now down to fence in many places; but also good patches of mixed meadow. Heavy ***Microtus*** population traces all over. Everywhere the ***Cirsium lanceolatum*** heads had been torn open (at 2-3 ft.) and many lay on ground. Possibly goldfinches – woodpeckers could hardly have been supported? Young **beech** and some young **oak** in profusion (natural) at edge of wood above.

The Ridge and Lords Common and Rough Common also visited.

Upper Seeds in general still in fine mixed meadow domain by ***Dactylis***. Also voles abundant traces. Virtually no ***Brachypodium***. One bramble patch.

{reverse side}

8 MAY 1964

8 MAY 1964. WYTHAM WOODS.

Took Capt. Cyril Diver (former D.-G. of the Nature Conservancy), his wife and two friends to the top of the North Hill. On Lord's Common dead seed-heads on stems, of ***Gentiana amarella*** were very abundant. A small ***Carex caryophyllacea*** in flower and common, and ***C. flacca*** flowers beginning though very short.

Also visited Marleywood Plantation. Lane's pasture next to Marley Wood had a very large number of **cowslips** in flower. The anthills had a shaggy look as if no cattle have grazed this spring. The stream (No. 3) that edges this bit of pasture has a barbed wire fence on each side, so cattle access is controlled.

{reverse side}

21 MAY 1964

21 MAY 1964. WYTHAM WOODS.

Chalet meeting with the WW Management Committee. Inspected six old **beeches** on main part of The Singing Way, and decided to fell (1) the one noted by me on 16 September 1963 (2) one other in an "ugly-looking" condition close to the track.

The policy will be in future (1) to remove old trees at intervals (2) to plant young beech in such gaps, also in other places where e.g. young sycamore can be cleared (3) drag the major trunks and boughs (part already rotted) away into cover on the belt (4) when possible cut, say 10-15 ft., at above ground to leave an old bole.

Decided that **sycamore** stumps in the wood would be killed by spraying a herbicide () after cutting – only on stump and only on sycamore.

The young common elm grove by the two remaining "5 Sisters" at the edge of Rough Common will be thinned.

{reverse side}

29 MAY 1964

29 MAY 1964. WYTHAM WOODS.

Made round of some woods on the North Hill, with R.S. Miller, C.A. Elbourn and J.D. Ovington, to show J.D.O. the possibilities for an extension of his research based on Monks Wood Experimental Station. Saw Common Piece, the Northern Reserve and Varley's oak glade, and Comps 4 and 9 and their relatively unspoiled oak-ash-sycamore.

Lysimachia nemorum flowers abundant among the grass of Middle Ride.

G.C. Varley collected/det. a ♂ *Rhyssa persuasoria* (L.), (the parasite of *Sirex*) on larch trunk logs recently hauled out to First Fork after being cut in Plantation. He had seen several there on 24 May but no ♀♀.

1668

{reverse side}

17 JUNE 1964

17 JUNE 1964. WYTHAM WOODS.

With Christopher Mathews, to see his work on Stream 5A, Marleywood Plantation, 1.30-2.30 p.m. G.M.T. The two culverts that are under the lane and through which the two stream branches come are rather blocked, but steady shallow water flows below. His emergence traps, down since May, catch almost nothing, in contrast to those of Efford several years ago, and of Eccles in Stream 5. Is this a crash after the cold winter of 1962-63, or an effect of silting following earlier drainage channels made above, in the fields? *Gammarus* is abundant, and one caddis larva.

There is a large glade from forest cutting in , at the centres stretch of the stream, with luxuriant field layer of bramble, enchanter's nightshade etc. some **twayblade orchids** in flower.

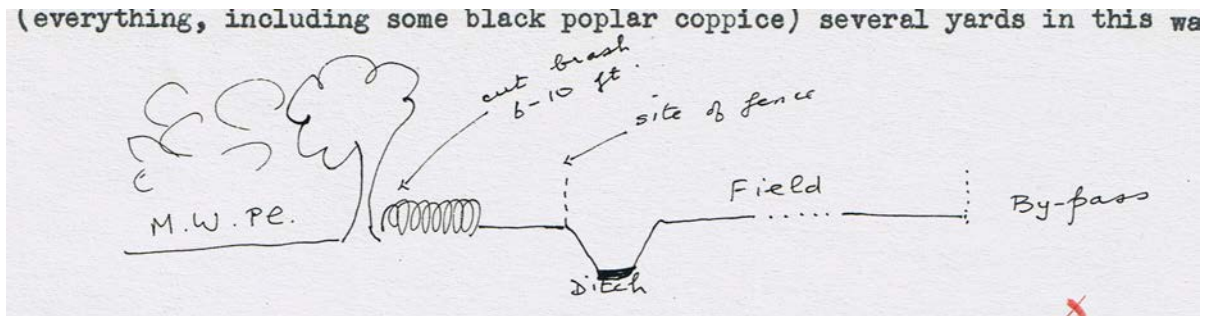
The outer rim of the wood facing the bypass has now been drastically cut

{reverse side}

17 JUNE 1964

17 JUNE 1964. WYTHAM WOODS ***

back (everything, including some black poplar coppice) several yards in this way:



Found one specimen of a snail not hitherto recorded in Wytham Wood, *Theba cantiana*, on flower heads of *Dactylis glomerata* at about 2 ft., in thick grass verge just outside the gate of Botley Lodge, and in deciduous wood edge partly shaded by the hedge elms. 1669

Find I took it on cocksfoot grass by the Canal on 17 June 1945! This seems to be generally an open ground species not living right in woods, and often ruderal too.

{reverse side}

2 JULY 1964

2 JULY 1964. WYTHAM WOODS.

With C.A. Elbourn to look at the Chalet Woods, with Major J.R. Mills and Probitts. Agreed on plans for planting young beeches in three glade patches, which involves cutting little but sycamore; and for slight widening but not metalling the ride through "Blenheim".

Probitts showed us the only "wild" **walnut** tree in Wytham, a planted oldish but not very large tree near the two old cherries towards Lords Common; and how the **fallow deer** have used it regularly to sit under, slightly damaging the exposed bases of the roots. I think this place is chosen because *Hydrotaea* do not come much under walnuts.

{reverse side}

18 JULY 196422 JULY

18 JULY 1964. WYTHAM WOODS.

S. Sutton showed me a house cricket (*Gryllulus domesticus*) caught at a MVL trap by the Chalet last night. (The nearest known breeding population is Port Meadow rubbish dump).

22 JULY.

With C.A. Elbourn in the morning to examine the **ragwort problem** on the Park ant reserve. We cleared $\frac{1}{2}$ - $\frac{3}{4}$ acre in the centre by pulling up flower stems by the roots. Rest to be done next week. This is necessary because ragwort is a potential poison to cattle, and the farmer has cleared the rest of the Park. It was in full flower with stems mostly 2-3, but up to 4 ft. and extending over the whole reserve, in some places in clumps or mixed with some very dense thistle patches, but mostly thin. Here and there were plants on the (*Lasius flavus*) **ant-hills**. The latter are up to 2-3 ft. across and 1 ft. high, mostly firm, "active", well covered with turf of *Agrostis*, **yellow bedstraw** etc. The pasture turf is rather rough but mostly a firm sward in which a good many non-flowering ragwort rosettes are scattered. Only on the lower sandy slope where it gets steeper is some cattle trampling erosion. The dense patches of *Cirsium lanceolatum*

{reverse side}

22 JULY 1964

26 JULY

22 JULY 1964. WYTHAM WOODS ***

apparently have developed on the patches cleared of scrub and having bare soil. The spear thistles are in full flower 4 ft. or so. The other tall thistles are marsh thistle (*C. palustre*) scattered mostly near the woodland margin of beech, ash and wych elm. There is *C. arvense* in some areas. Also scattered *C. eriophorum*, mostly along the upper zone towards the wood. White-flowered bramble in small patches, also mostly in the shadier parts. There is a magnificent view down the Park over across Oxon., as if one is sitting in an amphitheatre. On the reserve there is one oak and one ash tree.

26 JULY. WYTHAM WOODS.

Went in the morning, to the ant reserve to take colour photos before the ragworts and thistles are removed. Fine but sun muted by thin cloud. Plenty of cow-pats at all stages, but no molehills. Collected *Agrostis* from an **ant-hill** that has a close turf of grass, **self-heal**, **yellow bedstraw** etc. 1673

Ride management along the Singing Way is very successful. The centre is machine-cut sward; the edges have huge *Heracleum* and tall grasses such as *Festuca gigantea*. One side will be cut in September, the other next year.

The Bowling Alley has great drifts of flowering *Holcus* (nearly over), and *Brachypodium pinnatum* in some serious patches. One big clump of milk vetch *Astragalus glycyphyllos*, mostly in pod, with one or two flowers.

Lord's Common has *B. pinnatum* spreading seriously.

{reverse side}

28 JULY 1964

28 JULY 1964. WYTHAM WOODS.

A party from the B.A.P. spent the morning clearing **ragwort** on the ant reserve in the Park: C.A. Elbourn, S. Sutton, J. Whittaker and myself, with Keeper Beale slashing thistle patches etc. (Further work was done by C.A.B. with three other helpers next day). It was grilling hot; most of the ragwort was pulled up, but this usually does little damage to the turf as the roots are only a few inches long, though numerous. We noticed both yesterday and today that the *Hydrotaea irritans* were scarce on the reserve in itself, at least not annoying us, though fairly abundant in the Woods. There is plenty of active cow dung – cattle grazing on fallow field some hundreds of yards away. Huge swarms of *Polietes lardaria* on some cow-pats – rise off in unison when one is only several feet away.

Down the ant slope one notices a gradient from a firm top, through obvious Calcareous Grit sand, to very solid clay or perhaps sand-clay colluvium at the bottom – where ragwort much more difficult to pull up. At the top of the ragwort was easy to pull (presumably in sand mixed with tree leaf-mould) but woods cut off a west breeze. On the steep slope there was a fair cooling breeze. On the bottom (where I was mostly) there was a hot windless zone again.

A good joke: the home farmer has ploughed up nearly the whole Park, but during this very dry summer finds the ant reserve essential good grazing!

{reverse side}

3 AUGUST 1964

- 1674 C.A. Elbourn made Tullgren extracts and found flea larvae fairly abundant, but no fleas. This confirms the hygienic use of the habitat. Badgers (according to Neal's book) push out bedding in the early months, and again after summer, the latter often combined with a temporary move. The bedding used is highly individual choice – straw, the leaves of trees, or of FL, bracken etc. the badger has two common fleas, one specific (*Paraceras melis*) the other "human" (*Pulex irritans*). This bedding cannot have been out long, for the flea larvae to be alive. It offers two ways for survey: (1) clues to nest fauna (2) cover for outside animals – Sutton says many noctuids use loose cover of this sort by day.

3 AUGUST 1964. WYTHAM WOODS.

With Richard Arnold to the south end of Brogden's Belt, to agree final arrangements for his experiment with 2000 tantalum radio-tracer marked *Cepaea nemoralis* introduced to beech litter. 1.30-2.45 p.m. G.M.T. Very hot in sun, dramatically cooler under the beeches. There are several large patches of dog's mercury ± enchanter's nightshade etc. but partly pure stands. In the lower part where beeches effects tail off and also more protection from through winds, the mercury grows more luxuriant. Below this there is much thick 3 ft. nettle with **badger** paths in it from a large complex earth. All about here are many old pits 6-9 in. across which must be badger lavatories, but all now old and ground baked hard. No fresh ones seen. Could nettles be caused by "generations" of badger dung? Much fresh activity in the sandy earths, and clean-looking grass bedding out airing. Much fresh scratch that took a bag full to see what is in it – from bare sand not ordinary ground layer. It included 1 large **yellow underwing** (*Triphaena pronuba*) (S. Sutton confirmed det.). 1674
Skin and skeleton fairly recent of small badger, ? this year's young, by entrance. There is a large **lime-tree** overshadowing this badger citadel.

A few *Hypopithys* and a scatter of *Cephalanthera* {sic = ? *Cephalanthera*) old stems.

{reverse side}

15 AUGUST 1964

15 AUGUST 1964. WYTHAM WOODS.

1.45-3 p.m. G.M.T. Took photos on the **yellow ant** reserve at the head of the Park. Now practically clear of thistles (except marsh, deliberately left, and a few common). All **ragwort** stems removed completely, but some slashed thistles lie.

{reverse side}

15 AUGUST 1964

15 AUGUST 1964. WYTHAM WOODS ***

After this very dry spell in the last two months, anthills look much more parched than pasture round. Not much woodpecker damage to mounds. A little by wood margin at top where I saw a **yaffle** (*Picus viridis*) fly up.

One **red admiral** in strong flight northwards at 7 ft. One **small copper** (*Lycaena (Heodes) phlaeas*) settling twice on dry cow-pats.

Rooks, starlings and one **blackbird**.

{reverse side}

16 OCTOBER 1964

16 OCTOBER 1964. WYTHAM WOODS.

Visited Marleywood Plantation and the North Hill (with Dr. Peter Bull and family, from New Zealand). Magnificent autumn colours after the very dry summer (only about 2 in. rain from July-September). But hardly any leaf-fall yet. **Sycamores** damaged by grey squirrels conspicuous. The **yellow-ant-field** on Lower Follies is rather rough but has some signs of grazing. The ant-hills in this field are very large.

{reverse side}

5 FEBRUARY 1965

12 FEBRUARY

5 FEBRUARY 1965. WYTHAM WOODS.

With Clifford Elbourn to the Singing Way, via Marley Wood, 10 a.m. to noon, cool wind on top, before rain later in day. Forestry work going on along Singing Way consists mainly of singling very tall coppice of ash, wych elm etc., and cutting out some sycamore to make patches in which small groups of beech are being planted.

A narrow "light" or view has been cut through the east belt by the ant reserve, by removal of a big hollow tree, thus giving a view down the Park to the Abbey. The idea, though not this site, was suggested by me last summer.

Quite a lot of young *Daphne laureola* are growing up among the beeches at the north end before one reaches the Bowling Alley.

On the **ant reserve** I saw two sandy **mole** castings at the top near the wood. Moles are scarce on it, as also on Lane's ant field by Marley Wood. He is grazing sheep now on the latter (colour photos by me).

Two glades (one large) cleared in Marleywood Plantation – between LOGS 29 and 25, and by LOG 20, have groups of young beeches planted.

12 FEBRUARY. WYTHAM WOODS.

With Clifford Elbourn to Pond 1, especially to plan conservation of the water level. Most notes made by him. 6 **mallard** rose from the reed-swamp. Water up to circa 1 ft. below dam top, running fast through lower of three sets of holes near top of sluice, and through cracks in and below latter. Much decaying matter on

{reverse side}

12 FEBRUARY 196524 FEBRUARY

12 FEBRUARY 1965. WYTHAM WOODS ***

bottom – H₂S when disturbed, but water very clear. Some submerged green *Hippuris*. The dead broken-standing *Scirpus lacustris* dominates the scene. At present level, the small upper zone of *Samolus* marsh is water-logged at surface in its lower part, so higher pond level would submerge it too much.

Damp meadow (*Cirsium dissectum* area) needs young scrub pioneers removing.

In the pond were numerous Entomostraca, including bright pink breeding *Daphnia pulex*, also *Simocephalus vetulus*, several *Cyclops* species, small ostracods, *Asellus*, *Lymnaea peregra* young, young dragonfly larvae, etc. And larvae of two mosquito species: *Aedes rusticus* and *Theobaldia morsitans*. (For details see C.A.E. notes, which will be indexed).

The plantations on Radbrook Common are no longer scrub, but woodland.

24 FEBRUARY. WYTHAM WOODS.

With Clifford Elbourn to the Singing Way, to look at two large beeches just felled on account of their supposedly dangerous state. One, opposite “the Island” at the north end of the Pasticks, on the ride edges, had no habitable dead wood. The other, on the ride edge opposite the Pasticks wood was better, and examined in some detail. The bits, up to 33 ft., lay in order, but higher canopy branches had been cut and stacked. Later, most of the bits of trunk will be dragged into the beech belt for LOG 167.

{reverse side}

24 FEBRUARY 1965

24 FEBRUARY 1965. WYTHAM WOODS ***

From the base there were two trunks. We measured the main bit, as the other had little useful rotted parts. It was 4½ ft. diameter at 6 ft. height, and a long scar of earlier branch-fall and decay ran from 4 ft. to 30+ ft. partly as a hollow channel. No macrofungi. Samples taken from 1, 4, 8-9, 17-18, 23-25 & 25-26½ ft.

- 1 = papery lamellae of touchwood, white with such intense mycelial growth between lamellae (and in some old galleries) that there was distinct heating and damp inside overnight tin. No fauna seen. Put in two tins and kept in my room at lab. 1680
- 4 = dark reddish-brown frass accumulated in hollow, soil-like wood-debris, bits of hyphae and twigs etc. No animals seen. Put into two tins. (See next page) 1681
- 8-9 White rotted wood, crumbly material much less laminate. No animals seen. 1 tin. 1682
- 17-18 Dryish white-rotted wood in situ, many old large galleries. 1683
- 23-25 Stringy frass mainly from white-rotted central core. Many *Porcellio*, seen in field. A good many old galleries. 1684
- 24-26½ Ditto, entirely hollow core, but open below. A few *Porcellio*. (See page 87) 1685

No sign of live *Sinodendron* were found except in one bit of scar-face, at 8-8½ ft. Hard cutting an inch or so into rather solid wood (mainly white, but red round burrows in which frass was red) revealed a tight colony from which

{reverse side}

24 FEBRUARY 1965

{Numbered page 86A}

24 FEBRUARY 1965. WYTHAM WOODS ***

8 mainly full-grown larvae (n.k.) were taken in separate parts of the burrow system. 1686

Old pinholes of *Ptilinus pectinicornis* were abundant in the hard scar surface up to circa 15 ft., but only a few above. N.B. this part of the Singing Way is rather more sheltered than some of the rest, with the Pasticks wood to the east and pine belt to the west, but nevertheless exposed to wind.

4 ft. 1 large fly emerged 13 March 1 ♀ *Hydrophoria conica* (Wiedemann) M. Ackland
det. 1965 1681A

1 owl-fly "emerged" 17 April *Trichomyia urbica* Haliday A.M. Hutson det. 1969.
(Kept by British Museum) B

24 FEBRUARY 1965. WYTHAM WOODS ***

LOG 167***

17-19 March, “emerged” 13 *Tephnochlamys tarsatus* (Zetterstedt) M. Ackland det. 1965.
(Also one more emerged, apparently the same, not det. M.A.) 2 kept. 1685A

6 April, “emerged” 1 ♂ *Ctenophora pectinicornis* (L.). Also another in April lot,
unsexed. B

6 April, “emerged” 1 *Limonia (Rhipidia) uniseriata* (Schiner) A.M. Hutson det. 1969.
Kept by British Museum) C

{reverse side}

3 APRIL 1965

3 APRIL 1965. WYTHAM WOODS.

With Rob, up to 3 Pines, 9.30-11 a.m. GMT. While he looked the birds (which included hearing **chiffchaff** and seeing **willow tit** (yes) and a pair of **nuthatches**), I walked down the hill to take colour photos of the serious fire burn on the northern reserve.

On the upper corner (south-west) of the West Heronry Plantation (= No. 2) a pair of **great-spotted woodpeckers** were flying and making chattering cries and scrapping with a third. Mostly very high up in canopy of spruces, and of a very large

{reverse side}

3 APRIL 1965

Oxford Mail, Thursday, April 1, 1965.

“Woods Blaze for 6 hours

Fireman from Oxford, Eynsham and Kidlington fought for nearly six hours yesterday to control a fire which destroyed 40 acres of grassland and trees in Wytham Woods.

The blaze occurred almost a mile from the Oxford-Eynsham road near the Swinford toll bridge, and fireman had to use the towpath to reach it.

The alarm was raised by the Eynsham lock-keeper, Mr. Brian West, and when fireman arrived the flames, fanned by a strong wind, were rapidly spreading.

Fireman pumped water from the Thames and had the blaze under control in about two hours, but it was another four hours before the flames were put out.”

3 APRIL 1965 . WYTHAM WOODS ***

black poplar in the close adjoining deciduous wood. The red under the tails was clearly seen and the large white patch on the wing. There was also some drumming.

The Big Burn occurred on 31 March, starting from the river bank, burned out Wytham Mead Reserve (including the marsh, now dry), most of the Further and Hither Clay Piece woodland reserve, also part of Comp. 15 and margins of neighbouring ones of young planting. C.A.B. has mapped its extent which includes most of the area burned 9 years ago. I photographed the Hither Clay part where it has a lot of open bracken between a savannah of trees and scrub clumps. The ground was bare and covered with an inch or two of bracken ash; yet an inch or two below this was a damp bracken layer no doubt kept so by fungal metabolism. Trees were lightly scorched to field layer height, much scrub completely burned overground. A rather grim sight at this time. A good many runs of small mammals (bank voles) exposed. S. Sutton told me he found both scorched and live *Glomeris* in the damp litter below the burn. Striking sights were some entirely untouched **sallow** clumps full of ♂ flowers. Either saved by early sap-flow or preference for slightly damp ground.

There is much willow on the H.C.P. reserve, and quite a scatter in the middle slopes of the North Hill.

WYTHAM WOODS

GENERAL FIELD NOTES BY C.S. ELTON.

Book "Spring 2".

11 April 1944-31 Aug 1949

C.E. 264, 300, 361, 540-1, 544, 546, 573-7, 583, 605-10, 857

Red ticks³⁷ mean ready to be indexed. Crossed red ticks mean indexed.

Circles³⁸ round the code-numbers for specimens mean they have been named, or were named as far as practicable.

Where not otherwise annotated, all species determinations are by C.E. in the year the specimen was collected.

"n.k." = specimen not kept.

³⁷ Shown as **bold** in edited version.

³⁸ Edited to A or 00

11 APRIL 1944. WYTHAM WOODS. S 2.

In O.S. 114 ("My Lady's Seat") there are two springs marked on the map. They are outside the Park's cattle-fence, and obviously marked the junction of Grit and Clay. They lie in a patch of apparently "regressive woodland" (Church, I, 263), mostly thorn and elder scrub, with a springy turf covered with bramble or nettle or bracken, all rabbit-grazed. The upper spring (S 1), is now only a little marshy patch with large marsh willow-herb, *Juncus*, etc., and no open water.

The lower one (S 2) is under a tall grey poplar and also surrounded by tall scrub. It is about 15 x 6 ft. and not more than 2 in. deep, but with a strong spring running. There is no outlet – the water just disappears again underground. It is full of rather nasty dead sticks and poplar leaves, no visible algae or water-plants. But there are small (some coupled) *Gammarus*, a "mayfly" nymph, a cylindrical straight grit case caddis larva, a huge Tipulid larva, and an adult ♀ stonefly on margin. (No toads).

264

This fauna proves it to be a permanent piece of water.

264 is a ♀, and had a cluster of small white eggs just come out and stuck on the end of the abdomen. Identified from Hynes (1940) as *Nemoura cambrica* Steph. The wing veins, long (hairy) many-jointed antennae, genitalia are clear and the wings held flat-crossed like a

Hymenopteran. The tarsi  with tiny middle joint prove it not of the Taeniopterygidae, Perlidae or Perlodidae. The Leuctridae have rolled-over wings. The Capniidae have long many-jointed cerci. This leaves Nemouridae. Front wing has this family is so-called X in veins:



Specimen given to Hope Department.

{reverse side of blank previous page}

11 APRIL 1944.

Confirmed by D.E. Kimmins 25.4.44.

11 APRIL 1944***

Cerci on last segment of abdomen have 1 joint, short. Shape of subgenital plate on 7th sternum is exactly like the Hyne's picture and is diagnostic, see my sketch:



rather dark coloured

He gives flight period April-June. Common & widespread in running water with stone bottom. In Lake District: "Common in all becks, usually associated with dead terrestrial vegetable matter."

Not listed in Oxon. VCH – only *N. variegata*, which apparently comes in one small stream at least.

N. cambrica specimens in Hope Collection, since Oxon. V.C.H.list:

5 E. Taylor, near Beckley, 1.5.40. He tells me this was Cook's Copse (between Beckley and Noke Wood). This lies actually on the junction of Calcareous Grit and Oxford Clay!! Little streams going down to Otmoor have head waters at Beckley, – see maps.

1 P.M. Miles. Ditto. Same date.

2. A.D.Grensted, Piddington, 22.7.40.

1 A.D.Grensted, Headington, 12.8.40.

4 A.D.Grensted, Shotover, 22.7.40.

The (old) Berks VCH (page 73) gives only *N. variegata* (Bagley (confirmed by Zoology Class); Wellington College).

A/C to D.E. Kimmins (1940) *Trans. Soc. Brit. Ent.* 7(3): 80, *N. cambrica* cites Morton that it is one of the commonest *Nemoura* in north Britain. K. has seen records from Dorset, east Sussex, Surrey, Glamorgan, Derby, Yorks., Cumberland, Westmorland, Edinburgh, Inverness.

{reverse side}

7 JULY 1944.

7 JULY 1944.

Visited spring pool S 2 (with H.N. Southern and D. Veale) and collected ***Gammarus pulex*** from among the vegetable debris in the swift microscopic flow. 300

{reverse side}

14 FEBUARY 1945.

361 C. *Crunoecia irrorata* Curtis. C.A. Elbourn det. 1964

14 FEBUARY 1945.

Nemoura spring (S 2). Very cold water running an inch or two deep over clean silty sand, but mostly filled with partly skeletonised dead white poplar leaves. No algal or phanerogam growth, probably because of the coldness and the summer shade. To my imagination the water tasted faintly salt.

Gammarus pulex, small, breeding, fairly abundant 361 A

Nymphs of a stone fly *Nemoura* species fairly abundant among the leaves. Their broad legs and creeping gait make them look like tiny crickets. B

Small caddis larvae very abundant in sand cases:  the latest part having bits of dead leaf on. These were shaken off the leaves and were probably skeletonising them. C

1 straight caddis, large, cylindrical, case of tiny pebbles cemented. D

2 small caddis larvae, no case. Polycentropids. E

Small black fly or beetle larva F

Beetle larva, torpedo-woodlouse shape. A few. *Helodes* G

Chironomid larvae, long thin, easily gets above surface film, greenish. Fairly abundant. H

1 Tipulid larva, black, small. Fixed in "Simulium picric." J

{reverse side}

14 FEBUARY 1945.

R.S.A. Beauchamp & P. Ulliyott (1932). *J. Ecol.* 20:200-8, gives a good deal on *P. alpina* v. *Polycelis cornuta* and conclude that *alpina* at 9 °C dominates in flowing (rheocrene) conditions, but *cornuta* in pool (limnocrene) conditions. It depends on the conditions at the stream head which dominates there. Cite observations from Bibury and Seven Springs and Syrford, in Cotswold cold springs, which are often pools at the source. Thus you can have *cornuta* at the pool head replaced by *alpina* where stream is a little below. In Seven Springs, semi-pool at 9.5 – 10.8 °C there were also *Polycelis nigra* and *Dendrocoelum lacteum*. Cite European literature.

14 FEBRUARY 1945***

? very all black beetle larva with bristles. ? a Hydrophilid, like *Berosus*.

K

Also white, grey and dark grey slender planarians, resembling *Planaria alpina* (checked by Mellanby's key, more or less guaranteed by H.A. Baylis, B.M.) Fast moving. Survive transport. A few. This seems to pin down the spring as having a partly boreal relict fauna! Percy Trotman reports finding similar planarians in the stream from this spring-water table, where it runs through the village (Stream 1 C). He says the water is very cold and never dries up. This would be partly through its spring origin, and partly running so much below ground.

{reverse side}

6 FEBRUARY 1945.

C & E remained active among the leaves for at least a week, though the water was tap and after the first two days not running, and by 12-13th had reached room temperature at 14.6-15 °C. This was noted again on 11 March, 3 days, to 14.9 °: Also for Gammarus, Candona etc.

540 . *Crunoecia irrorata* Curtis. C.A. Elbourn det. 1964

6 FEBRUARY 1946. 3.15-4.15 p.m. (G.M.T.) Temperature at inlet 6.5 °C.

Spring running full tilt, there having been recent flooding rains. But the very shallow channel, 1-2 in. over clean sand. Rest of pool hardly covered by water, though matted in places with soaking, partly skeletonised grey poplar leaves, or covered with debris branches of elder etc.

Gammarus is far the most abundant and biomassive species, though small in size. ♀♀ carrying eggs or young.

540 [A]

There is no obvious green alga, only dead vegetable debris: this may account for the smallness. The number of free-living young seemed rather small (cf. S 7 versus T 8 on last Wytham visit).

2 Polycentropid caddis larvae netted

B

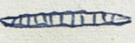
Among dead grey poplar leaves (most of them notably skeletonised in part or whole) were: [H]

Tiny sand-case caddis larvae fairly abundant. They cling hard to vegetable debris. [C]

1 large cylinder cased caddis larva. The case a mosaic of dark brown leaf or bark (?), with a few flat large sand grains. D

Nymphs of *Nemoura*. These seemed far scarcer than last year, and I only found one abundant patch, near the water inlet. They feign dead when knocked about by netting, or when touched hard. They cling close to the dead leaves and are very hard to see. E

Several black fly larvae

1a.  that have a flattish cross section 

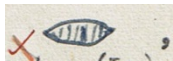
F

Some are greyer on part of the segments. They curl up into an arc and feign dead when touched hard, when they looked like bits of dead bract. I think they live among the dead leaves.

{reverse side}

6 FEBRUARY 1946.

6 FEBRUARY 1946.*****

Beetle larva , a few. Slow-moving. 540
Helodes minuta (L.) F. van Emden det. 1947. (Adult comes ashore and sits on bushes etc.) G
 One or two chironomid larvae very small, not red n.k. L

In the sand and debris:

A few "*Candona*" 4 adult, 2 young, ***Potamocypris wolffi*** Brehm. D.H. Eccles det. 1957 J
 A ***Pisidium personatum*** Malm (alive) K

From the lab. debris etc.

3 ***Planaria alpina***. There seems no doubt. n.k.
 3 ***Polycelis cornuta*** n.k.

One thing that strikes one is the almost complete absence of algae, diatoms etc. and of any conspicuous microfauna such as Copepods, Cladocera, Rotifers, etc.

A few small gnats flying or circulating in air over the spring. Six caught, several species, partly nematoceros. 541

1 ♀ ***Dixa submaculata*** Edwards. (Culicidae, Dixinae) L.W. Grensted det. 1947 A
 2 ***Brillia modesta*** (Meigen) (Chironomidae, Orthocladiinae) L.W. Grensted det. 1947 B
 1 ***Spaniotoma*** (subgen. *Smittia*) ***aterrimus*** (Meigen) L.W. Grensted prov. det. 1948 conf. C
 K.G.V. Smith 1961 D
 1 ♂ ***Tanytarsus (Micropsectra) atrofasciatus*** Kieffer K.G.V. Smith det. 1959 E
G

{reverse side}

11 MARCH 1946.

1 ***Trichocera regelationis*** (L.) L.W. Grensted det. 1948

546 C & D ***Crunoecia irrorata*** Curtis. C.A. Elbourn det. 1964 (slides n.k.)

11 MARCH 1946. 3-4.15 p.m. (G.M.T.) Water temperature inlet 5.1 °C
Air temperature (Shade, 4 ft.) 4.2 °C

Conditions exactly as 6.2.46, water running fast and shallow, temperature 1.4 ° lower: had been bitter cold, snow just gone from this scrubby area.

Two or three very delicate 'fungus gnats' dancing over the water at 4 p.m. – very cold, but pale sun. 1 k. 544

The centre is clean sand, the side stretches (more than 2-3 times the sand area) is dirty, muddy sand. In the latter, some old valves of an asymmetrical *Pisidium*.

No adult insects seen on the margins.

Collected random 'culture' of grey poplar leaves and debris and sandy mud. Impression that leaves are even more used up by skeletonising than last time. 546

Gammarus pulex, all ages, a good many coupled, ♀♀ with eggs. Abundant. A
2 ***Polycentropid*** larvae. These can swim along slowly, but fastest when they swim backwards – a possible adaptation to regaining hold with their hind hooks if washed downstream. B

1 smallish cylinder-case caddis larva D

Tiny sand-case caddis, a few, usually attached by their legs to bits of leaf, clinging hard. (Alcohol plus 3 slides) C

Nymphs of *Nemoura*, a few. They cling to and run on leaf only, hard to see without magnification. (Alcohol plus 2 slides) E

No black fly larvae (as 540 F).

3 ***Beetle larvae*** (torpedoes) among leaves ***Helodes minuta*** (L.) F. van Emden det. 1947 G

2 ***Planaria alpina***. Rather large and active. n.k.

No *Polycelis*.

{reverse side}

11 MARCH 1946.

T 1 ***Carychium minumum*** Müller n.k.
2 *Vallonia* sp. (too worn to det. safely) (1 got smashed)
1 *Vertigo*
1 ***Succinea pfeifferi*** Rossmüll n.k.
1 ***Goniodiscus rotundatus*** (Müller)
1 ***Cochlicopa lubrica*** (Müller)
1 small 'helix': *Retinella* sp. (broken n.k.)

11 MARCH 1946.****

"Candona" large green, apparently feeding at vegetation debris, fairly common 546 J
(Alcohol Plus 2 slides) 11 adults, 1 young *Potamocypris wolfi* Brehm D.H. Eccles det. 1957

Several shells (5 valves, 2 being pairs) of *Pisidium personatum* Malm (fairly recent) K

One pair of ancient valves of a larger, more asymmetrical *Pisidium* M

Small greenish Chironomid larva (slide, Du Faur) P

Smallish stout fly larva (slide, Du Faur) Q

1 Very large (c. 1 in.) fat whitish. Tipulid larva with heavy dark jaws at front end, with which it clashed vegetable debris, and at the hind end 2 dark spots and two delicate diverging short processes. It was under a submerged small branch among muddy sand and debris. R

1 Active zig-zagging very small Harpacticid Copepod, that rushed about on the surface of a pebble. It carried a large sack of eggs below, but not projecting behind. 1 ♀ *Canthocamptus ?echinatus* Mrázek D.H. Eccles det. 1957 S

Various quite old bleached or browned shells of tiny land snails washed into the spring from the surrounding land. T

Birds (what ?) visit the spring, as shown by beak probings in the mud bank, and a little dung on branches lying in the water.

{reverse side}

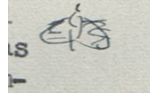
11 MARCH 1946.

11 MARCH 1946.

Chironomids in sand tubes

546 U

Pupa of small fly, kept alive in tube of water. It hangs below the surface. Emerged 21 March.



Sat on water surface and then flew and escaped! Small furry wings, brown, wings at an angle flat. Pupal skin kept. [This was a Psychodid, same type as C.E. 575 A taken on 26 April in numbers]. V

{reverse side}

26 APRIL 1946*****

26 APRIL 1946. S 2. 1.15-3.30 p.m. (Single Sr. T.) Water temp. at inlet 8.2 °C, 2.30 p.m.

Today was damp but fine and warm, not sunny. The stream was running fast in its 1 ft. wide 1-2 in. deep clean sandy channel, but the muddy rest of it was wet and only thinly underwater. Some wet mud margin. Sticks and branches lying, some with moss on. Muddy edge with partly nettles 1 ft. high, partly a few mossy Rag stones. Grey Poplar just in new leaf, also shade from elders.

In the water were (fields; and lab. sample of more mud and leaves):

573

Gammarus pulex very abundant, many paired or carrying eggs, rather a few young ones. Some of the pregnant ♀♀ are very small. The ones kept are all that were in the sample.

A

1 large Polycentropid larva

B

Very few small caddis grit-case larvae *Crunoecia irrorata* Curtis. C.A. Elbourn det. 1964

C

1 broken large cylindrical caddis case, grit.

D

A few *Nemoura* nymphs

E

A few *Pisidium* one almost certainly ***personatum***

broke

1 fly larva

G

1 beetle larva (torpedo). (1 small black beetle *Helodes* under piece of wood in water. Lost.

H

3 huge Tipulid larvae, and a branch in water, buried partly in silt. (2 k.)

J

Planaria alpina quite abundant, large active, grey, on the clean silt, not among leaf debris.

K

{reverse side}

26 APRIL 1946

26 APRIL 1946*****

The dead leaves are notably used up, practically none even skeletons left. Except for **Gammarus** and *P. alpina* very small populations in the water. Chief food left is vegetation detritus-mud. Beetle larvae etc. may have landed to pupate?

On the wet mud marginal area:

574

3 small short red earthworms that leap about when handled, in watery mud under sunken branch.

Eiseniella tetraedra (Savigny). A.J. Cain det. 1946 (1 adult, 1 immature kept).
Known to be aquatic or marshy and a common species.

Walking and flying and settling on mud:

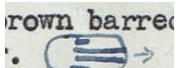
575

Scores of small  very furry grey and brown Psychodid flies ("owl flies"), (similar to 546 V, which had a definite aquatic pupa). 7 kept A
♂ 1 **Pericoma pulchre** Eaton L.W. Grensted det. 1946 confirmed K.G.V. Smith 1960
♀ 1 **P. avicularia** Tonnoir L.W. Grensted det. 1946 K.G.V. Smith 1960
2 **Liriopse albigera** Fab. ♀♀ (*Ptychoptera*, Kl. & H.) A common 'bog' species round Oxon. B
1 **Empis punctata** Meigen Orange fly with long beak. L.W. Grensted det. 1947. C
1 small fly. D

{reverse side}

26 APRIL 1946

577 A The *Otites*, he says, is the fourth British specimen. It is handsome fly; wings circa 6 mm, longer than the thin body; head and thorax light dull green-grey; bright brown centre stripe on head; light and dark brown barred eyes; curved black hairs sparse on

rown barred
dark tubercles; dark marks on thorax; m mottle. abdomen and legs greenish, dull green, densely haired; wings with brown mottle.

26 APRIL 1946***

1 medium Tipulid larva under a piece of branch 575 E
 2 small staphylinids, running, one also under a bit of wood = 2 *Lesteva longelytrata*
 (Goeze) P.J. Osborne det. 1956 F
 Yellow collembola; small woodland slugs; no spiders

Sitting on nettles within a foot or two of the edge: 576

6 *Nemoura* (all seen)
 = 5 ♀, 1 ♂ *N. erratica* Claassen (of these, 1 ♂ 3 ♀ presented (alcohol) to Hope
 Department) A
 1 *Liriope albigana* Fab. ♀ (specimen destroyed)
 1 medium, grey Tipulid fly: Tipulidae, Pedicine: D
Dicranota bimaculata (Schummel) L.W. Grensted det. 1947. Pierre (1924) in Faune
 de France, says near streams, March, April and autumn (e.g. October) Distribution
 includes Alps and Pyrenees. *Dicranota* larvae occur in Nadig's Swiss cold spring
 areas.

 3 Furry Psychodid flies (more seen) E
 ♂ ♀ 2 *Pericoma fuliginosa* (Meigen) L.W. Grensted det. 1946. Confirmed K.G.V.
 Smith 1960
 1 large *Tipula* with marked wings seen but lost n.k.

Flying over the spring area: 577

Simulium – a few, from swarms outside (see other notebook) n.k.
 1 mottled winged fly: Otitidae (= Ortalidae):
Otites (Ptilonota) guttata (Meigen) L.W. Grensted det. 1947.
 1 small fly *Sciara* species L. W. Grensted det. 1948 B
 3 "winter gnats" 3 *Ormosia lineata* (Macquart). L.W. Grensted det. 1948. C
 No Chironomids seen.

{reverse side}

26 APRIL 1946.

30 APRIL 1946

26 APRIL 1946****

Under moss mat on a dead branch out of the water i.e. damp air, but not wet, were some grey Tipulid larvae kept to breed out. Failed

30 APRIL 1946.

Collected one *Nemoura* sitting on the nettle.

583

1 ♀ *N. erratica* Claassen

Liriope ♂ ♀ seen, ♀ was *albimana* ♂ presumably same. Sitting on the nettles. n.k.

Many Psychodid flies on nettles. n.k.

{reverse side}

18 JUNE 1946.

606D 6 adult 3 immature *Eiseniella tetraedra* (Sav.) A.J. Cain det. 1946

4 adult *Allolobophora chlorotica* (Sav.) A.J. Cain det. 1946

2 immature *Lumbricus* species (1 *rubellus*?) A.J. Cain det. 1946

607C 1 ♀ *Prodiamesa olivacea* (Meigen)

1 ♀ *Ormosia* (? *aciculata* Edwards ♀ not easy to det.) L.W. Grensted det. 1947.

Confirmed K.G.V. Smith 1961

18 JUNE 1946. 1-3 p.m. (temperature at inlet 9.6°C.)

Spring running fast, central clean silt channel, mud and sticks either side, tall nettles on bank, now a little shaded by white poplar canopy. A few grey poplar leaves in the water, and their fresh green tissue partly skeletonised, two tiny caddis larvae and some *Planaria alpina* on one leaf. 605A

P. alpina abundant, some on the open sandy-silt bottom. *Gammarus pulex* by far the most abundant species among stick debris in the water. B

Very little other life seen in this material or in what was brought home. One torpedo beetle larva seen. A large number of dead land snails and fresh shells, chiefly *Trichia striolata*. These may provide some food for scavengers. They climb the nettles and may get knocked off?

Under sticks on the damp marginal mud were 606

- 1 large Tipulid larva A
- 3 Torpedo-shaped beetle larvae *Helodes* B
- 1 slug, small *Agriolimax* species
- A good many earthworms, in the surface mud. D
- 1 small shining hemispherical beetle *Anacaena globulus* (Paykull) P.J. Osborne det. 1956. E

Among ditto 607

- 1 ♀ *Nemoura erratica* Claassen ♀ D.E. Kimmins det. 1949 (see letter 26.4.49). A
- 1 large fly Rhagionidae *Rhagio annulata* (Degeer). L.W. Grensted det. 1947. B
- 2 Chironomid flies C
- 1 ♂ *Liriope albimana* F. C. Elton det. D

{reverse side}

18 JUNE 1946.

18 JUNE 1946.

On nettles: 2 ♀♀ *Pericoma fuliginosa* (Meigen) L.W. Grensted det. 1946. Confirmed K.G.V. Smith 1960 608

Flying over the surface of water: 609

Hilaras (1 k). 1 ♀ *H. nr. quarifaria* Strobl. Confirmed K.G.V. Smith 1959 ("This section of genus badly needs revision"). A

On trunk of white poplar: 610

♀ 1 *Pericoma fuliginosa* (Meigen) L.W. Grensted det. 1946. Confirmed K.G.V. Smith 1960

21 AUGUST 1947.

S2 was very dried up and only running a bare slow trickle, but full of small ***Gammarus***, and with some ***Planaria alpina***. No careful search.

{reverse side}

24 JUNE 1946.

857A. ♂ ***Pericoma fuliginosa*** (Meigen) K.G.V. Smith det. 1960

B. ♀ *P. sp.* (not kept) K.G.V. Smith det. 1960

24 JUNE 1948.

S 2 was nettly, bosky and gloomy under the grey poplars. The spring only an inch or so deep, much skeletonised leaf (old) as well as skeletons of quite new green leaves beginning. In the water a casual inspection revealed stonefly nymphs, *Gammarus pulex*, *Planaria alpina* and small caddis larvae. A ? *Hilara* was weaving close to the surface. Sweeping nettles gave little stream stuff: I kept two owl-flies, and a small yellow and dark marbled homopteran. Saw no adult stoneflies or caddis.

857A. n.k.

31 AUGUST 1949.

Spring S 2, was also 'alive' though the merest shallow trickle. But ***Gammarus*** and ***Planaria alpina*** were visible; and many *Pericoma* owl-flies on the nettles around.

{Presumed, title page missing}

WYTHAM AREA

GENERAL FIELD NOTES BY S.W. HURRY/ C.S. ELTON.

19 January 1960-15 July 1960

S.W.H. 1-69

{N. B. This Book appears to have been edited and typed by C.S.E.
from S.W.H.'s field notes.}

Punch-carded

{reverse side}

19th JANUARY 1960.

[pages 1-3 not used]

1 ♀ *Heterischnus thoracicus* Grav. det. J.L. Perkins 1960.

19 JANUARY 1960. WYTHAM WOODS.

10 a.m.-3.0 p.m. G.M.T. With K. Paviour-Smith and H.N. Southern. Cold wind – little snow on ground.

The recent snow has mostly melted but Port Meadow not as flooded as I had expected. In the woods the snow was still in the hollows, under lee of shelter. Some animal tracks could be seen in the snow and in the wet mud along the paths. These included pheasants, rabbits and fallow deer by the big dead ash in C. 30, on area of *Brachypodium*. Rides in whole area covered have liberal scattering of fox faeces – some very fresh, and in fact woods smell of fox all over! Footprints seen in mud along ride between C. 30 and C. 32.

With Kitty – inspected tree 99 – brought back some bored very wet wood with white larvae in (Mycetophilids?). Also a Hymenopteran* sheltering there. ¹ kept
Polyporus betulina mainly responsible for the rot – reddish cubical chunks of wood also present. *Polystictus* – white rot and black line discolouring the advancing edge of attack.

Large badgers' sett on south side of Nealings Copse in area of LOGS No. 98 and 97. Fresh tracks in hole entrances.

{reverse side}

19th JANUARY 1960.

19 JANUARY 1960. WYTHAM WOODS ***

Took main ride back between C. 30 and 32. Fox tracks and badger tracks in mud. Badger lavatory on Comp. 33 side of ride. Several scrapes but only one with dung in it.

On return journey heron seen in field beside Seacourt Stream.

{reverse side}

22 JANUARY 1960.

22 JANUARY 1960. WYTHAM WOODS.

Marley Wood. 10 a.m.-12.45 p.m. G.M.T. With K. Paviour-Smith. Warm, damp, overcast.

Went into the wood and up to show K.P-S. the fallen birches in the woods around Marsh 5. High winds this winter have blown down parts of the birches infected with *P. betulina* and *Polystictus*. Tree 40 has no fruiting bodies but the wood in old scars on the crown and lower branches is red rotted while the roots have white rot. *Polystictus* in. Yet the tree would, if it was still upright appear to be a healthy tree, an appearance increased by the fact that young buds and catkins are being produced. The rooting system appears to be very shallow and together with the rot it is not surprising that the tree fell. On the stump took large Dipteran which was quite still on two pellets of dung –? squirrel adjacent to Tree 40 in T/5, layer 3-4 ft. above ground.

Across the marsh we inspected another recent casualty, now known as log 48A. Rot in stem of *P. betulina* – some fruiting bodies. The trunk has broken into several pieces.

{reverse side}

22 JANUARY 1960.

3

A

Ichneumonid parasite ***Demopheles caliginosus*** (Gravenhorst) ♀ emerged 20 February det. J.L. Perkins 1960

B

Demopheles caliginosus (Gravenhorst) ♀ emerged 20 February det. J.L. Perkins 1960

C

emerged 22 Feb., wings not expanded. ♂ ***Coelocrabo leucostomoides*** Richards I.H.H. Yarrow det. 1960.

D

emerged 23 Feb. ♀ ***Coelocrabo leucostomoides*** Richards I.H.H. Yarrow det. 1960.

E

Demopheles caliginosus (Gravenhorst) ♀ emerged 23 Feb. Richards I.H.H. Yarrow det. 1960

F

emerged 25 Feb. ♀ ***C. leucostomoides*** Richards I.H.H. Yarrow det. 1960.

G

emerged 27 Feb. ♂ ***C. leucostomoides*** Richards I.H.H. Yarrow det. 1960

H

imago in pupal case, but has bitten hole in it. ♂ ***C. leucostomoides*** Richards I.H.H. Yarrow det. 1960

22 JANUARY 1960. WYTHAM WOODS ***

In the burrows in the wood just under the bark dug out several pupal cases. At one end of these cases there were often the remains of Diptera, wings with parts of the thorax sometimes. The cases (A-H) were pale brown and rather soft, inside and at one end there was a solid portion – the pupa itself. Suspect *Coelocrabro* species. 3

In Marley Woods, *Mercurialis* and *Urtica* new shoots pushing up, and in Marsh 5 *Iris* and willow herb (*Epilobium hirsutum*) shoots. Great tits very loud in scrub of C. 40.

{reverse side}

22 JANUARY 1960.

25 JANUARY 1960. WYTHAM WOODS.

10-10 a.m.-12.45.p.m. G.M.T. With C. Elton. Sunny and warm.

Heavy rain on Saturday night and the last of the snow thawing has flooded Port Meadow more than last week. From Singing Way looking south-west fields along the Thames now flooded. Left car at the top of Keepers Hill and went first into Lower Seeds and up to the Dell. Spring 2 running fast. Few *Gammarus* found and two stonefly nymphs. Spring 7 examined – plenty of water and also an additional stream running into the spring from the hill above. Two fallow deer seen at edge of wood by S. 2. Both antlered and dusky grey brown on back and sides. One well marked with white on chest and between forelegs. Elder in copse at bottom of Dell has bark stripped either in patches or in bigger strips for up to 2-3 feet from ground –? Deer. Rabbit seen by S. 1 – C.E.

Bowling Alley has large numbers of Pine seedlings regenerating along north-east side near parent trees, and 1 holly seedling also seen.

Two Coccinellid (*Coccinella 7-punctata* L.) hibernating on the top of a pine seedling in Bowling Alley, and one more *C. 7-punctata* in a thistle head in Lower Seeds. n.k.

{reverse side}

25 JANUARY 1960.

25 JANUARY 1960. WYTHAM WOODS ***

Back via Little Ash Hill and Lower Seeds. Pair of **pheasants** (♂, ♀) put up at edge of Upper Seeds and Lord's Common and single ♂ by gateway out of Lower Seeds to road.

{reverse side}

2 FEBRUARY 1960.

2 FEBRUARY 1960. WYTHAM WOODS.

10.10 a.m.-12.45. G.M.T. With C. Elton and Monte Lloyd. Damp but not raining.

Port Meadow floods don't seem to have increased in spite of the recent rain. River very full at Godstow. Meadows by Godstow Nunnery flooded: flocks of starlings feeding around edge of water and on any hummocks still sticking above water level. Ditches in the village all have flowing water now. Parked car at 3 Pines, collected bag of cones from the top of the litter from trees on right hand side. Tried only to take cones lying free on litter and not those contaminated by being in or near any field layer.

Walked along the Ridge and the whole length of Brogden's Belt. Collected bag of beech mast – tried to get only mast and no litter. Leaf litter pure beech but blown into patches leaving bare areas, but the mast is left in these bare patches but does not cover the whole area. Probably heavier than leaves and more awkward shape for blowing about.

{reverse side}

2 FEBRUARY 1960.

10
A
B
C
D

1 ♀ *Araneus umbraticus* Clerck, 1 other seen on the bark – n.k.
1 ♂ 1 ♀ *Ciniflo fenestralis* (Stroem), others not collected – not kept.
Marpessa lamellata (Montagu) n.k.
Oxychilus alliarius (Miller) smells of garlic: field determined C.E.

15
D

5 larvae of *Melanotus rufipes* (Herbst) 14.3.60 – not kept

9

♀ *Ichneumon gracilentus* Wesmael J.L. Perkins det. 1960.

2 FEBRUARY 1960. WYTHAM WOODS ***

Walked along elder belt – very thick tangle of elder in scrub layer. Badgers' earth here – entrance hole exactly at outcrop of sand under Coral rag which acts as a sort of lintel over the entrance. Not very good sign of any recent activity. *Arum* dug up and gnawed in this part of the wood (badger ?) as well as bluebells.

Crossed the Park to Wormstall Duck Pond – good deal of water inside the fenced area, then up to the Jews Harp. Collected from elm Log 65. Bark very loose and frassy. Signature of at least 2 bark-beetles on outer wood as well as hundreds of holes in bark. Fauna included woodlice, *Lithobius*, *Polydesmus* (M.L. collected), earthworms, a few mites, many Collembola. Spiders, and snails. Large white-gilled Basidiomycete (*Pleurotus ostreatus*) fruiting on the log. Habitat T/5/2 edge. A very rich fauna indeed.

10 ABCD

The island in the Pasticks (North end) has been felled recently – still smells of fresh cut logs. Only a few trees remain upright – including some very dead and partly decayed crownless trunks. Collected from a conifer log which must have fallen from the dead trunk which is still upright. Very large population of woodlice – and Collembola. Smaller numbers of *Lithobius* species but no *Polydesmus*. Very fine burrows in harder core of heartwood but rest of limb soggy and brown-rotted. Some areas macerated – Mycetophilid larvae confined to these areas – brought one lot back.

15

Also collected a spider (immature so not identified) from a small oval smooth-walled chamber deep in the wood and a hibernating Ichneumonid

9

{reverse side}

10 FEBRUARY 1960.

- [11] *Plagiochila asplenoides* v. *major* (L.) Dum. n.k. S.W.H. det.
on clay soil. Woodland with all layers present.

10 FEBRUARY 1960. WYTHAM WOODS & GODSTOW HOLT.

10.30-1.15 and 2.00-3.45 p.m. G.M.T. With H.N. Southern and K. Paviour-Smith.

South east side of Lower Seeds now ploughed up, as well as the rough ground around the tree nursery at Probitts' cottage.

Buried fox corpse in old fox earth at First Fork, corpse shot on Saturday, 6th Feb. ♂.

Path through Common Piece difficult to find for first part as forestry work has been done and a mess of top and lop left behind – some big stumps – bark firm, wood firm.

Between Black Hut cross ride & Stream 7 B took leafy liverwort growing on ground. Only two patches seen. Stream 7 A running full but masses of dead leaves piled up in the stream bed. Stream 7 B has been dug out and straightened. Soil thrown upon west side. 11

Pair of long-tailed tits in low canopy of sycamore beside path in Thorny Croft, flew up to high canopy of oak to join flock of blue tits which were feeding. Goldcrest searching in field layer, feeding from vegetation and fluttering into the air as though taking insects on the wing.

{reverse side}

10th FEBRUARY 1960.

12 from willow log
2 *Silpha strata* and 1 var. *brunneus* n.k.

A *Lathrobium elongatum*
B *fulvipennis* Grav. 2 specimens
C *Philonthus splendidulus* Grav.
D *Lathrobium brunnipes*
E *Stenus clavicornis* (Scopoli)
F *Aphodius equestris* Panzer
G *Aphodius prodromus* (Brahm)
H *Cercyon lugubris* (♂) 2 sp.?
J *Conosoma pubescens*
K a *Oxytelus laquetus* Marsham
b,c,d *Styloxis rugosus* Fab.
L,M,N Staphylinids

10 FEBRUARY 1960. WYTHAM WOODS & GODSTOW HOLT ***

Visited Godstow Holt. Wood contains large amounts of D/D willow, some Black poplar, and elm. Other living trees include oak, elm and alder. Shrub layer and low canopy of blackthorn. Field layer – not well developed as cows walk in the wood.

North side of wood bounded by a ditch which probably has water in all the year round. Whole area very damp – and subject floods. Flood rubbish lies in wood at the moment.

Willow log – one piece of bark stripped away. Very ‘fruity’. Log shaded by parent tree but no low vegetation overhanging 12

One tawny owl pellet found on horizontal semi-rotten willow branch, – circa 3 ft. above ground. Contained *Geotrupes* legs and elytra and skull of *Clethrionomys*. H. Southern said probably visits wood on hunting trips not resident.

{reverse side}

15 FEBRUARY 1960.

S.W.H.

- Br. 1 A. *Lophocolea cuspidata* (Nees) Limpr. Not fertile. n.k. A mixed patch
B. *Hypnum cupressiforme* var. *tectorum* Brid. Fertile 1 ♀ immature found. n.k. A mixed patch

S.W.H.

- Br. 2 *Thuidium tamariscinum* Hedw. (B. & S.) one capsule found – ripe. S.W.H. det. n.k.

19th FEBRUARY 1960. WYTHAM WOODS.

10.30 a.m.-12.45 p.m. G.M.T. With H.N. Southern and K. Paviour-Smith.

Mild enough day to melt the recent snow but windy. Green plover in fields by Seacourt Stream – only a small flock.

Went with K. P.-S. along path from Keeper's Hill between unploughed and ploughed land of Lower Seeds past the Swimming Pool to ride in Burkett's Plantation, then via Bowling Alley Plantation, Singing Way, Old Carriage Drive, Botley Carriage Drive, Marley Lodge to the Abbey.

Treecreeper feeding from ground level to about 20 ft. up trunks of a sweet chestnut and an oak on the North side of Singing Way.

Collected some Bryophytes from two ash stumps (by the Barn in field) in open woodland West end comp. 36. Both stumps were 6 in. high and not overhung by plants in the field layer.

S.W.H. Br. 1

Old Nursery By Singing Way has pine logs and stumps just inside the line of standing pine trees. Between these and the wood a bolt of hazel and dogwood scrub. Ground carpeted with pure cover of a moss species – with bramble and some bracken.

S.W.H. Br. 2

Some trimming has been done at edge of Comp. 41 – slash thrown back into wood.

{reverse side}

19 FEBRUARY 1960.

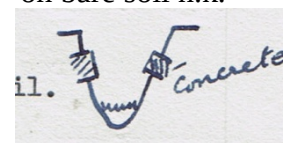
13 Stripped of pieces of bark and examined under binocular microscope. Dissected out animals from the bark. The tunnels in many places contain 'frass' – light brown in colour and mites at the head of the tunnel. Two sorts found here: light yellow brown and small black. Exuviae of light yellow brown mites found sometimes mixed with 'frass'. Both sorts active: in some of the older tunnels which have grown *Pleurococcus* inside, living and dead black thrips, usually in singles, sometimes two together.

Embedded in bark – 2 types of egg – cigar shaped and a flattened oval (3 together) sort.

One black larva emerged from a crack in the bark. One white translucent larva was in a tunnel, tail nearest the opening. A larger species of black mite very torpid clinging to bark in cracks and fissures. None of the tunnels go deep into the bark – most are very near the surface, none penetrate to cambium. Most frequent mite – yellow brown type.

Br. 3 A. *Pellia* species – from old concrete on sides of ditch – vertical. Not indexed n.k.
B. *Lophocolea bidentata* (L.) Dum. – mixed with a small moss – on bare soil n.k.

C. *Fissidens taxifolius* Hedw. S.W.H. det. n.k.



19 FEBRUARY 1960. WYTHAM WOODS ***

Brought back an elder branch – living because bark pitted by some animal – round pin holes. Some seem to have been enlarged from outside – possibly by birds. Branch from elder bush at edge of wood – but it was cut at one end and impossible to put into its original habitat. 13

Cut through Comp. 46 to join Marley Carriage Drive.

Collected some bryophytes from vertical sides of Stream 3 (water flowing clear but many leaf and branch dams in stream bed) – from under beech tree on east side of the road way. Br. 3

Flock of 6 long-tailed tits feeding on upper and lower sides of branches in canopy of beech and sycamore at parking place, Marleywood Plantation.

{reverse side}

27 FEBRUARY 1960.

- 14 *Coelocrabro leucostomoides* Richards. I.H.H. Yarrow det. 1960 (as *Crabro* (*Coelocrabro*) L.)

A - emerged ♂ 22/3/60
B - emerged ♂ 22/3/60
C - emerged ♂ 22/3/60
D - emerged ♂ 23/3/60
E - emerged ♂ 24/3/60
F - emerged ♀ 24/3/60
G - emerged ♂ 24/3/60
H - emerged ♂ 22/3/60
I - emerged ♀ 22/3/60

K,L,M,N,O emerged between 27 March-4 April ? *Demopheles caliginosus*
Ask Gradwell

27 FEBRUARY 1960. WYTHAM WOODS.

Marley Wood. Collected more pupae of Hymenoptera{n} S.W.H. 3 from Log 48A. Pupae in old burrows in red rotted wood. Concentrated near mouths of burrows, none found more than 5 in. into wood unless from burrow with opening onto side of wood. 14

5 MARCH. WYTHAM WOODS.

Caddis larvae from Stream 8 – cases made of vegetable matter cut into plates, others used small molluscs, stones and pieces of vegetation, others used all molluscs shells and stones. Skeletonising oak leaves. 17

{reverse side}

18 MARCH 1960.

18

Y-

3 *Sciara* species K.G.V. Smith det. 1960. One of each kept.

Z-

3 *Sciara* species K.G.V. Smith det. 1960. One of each kept.

C-

D-

9 *Scolytus scolytus* (Fab.) emerged 7 April Some mites attached.

Mites (= 26 *Scolytus scolytus* in alcohol tube, of which 6 had one or 2 mites still attached) only 3 of these kept with E in alcohol.

E-

Scolytus and mites. On emergence into the collecting tube the mites are clinging to the dorsal surface of the beetles. After a little while, particularly if the tube gets crowded the mites wander about the tube away from the beetles. They also leave at once if ethyl acetate is put into the tube (by wetting the cork).

F-

Lonchaea laticornis Meigen ♀ K.G.V. Smith det. 1960.

G-

Staphylinid. Several small staph. larvae (n.k.)

H-

ditto

J-

Medeterus nitidus (Macquart) ♂ K.G.V. Smith det. 1960.

K-

Entedon ? ergias Walker R.R. Askew det. 1960

M-

Medeterus spp. K.G.V. Smith det.

N-

Aulonium trisulatum {sic = *trisulcum*} Geoff. 1 specimen. (Col.: Colydiidae) confirmed C. Elton 1969.

O-

Lonchaea laticornis Meigen ♀♀ K.G.V. Smith det. 1960

P-

Lonchaea ? laticornis

Q-

Rhizophagus bipustulatus (Fab.). P.M. Hammond det. 1969 (B.M. Nat. Hist.)

A-

B-

KPS has mite 18 E to name

18 MARCH 1960. WYTHAM WOODS.

Nealings Copse. 10.15-12.00 a.m. G.M.T. Cool, overcast, no wind.

With K. Paviour-Smith & D. Kempson to newly erected birch "tree". Badgers have been active, quantities of newly dug soil in the mouths of burrows in this area. Saw no sign of bedding being changed.

Dog's mercury in flower in a few places.

Cows have been into this part of the wood, little damage done except by trampling broad paths.

Wych elm (see p. 41) by field gate on left of path down from Kitty's 'tree' has been sawn up and pieces thrown over into the wood. The large portion of the main trunk inside the wood has been attacked by woodpeckers. Heavy infestation of beetles, judging by numbers of exit holes. Attack by woodpecker seems limited to upper surface and size of trunk very little underneath. Bark strips off easily but fauna scanty. One large beetle larva (18 A), and two smaller ones (18 B) brought back. One small black beetle (18 Q). Bark stripped off and "tinned" in lab. 18 ABQ

Walked down just inside wood edge, found upright dry rotten elder stump – (circa 2 ft. 6 in.); Heavily attacked by beetles and also a very small hole-boring animal. Could find no animals in small portion that I broke up.

{reverse side}

18 MARCH 1960.

18 MARCH 1960. WYTHAM WOODS ***

Stream 10 C running strongly in a nearly bare bed. More leaves and twigs in portion north of path than south side. No *Gammarus* seen, *Nemoura* present. Poplar leaves skeletonised but oak leaves intact wherever both occurred together. Saw no Caddis larvae and no lime deposits on vegetation in water. Collected one white larva with swollen posterior end. 19

Many mole hills in West end of Comp. 30, north of path, and above stream. These seem to occur more frequently on higher ground than in the swampy area along stream side.

{reverse side}

22nd MARCH 1960.

20

A

Triaxagus obtusus (Westwood in Curtis) 9 specimens 3 kept. .). P.M. Hammond det. 1969 (B.M. Nat. Hist.)

B

Rhyncolus lignarius (Marsham) 2 specimens. Confirmed C. Elton 1969.

C

Polyxenus lagurus (L.) n.k.

D

Anthocoris confusus Reuter 2 specimens. C.A.Elbourn det. 1969

E

Beetle larvae – 3 specimens alcohol ? *Sinodendron* very young to K.P.-S.

22nd MARCH 1960. WYTHAM WOODS.

10 Acre Copse and Wytham Mead. 10.15-12.30 a.m. G.M.T. With C. Elton. Warm, Sunny.

In trying to reach Varley's Patch via Marsh path and Nightingale Path we got lost, and ended up in a group of wych elms at Summerford Corner on the south bank of Stream 8. Trees form a closed canopy, and have suppressed many of the lower branches and some small trees, as well as the hazel scrub which forms a dense scrub layer on the east side of the grove. Very little litter mainly of oak leaves, but masses of dead and decayed branches and twigs both on the ground and caught up in the lower branches.

Brought back an upright branch (wych elm) – 2 in. diameter – for examination. 20
Wood not rotten except in one place which looked like an old wound partly healed over at the edges. Fauna concentrated here. A small Elaterid (= Trixagid) and a small weevil in galleries, *Polyxenus* and a bug in the frassy material, and old beetle galleries. Three beetle larvae dug out of sound wood. 20 A B C D E

Also brought back (for intubation) a log of wych elm which had extensive growth of *Auricularia mesenterica* (K.P.-S. lab. det.)

{reverse side}

22 MARCH 1960.

21 Emerged 9 April Wych elm log n.k.

B- ***Trixagus obtusus*** (Westwood in Curtis). All specimens were able to right themselves when upside down by a vertical jump. When this was done there was a sharp click. Fowler says that this habit is unknown in this genus. 2 kept.

C- Beetle

D- 1 ***Cephennium gallicum*** Gangebauer (= *thoracicum* and Brit.) P.M. Hammond det. 1969 (Brit. Mus.)

E- 1 ♂ ***Segestria senoculata*** (L.)

G- Millipede (n.k.)

H- Mite (n.k.)

J- 7 Woodlice (n.k.)

K- n.k.

L-, M-, N-, O-, P- Col. Staphylinid = 1 species?

Q- n.k.

22nd MARCH 1960. WYTHAM WOODS ***

Bumble bee investigating bole of wych elm at ground level on it. Log (see page 21 bottom) sawn into two sections (6 in. high diameter 5 in.) and put into muslin covered tins. 21

Went through wood to north edge and along towards Wytham Mead, returning via Varley's Patch. Ground layer very obviously altered by clearing and ? traffic when compared with ground layer in uncleared scrub ground layer surrounding the patch. Inside *Deschampsia caespitosa* dominates, outside little of it, much moss, some fern and bare ground. Much more leaf litter under scrub than in the open cleared glade, but less bramble though these appear to be trimmed.

1 Brimstone flying along path beside 5 Acre enclosure.

{reverse side: only left-hand column shown here; right-hand column is on p. 22A.}

14 APRIL 1960.

S.W.H. 22

A	1 <i>Xestobium rufovillosum</i> (Degeer)
B	1 <i>Mycetaea hirta</i> (Marsham) P.M. Hammond det. (Brit. Mus.)
E	<i>Platygerrius</i> (= <i>Trigonoderus</i>) <i>ductilis</i> (Walk.) (Cleonymidae) ♂
F	23 <i>Rhyncholus lignarius</i> (Marsham) 2 kept. Confirmed by C. Elton 1969.
G	<i>Forficula auricularia</i> L. 1 ♂ n.k. Immature harvest spider - 3 (n.k.) Small immature spider 2 n.k.
K	<i>Platygerrius ductilis</i> (Walk.) ♂
L	3 nymph long horned grasshopper
M	<i>Anaspis regimbarti</i> Schilsky C. Elton det. 1962
N	Insect larva Coleopt. 2 spp.
P	Green lacewing
R	Pseudoscorpion
T	<i>Anobium striatum</i> Olivier – 4 kept, conf. K. Paviour-Smith 1969 as (syn.) <i>Anobium punctatum</i> (Degeer)
U	2 <i>Rhyncholus lignarius</i> (Marsham) Confirmed by C. Elton 1969.
V	<i>Platygerrius ductilis</i> (Walk.) ♀

22 E, K, V R.R. Askew det. 1960 as *Platygerrius ductilis*

{Right-hand column from reverse side of p. 22.}

14 APRIL 1960.

S.W.H. 23

- A** *Chernes cimicoides* (Fab.) 1 adult and 2 young M. Lloyd det. 1960
 Mites n.k.
 Hairy Millipede – 2 n.k.
D Carabid to Hope {Dept.}
E ***Enicmus transversus*** (Ol.) K. Paviour-Smith (at B. M.)
H Beetle, small staph.
K ***Rhynchaenus alni*** (L.) Confirmed C. Elton 1969
M ***Cleonymus depressus*** (F.) ♂
 Immature spiders – 4 n.k.
O Hymenoptera to Hope {Dept.}
Q R ***Ptilinus pectinicornis*** L. 2 ♂♂
S ***Anobium striatum*** Olivier – 10 specs. 4 kept conf. K. Paviour-Smith 1969 as (syn.)
Anobium punctatum (Degeer)
T ***Trixagus obtusus*** (Westwood in Curtis). P.M. Hammond det. 1969
U Hymenoptera to Hope {Dept.}
V ***Segestria senoculata*** – 1 ♀ - n.k. Confirmed C.A.Elbourn 1969

23M R.R. Askew det. 1960

14 APRIL 1960. WYTHAM WOODS.

Nealings Copse. With K. Paviour-Smith.

Wych elm trees (see page 41) by field gate near Kitty's tree (see S.H. 18). Climbed up and broke off dead branches from between 12-20 ft. Wood dry and some had beetle exit holes. Brought back to Lab., and kept in tins. 22

Elder stump (see 18 March 1960) from wood edge, Nealings Copse. Cut off at ground level and brought back to lab. Wood dry and powdery, white rotted, no bark. Cut into pieces about 6 in. long and kept in tins. 23

25 May – tins cleaned out and wood chopped into smaller pieces. Specimens O-U found in tins dead.

(“emerged” from dry wood of dead branch bits, from the fallen *Ulmus glabra*, edge of deciduous wood and pasture”)

{reverse side}

14 APRIL 1960.

26 APRIL 1960. WYTHAM WOODS.

Wormstall Duck Pond. 9.15 – 11.45 a.m. GMT. C. Elton.

Via The Mount to Marsh 9, surrounded by trees but no closed canopy either around or over the marsh. Horsetails in flower. Some of the sycamores are dying, result of waterlogged soil or squirrel damage which has extensive on some trees. Marsh full of water, making small pools over the whole area.

Crossed the Park to the Pond. Cowslips in full flower and very numerous. At least three species of willow in and around the Duck Pond. Two very large trees at north corner – circa 60 ft. high both in flower. Small trees with greyish leaves surrounding the Pond and mixed with these a third species without the greyish colour on the leaves. Enough water in the Pond to cause a fast flow down the north edge of the marsh, but not on the south side. Inside the trees on the marsh itself quite a lot of insects were active and flying – when sun shone it was very warm being sheltered from the wind. Swept vegetation – young willow herb, sedge which was beginning to flower (height between 6 in. and circa 18 in.). Collected stoneflies for C.E. in an effort to get *N. dubitans*. Most taken around the willows, with fewer taken in open situations. None

{reverse side}

26 APRIL 1960.

24	A	<i>Hemistenus nitidinsculus</i> Stephens
	B, C, D, E, F, G	<i>Hypostenus solutus</i> Erich
	H	<i>Notiophilus</i> sp.
	J	?

24 N *Hypoma bituberculatum* (Wider) 1 immature ♀, 1 mature ♀, 3 mature ♂♂ M. Lloyd det. 1960

26 APRIL 1960. WYTHAM WOODS ***

taken or seen on branches or stems of willows (C.E. collected from trees around edge had similar results). I only saw 2 specimens on vegetation and 1 in flight. Sweeping seemed to indicate a rather patchy distribution. Standard sweeping of 12 double strikes, with catch varying from 7 (on 2 occasions) to 0, with lowest figures in general for open situations. Visually there seem to be at least 2 species, a smaller one caught all over the marsh, and a larger more robust type caught mainly at the drier west end of the marsh. All specimens given to C.E.

In the collections made there seem to be very few Hemiptera (2 seen), more Diptera than Hymenoptera (Psychodids most numerous – and only prey in 2 large *Araneus umbraticus* snares). Small numbers Coleoptera – *Stenus* species most numerous. A very handsome Coccinellid collection on trunks of willow – shiny jet black with 2 crimson spots on the elytra. On the tree in west end had many specimens on – up to 10 ft. on trunk, but other trees had only a few. Most crowded tree was isolated one in full sun. All specimens taken were kept by C.E.

24 A-G

Spiders seen included *Tetragnatha* sp. (field ♂♂ and ♀♀'s), & a small spider – red carapace shiny black abdomen (1 immature ♀, 1 mature ♀, 3 mature ♂♂, det. M. Lloyd.)

24N

{reverse side}

26 APRIL 1960.

26 A- immature Harvest spider 3 specimens
B *Ctesias serra* Fab. – larva

25 A B C ***Mycetophagus multipunctatus*** Fab. K. Paviour-Smith det. 1 k.
Bred from *P. hispidus* SH 25 K.P.-S.

D 3 specimens ***Mycetophagus multipunctatus*** n.k.

E Hymenoptera 1 ♂ 3 ♀♀s. Specimens lost

24 J-

26 APRIL 1960. WYTHAM WOODS ***

On the way back looked into the clumps of trees on slope north of Duck Pond. Most west clumps contained ash, elm, and maple trees, with scrub layer of elder. In the middle of the clump was an old crab apple tree – collected some dead wood – approx. 5 ft. high, beetle attacked. Two very large hawthorn trees at the edge of this clump. Centre clump had ash, maple?, hawthorn and elder (scrub). Collected large brown bracket fungus from ash branch on west edge, at approx. 8 ft. 6 in. Fungus det. as *Polyporus hispidus* K.P.-S. to whom it was given.

Several beetles taken from it, small white pupal cases seen in body of fungus. 25 A, B, C D

Third clump rather smaller than other two. Similar construction, few trees and dense scrub layer at edges, with scanty field and ground layer. All used by cattle as shade areas. Much dead wood in all clumps.

E

T 4 visited – water running very fast and cold, few Collembola fallen in from grass – held in surface film. Two beetles collected from stonework on vertical surfaces. 24 H, J

Only an inch + of water in the trough. Both T 4 and S8 – cattle trampled. Ditch carrying run away from T 4 small but newly dug, with earth piled up at sides, circa 6 in. wide.

S 8 – in square stone tank – one half covered by a lid, water about 1 ft. deep – overflows and seeps away down hill. *Gammarus* and *Tubifex*

{reverse side}

26 APRIL 1960.

26 APRIL 1960. WYTHAM WOODS ***

only animals seen.

On the edge of the wood north of T 4 – a wet marshy flush which C.E. presumes to be the remains of the spring and tank shown on the Ordnance map for the area. Seeps away a long fence line towards S. 1 B. Ground waterlogged. Upper areas overhung by trees – lower in pasture fields with scattered elder trees, many dead or with much dead wood in them.

{reverse side}

1 MAY 1960.

1 MAY 1960. WYTHAM WOODS.

Great Wood. Early evening. Cool, overcast, dry.

Went by bicycle. Much badger activity at sett by pines in Common Piece. Huge mounds of newly excavated earth and lumps of coral rag outside sett entrances mixed with old bedding. Fresh bedding has been gathered in Mercury beds near sett, and it is easy to see the drag marks where the armfuls of bedding have been taken back to the sett. Camera tripod and light reflectors have been set up here. The lavatory in the dell just by the sett does not appear to have been in use. Along Middle Ride to junction of Fox Path. Very large sett in Comp. 13 with signs of fresh digging outside. Another camera apparatus set up here and a platform has been made in the lower branches of an oak overlooking the sett. On left of Fox Ride near junction with Middle Ride, is a small marshy strip with water standing in the 'ditch' – not marked on maps.

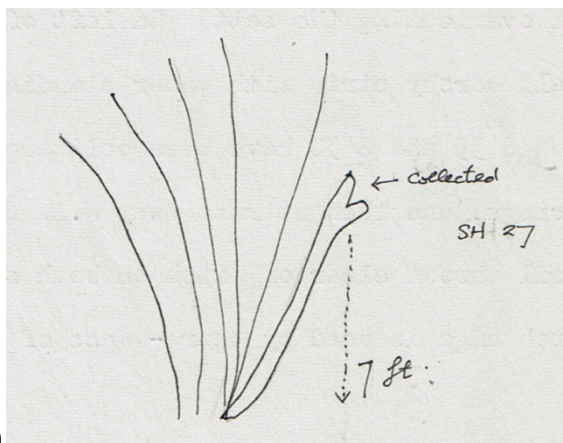
Spring 35 and Spring 30 have been obliterated. A drain has been dug connecting these springs, and then it runs away north-east for about 100 yards and then seeps into the ground. Spoil thrown clear of ditch on both sides. The small ledge between the soil and the ditch is used by fallow deer – mass of tracks on both sides.

{reverse side}

1 MAY 1960.

27

- A- Pseudoscorpion
- B- Mites – (3 species)
- ☒ C- 1 *Polyxenus lagurus* (L.) + 3 n.k.
- D- Beetle
- ☒ E- ***Digonochaeta spinipennis*** Meigen (Tachinidae) K.G.V. Smith det. 1960.
- F-
- G-
- H-



(Classified as T/5 (D) (E)/4 D/D Wood (D))

1 MAY 1960. WYTHAM WOODS ***

Comp. 13 has been felled very extensively. The trees left standing do not form a closed canopy. But so far there has not been time for the brambles to grow up. Comp. 14 must have had the same treatment but here the brambles are growing very well, and will make the compartment impenetrable this summer.

Went down Fox Path to the new Reserve boundary and then right down to the fence at the north edge. Very thick scrub, but east side opens out into bracken with scattered trees, oak etc. Collected rotten hazel branch, bark still on in places. Extensively attacked by woodpeckers. Tree is an old coppiced hazel, now grown up but with a dense mass of young branches from the bole. Stands on east side of path by boundary fence. 27
(Kept in lab for "emerged" animals.)

Went along south edge of Reserve, no path exists and it was very hard going. Comp. 15 has a great deal of sallow along its east side. Reserve has much bracken, bramble, and mercury on south upper side, with scrub of hazel, hawthorn, and scattered trees of oak, sycamore along the north edge. Very dense and very difficult to move through. Saw no sign of Stream 11. Went out into Wytham Mead, and walked along wood edge to north-east. Stream 11 does flow out of the wood, rather shallow and sluggish. Beyond the field is being invaded by hawthorn and bramble from the wood edge, but

{reverse side}

1 MAY 1960.

1 MAY 1960. WYTHAM WOODS ***

large areas are occupied by a sedge, and in the hollow at the north-east corner by *Phragmites*. One clump of kingcups (*Caltha*) in flower, away from Stream 11 water, 3 small clumps of cowslip along west side of small knoll indicate that this was once a meadow.

The Dog's Mercury along south-east edge of reserve – attacked by *Hermaeophaga*. Swept several adults to confirm this. This is the first sign I have seen this year.

Unable to find a path back into the wood, walked up outside wood to north-west corner of Comp. 19, then onto ride. This is in good condition but has not been used very much during the winter. Very large amounts of sallow in the woods here. Spring 37 very overgrown, stands in an extensive marshy area in woodland, planted with spruce and beech. Drains into field and forms another marshy area here – not ploughed or sown. (Marked as S 37 A – but could not find the spring).

Returned via Middle Ride to Chalet: south end of North Ride is being widened and graded. Some piles of rock may mean that it will be surfaced as well.

{reverse side}

3 MAY 1960.

29

A- *Scolytus* species – thorax and base of elytra only – n.k.

B- Clerid – pupated by next morning (4 May). Put into tube with shred of cotton wool.
On 27 May – Hymenopterous parasite emerged.

31

- A- Insect n.k. (psocid)
- B- Immature harvestmen n.k.
- C- Diptera - n.k.
- D- *Scolytus*
- E- Halcids
- F- Halcids

3 MAY 1960. WYTHAM WOODS.

Chalet Woods. Afternoon. With Monte Lloyd and K. Paviour-Smith.

Examined especially the dead wood on oaks in the woodland on north-east side of Chalet. The dead limbs, that I could see and reach, that were still attached to the tree seemed to decay in three stages. The first stage in which the bark and outer sapwood are attacked and fall off. This leaves the heartwood and an outer core of sapwood. Later this sapwood falls leaving a 'branch' of heartwood only. All the branches I examined in this final stage showed no sign of insect attack, but the bark and sapwood in some, not all cases, had been attacked. One branch, 3½ in. in diameter in an early stage of decay had been opened by a woodpecker. This branch was the only one that I found that had bark beetle workings engraved on the wood. I found 1 dead beetle in a burrow under the bark. 29A

Also a Clerid beetle larva. 29B

Brought back to lab. a branch that had fallen from the tree but was caught in a branch at between 10-12 ft. up. 31

Found and gave to K. Paviour-Smith a bracket fungus which I think was growing on an oak at 10 ft. up. I had to poke this down and could not be sure that it was 'rooted' or whether it was just firmly wedged in a fork of the main trunk. Extracted two small beetles from it in the lab., and two

{reverse side}

3 MAY 1960.

30 A- Snake fly larva

3 MAY 1960. WYTHAM WOODS ***

beetle larvae (K.P-S. provided det. as a Lathridiid, and *Tetratoma* species). On the hymenium of the fungus, which was very dry, dark brown, and leathery, I took two spiders. A small spider and a maggot attached to the anterior dorsal surface of the abdomen. Bristowe ('Comity of Spiders') lists several Ichneumonids that lay their eggs on the abdomen, and whose larvae develop in the position that I have seen in this specimen. The other spider was in a silken retreat under a curled up portion of the fungus.

The attached dead branches on oak, have in the final stages either a callus at their junction with the main stem, or a loose collar of bark. In the space between the bark and the heartwood debris collects. I noted woodlice and Collembola, but only two small red mites in the samples I examined. It might be worth making a Tullgren extract to see what does live there. Collected a snakefly larva. 30 A

The thick carpet of Mercury shows no sign of *Hermaphysa* – except for one small patch of about a dozen plants which have a few perforations.

{reverse side}

17 MAY 1960.

Wytham Woods – The Pasticks

Sycamore flowers

32

- F A *Syrphus* (= *Epistrophe*) ***eligans*** Harris ♀
- F B - *Platycheirus peltatus* (Meigen) ♀
- F C - *Anthocoris nemorum* (L.) C.A. Elbourn det. 1969
- F D - *Athous haemorrhoidalis* (Fab.) 1 specimen

{Right-hand column of this page is shown on page 32A}

{The following appears on a small loose sheet in Stephen Hurry's handwriting.}

The Pasticks, a deciduous wood with a mixture of (mainly planted) deciduous trees, has a few pines also. It is counted as DECIDUOUS.

Correct the cards for CE!!!!

& do S.W.H.32 accordingly.

17 MAY 1960.Wytham Woods – The Pasticks

Sycamore leaves

- A- *Empis tessellata* Fab. ♂ – K.G.V. Smith det. 1960
- B- *Adalia decempunctata* (L.) C. Elton det. 1962
- C- *Athous haemorrhoidalis* – (Fab.) 2 specimens 1 n.k.
- D- *Agriotes acuminatus* (Stephens). C. Elton det. 1962
- E- *Rhagonycha limbata* Thomson confirmed C. Elton 1962
- F Nitadulid – Epuraea
- G Nitadulid – Epuraea
- H- *Grammoptera ruficornis* (Fab.)
- K- Sawfly – *Macrophya albicincta* (Schrank) R.R. Askew det. 1961
- L- Sawfly – *Tenthredopsis litterata* (Geoffroy in Fourcroy) R.R. Askew det. 1961
- M- *Metacantharis clypeata* (Illiger) confirmed C. Elton 1962
- N- *Metacantharis clypeata* (Illiger) confirmed C. Elton 1962
- P- *Rhagonycha limbata* Thomson confirmed C. Elton 1962
- Q- *Harpocera thoracica* (Fallén) ♂
- R- *Anthocoris nemorum* (L.) confirmed C.A. Elbourn 1969
- S-
- T- *Cantharus nigricans* Müll.

(= “On honey-dewed sycamore leaves, sycamore on edge of deciduous wood
(with a few pines), The Pasticks, Wytham Wood” = deciduous)

17 MAY 1960. WYTHAM WOODS.

The Pasticks. Afternoon. Cool wind, dry, overcast.

Walked down to The Pasticks from the Old Nursery. The field along the south edge of the Pasticks has been planted with a mixture of small trees, oak, beech, larch; no sign of rabbit damage. Area surrounded by rabbit fencing.

Collected the leaves and flowers of a sycamore on the edge of the wood. Insect activity was massive even on such a cool day. A large bough hung over the unploughed field side, at between 2 ft. 6 in. and 7 ft. from the ground. I collected nothing higher than 5 ft. up. 32
There were three sources of food available to animals:

- a) the pollen of the flowers
- b) the leaves
- c) other animals

The flowers were visited by honey-bees, each with their pollen baskets crammed with pale greenish yellow pollen. The insects that I collected were not feeding as far as I could see.

The leaves were being used as food by green aphids, both winged and wingless forms, with a few black aphids also present – all winged. I saw no aphids feeding on the upper surface of the leaves, but the upper surfaces were sticky – honey dew rained down from the leaves above?

{reverse side}

17 MAY 1960.

17 MAY 1960. WYTHAM WOODS ***

Two sawflies (32 K & L) were collected while they were feeding on this sticky substance. It tasted quite sweet to me when I licked my fingers to clean them.

Of the remainder of the animals collected some were clearly predators. A large Empid fly and an adult Coccinellid both taken on leaves. A larval Coccinellid was seen on a bunch of flowers (n.k.). Syrphid larvae were frequently seen, all on the under surfaces of the leaves amongst the aphids.

A very pale yellowish fly was the other regular under leaf surface animal, they seemed to be resting here.

The remainder of the collection is made up of animals which might or might not be regular community members. The Longicorns, Elaterids and Cantharids (*sensu lato*) would appear to be pollen-eaters. Of these the Cantharids were very active, flying around and about all the time I was collecting. The Elaterids when disturbed fell to the ground, while the Cantharids always flew before they hit the ground.

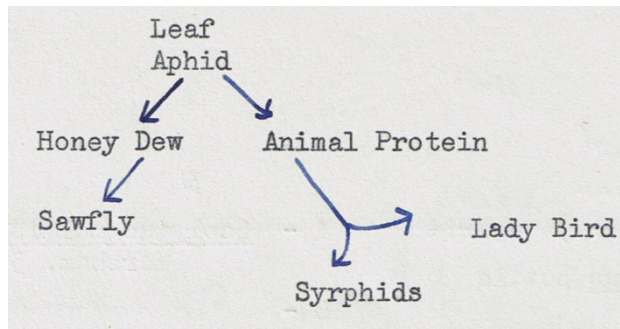
A *Forficula auricularia* ♀ (n.k.) – was resting between 2 leaves – presumably satisfying its contact needs in this position. I saw no caterpillars nor signs that the leaves were being eaten directly.

{reverse side}

17 MAY 1960

17 MAY 1960. WYTHAM WOODS ***

As an example of a centre of action the flowers and leaves were splendid. It is also possible to see a simple food chain – with 2 pathways into C 2 layer.



{reverse side}

24 MAY 1960

36

- A- Ichneumon
- ☒ B- Sawfly *Macrophya albicincta* (Schrank). R.R. Askew det. 1961.
- C- Weevil
- ☒ D- Bug – *Stenodema laevigatum* (L.) G.G.E. Scudder det. 1960

25 MAY 1960

33

- ☒ A- 17 *Scolytus scolytus* (Fab.) 2 kept. Confirmed C. Elton
- ☒ B- 9 *Scolytus multistriatus* bottle n.k.
- C- hymenopteran
- ☒ D- ☒ E- ☒ F- ☒ G- *Lonchaea ? laticornis* Meigen ♀♀
- H- Dolichopodidae – “This female defeats me even at generic level.” K.G.V.Smith 1960 labelled but not punch-carded
- J- *Athous villosus* ? larva
- K- det. by C.Elton 1969 as *S. scolytus* and included in A
- ☒ L- 4 young *Porcellio scaber* Latreille (n.k.)

34

- ☒ A- *Scolytus multistriatus* Marsham. 3 specimens

35

24 MAY 1960. WYTHAM WOODS.

Collected in leaf base cups of Teasel (*Dipsacus fullonum*) deciduous woodland edge
Marleywood Plantation, Lower Follies, alongside ditch, between Stream 4 and Stream 5. 36

25 MAY 1960. WYTHAM WOODS.

With C. Elton. 9.15-11.45 a.m. G.M.T.

Collected wych elm bark (see page 41) from Nealings Copse.

Took thick bark as before (S.H. 18)	33
thinner bark	34
thin branch and bark	35

All had bark beetles' sign on and SH 34 had live pupae and adults in chambers in bark.

In lab. sorted out tins – and collected animals that were in spiders webs, or were dead in the tins. Chopped up elder and barked elm (S.H. 22 and 23). Then put them back into their tins. Wych elm log also chopped up and put back (S.H. 21).

From wall inside building at Spring 19 1 ♀ *Meta merianae* var. *celata* (Blackwell) lab. det.
(Very shiny and very attractive spider.)

37

{reverse side}

30 MAY 1960

38

B- *Calliopum aeneum* (Fallén) ♀ (Sapromyzidae) K.G.V. Smith det.

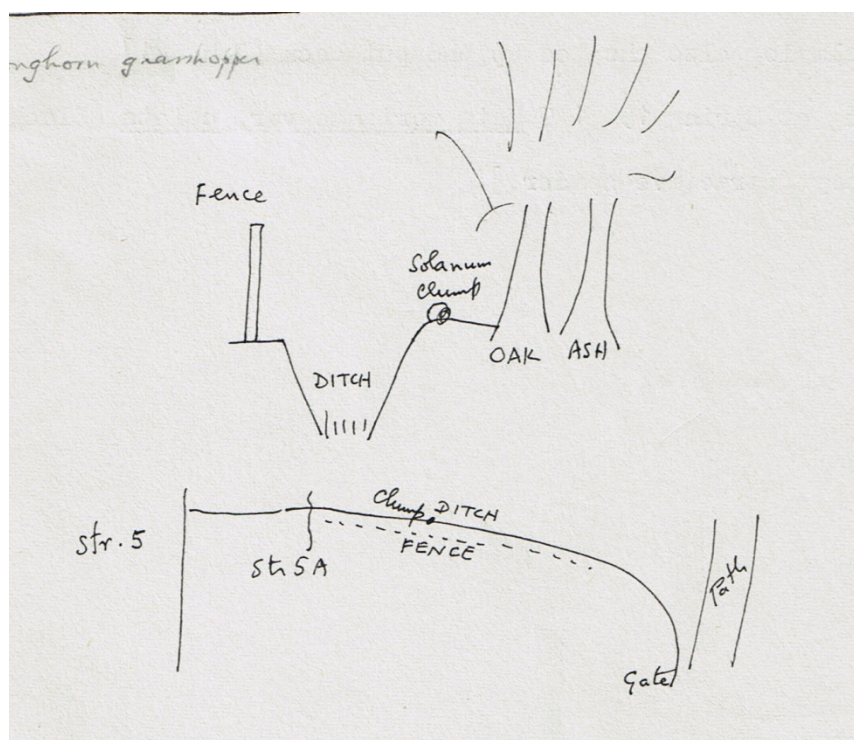
D- not kept, too immature to name

E- beetle

F-

G- *Helodes minuta* (L.). C. Elton det. 1969

H- Longhorn grasshopper



30 MAY 1960. WYTHAM WOODS.

Lower Follies. Afternoon.

A beautiful hot summer day, with a cool breeze and a few clouds. Examined the 'oak' bough and brought back bark which had pupae and larvae in it. The bough might be a hawthorn, from one of the several lying in the field, or from the large oak which overshadows the field at this point.

Saw a patch of bitter-sweet (*Solanum dulcamara*) which had perforated leaves, by beating collected the flea-beetle responsible and some other animals. Sample of damaged foliage (n.k.) Given to C.E. Clump was growing on top of ditch side at the edge of the wood. Ditch was damp in the bottom. 38

Hawthorn blossom is nearly over now, and the petals dropping off, saw very little animal life on the flowers. Elder is just coming out now – a few patches full out but most of it just breaking.

Collective from the fence posts along the wood edge. Mostly Diptera, Hymenoptera, and *Clytus arietis*. These beetles (*Clytus*) were very active flying from post to post, few 39

{reverse side}

30 MAY 1960

39

- A- Stonefly
- B- *Araneus umbraticus* – n.k. field det.
- C- *Clytus arietis* (L.)
- D- *Clytus arietis*
- E- Hym ♀ *Sapyga clavicornis* (L.) I.H.H. Yarrow det. 1960.
- F- Hym
- G- *Dryophilocoris flavoquadrimaculatus* (Degeer)

30 MAY 1960. WYTHAM WOODS ***

basked. Considerable size range of individuals. Watched a large ♀ ovipositing on a post that had some bark on. She did not palpate with her antennae, just walked along slowly with the tip of her ovipositor touching the bark. She probed cracks with this as she walked, stopping only when she inserted her ovipositor deeper into a crack.

Also took one of the smallest specimens that I saw – perhaps a ♂.

Although they are such active fliers, when disturbed while on a post they just give up and fall off. Protection ? in case black and yellow colour doesn't work?

The *Clytus*, Diptera, and Hymenoptera shared the sunny sides of the posts, while the shaded side had only spiders and a stone fly on them (1 specimen of stone fly seen & collected). The spiders that I saw were all *Araneus umbraticus* 3 specimens (2 ♂, 1 ♀) – field det. The only spider on the sunny side was *Salticus* species which was much too quick for me.

The most noticeable Hymenoptera were brilliant metallic Chrysidids. I thought I saw 3 species, a large greenish gold thorax, red abdomen species, a smaller bright blue thorax, and another about the same size with green thorax. Could not catch any, however. They were very fast, rushing about

{reverse side}

30 MAY 1960

{loose record card found between pages for early June}

FOR		2 3 4 5 6 7 8								SPECIES		LEAF/		FLOWER		FRUIT		TRUNK/		ROOT		FUNGUS		MISC.		1 2 3 4 5 6					
BRIT.		MARIT.		OXON.		BERKS.		BUCKS.		OX.REG.		WYTHAM		s. intricatus																	
LOCALITY		PLANT		OP.																											
SPECIES CODE NO.		RECORD CODE NO.																													
COL 79-1-5		S.W.H. 53																													
DAY		MONTH		YEAR																											
19		6		1960																											
TIME (G.M.T.)		HT. ABOVE GROUND		Obs.																											
4 1/2 - 5 1/2		FT.		STAGE		EGG		Y.		PUPA		AD.		♂		♀		MISC.													
HABITAT & NOTES		Specim.		2																											
Em. from bark from fallen oak branch, supported at butt end c. 10 ft., decid. wood, nr. Old Nursery (by upper Follies), ww.																															
Sal.		Br.		AQUATIC																											
A		B		C		D		E																							
S.W. Hurry 1960		Det. C. Elton 1964		19																											
Coll. S.W. Hurry		Det. C. Elton 1964		19																											
SPEED		LAYER		FORMATION																											
1 2 3 4 5		1 2 3 4 5 6		1 2 3 4 5 6																											
Edge		Conif.		Ar.																											
1 2 3 4 5 6		1 2																													

30 MAY 1960. WYTHAM WOODS ***

over the wood and taking off again.

I disturbed a large grass snake, which was basking on the Stream 4 bank, it slithered away into the wood.

Put up a pair of mallard from the marsh at the head of Stream 5 A (Marsh 6)

A great many Empids with smoky wings in the marsh at Stream 4 (Marsh). These were roosting on the upright vegetation, but when disturbed settled down in the grass behind the fence and did not use the fence posts, although plenty of other flies were using them.

1 *Pyrochoa serraticornis* (Scopoli) from strand of wire between 2 posts (Lab. det. n.k.) 39H

{reverse side}

30 MAY 1960

40

A- *Scolytus intricatus* (Ratzeburg) confirmed det. C. Elton 1964

B- S.i. 49 more, variable in size, in alcohol not kept

C- *Scolytus intricatus* (Ratzeburg) confirmed det. C. Elton 1964

D- E- F- G- H- J- K- L- M- *Entedon ? ergias* Walk. (Eulophidae) R.R. Askew det. 1960

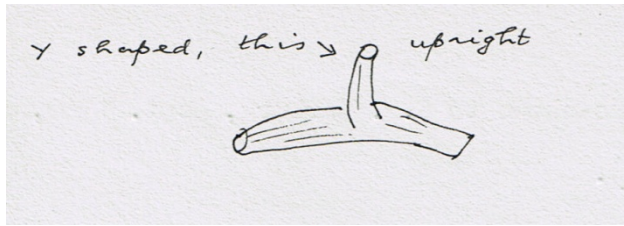
N- O- P- *Cheiopachus colon* L. (Pteromalidae). R.R. Askew det. 1960

Q R S Chalcids

30 MAY 1960. WYTHAM WOODS ***

A bough fallen into south field of Lower Follies.

40



(Presence of *intricatus* indicates it was probably oak, to which this species is confined. C.S.E.)

Upright limb attacked by woodpeckers: beetle holes evident

Lower not attacked – no beetle holes that I could see. Stripped of pieces of bark – put in 10 in Mab. {sic = ? Lab.} 24th May.

Many white larva and pupae seen in the bark – visible from its inner side. No sign of pupation in the wood itself.

Could not see any transverse galleries (difficult to orientate as it was on tree) if transverse means direction relative to direction of growth.

{reverse side}

3 JUNE 1960

Specimens (one with seeds) from both trees shown to E.F. Warburg, September 1960, who confirmed them as Wych elm (*Ulmus glabra*). Not kept

Flying and landing on the dead branches were

Scolytus multistriatus

Scolytus scolytus

Clytus arietis – 1 specimen

No Hymenoptera

Diptera – various

Field det. with lens.

none collected.

3 JUNE 1960. WYTHAM WOODS.

All day. Sunny, warm, dry.

Went first to Nealings Copse to collect seeds and leaves from the elms that have bark-beetles. The upright tree (Trees A) had fruits attached. Took leaves and fruits from a large drooping bough – circa 10 ft. high. Tree B is the living part of the fallen tree from whose dead branches specimens SH 18, 33, 34 and 35 were taken. Took a long terminal twig for leaves – saw no fruit.

41 Tree A Tree B

For comparison collected leaves from main branches – not suckers from elm at bottom of hill from Wytham Village, and from a tree in the wood by Spring 2. From this elm tree also took fruits.

Attempted to reach sap flux in an elm on right-hand side of path down to Stream 100. This is one of the trees in the first clump of elms after passing Kitty's trees. The individual with the flux is about No. 3 in the clump – the tree and the flux can be seen from the path. The flux is about 20 ft. up – begins at fork and the stains spread down for about 3 ft. as near as I could judge. The ladder I had was not long enough to reach the flux. I saw no insects flying around it.

{reverse side}

3 JUNE 1960

From Rose flowers

42

- A- *Micropteryx* species C. Elton det. 1960. (not kept)
- B-
- C- Beetle
- D- E- *Grammoptera ruficornis* (Fab.) C. Elton det. 1960 (not kept)
- F- Hym. Acul. ♀ *Andrena chrysoseles* (Kirby) I.H.H. Yarrow det. 1960
- G- H- J- Hym. *Andrena subopaca* Nylander I.H.H. Yarrow det. 1960
- K- Hym. Acul. ♀ *Andrena chrysoseles* (Kirby) I.H.H. Yarrow det. 1960
- L- Beetle *Anaspis frontalis* (L.). C. Elton det. 1962
- M- Beetle ♀ *A. maculata* Geoffroy in Fourcroy C. Elton det. 1962
- N-
- O-
- P- *Chrysogaster (Orhoneura) nobilis* (Fallén) ♂ Syrphidae K.G.V. Smith det. 1960
- Q- *Saltella (= Pandora) scutellaris* (Fallén) ♂ Syrphidae K.G.V. Smith det. 1960
- R- S- *Hera (= Lasiops) variabilis* (Fallén) Muscidae K.G.V. Smith det. 1960
- T- U- *Hera (= Lasiops) variabilis* not kept

3 JUNE 1960. WYTHAM WOODS ***

The flow is fresh, as it shone and glistened when the sunshine caught it.

The roses are blooming in the grassy patch in Comp. 30. Every bush has cascades of flowers, and every bush is surrounded by an envelope of scent. Collected a mass of insects from the flowers. Only took the individuals that were doing something that was recognisable and describable. The vast majority were eating pollen. The bees were collecting pollen – did not attempt to capture the hive bees that I saw only the small species. Saw one bumble-bee at flowers. Its collecting technique differs from the other bees most remarkably for its intensity. It appears to be fumbling and very neurotic! While collecting still buzzes. All the other bees were silent, quick, calm and collected. Saw several bees in copulation – took 1 pair. 42
The cockchafer (n.k.) was resting – not even moving his antennae. The caterpillar was feeding on the petals of a flower – died. 42D, E

Also took the collection from the foliage (without including the flowers) by beating. 43

Both collections made between heights of 4 ft. and 6 ft.

Went to the Dell to collect the elm specimens (see above). In long grass at edge of Dell by Brogden's Belt, several plants of White helleborine.

{reverse side}

3 JUNE 1960Rose foliage

43

- A- Hymenopteran
- B- *Anthocoris nemorum* – 10 specimens n.k.
- C-
- D-
- E- *Chrysopa perla* ? (L.)
- F-
- G-

- 44 has abdomen with pale brown and black mites
♀ *Pseneulus concolor* (Dahlbom). I.H.H. Yarrow det. 1960
(Not certainly from Wytham Wood).

3 JUNE 1960. WYTHAM WOODS ***

were in flower. Growing away from wood margin in grass.

The grassland is being invaded from Brogden's Belt side by scrub. Most common were hawthorn, then beech, a little oak, and a single privet. These were scattered in the grass all along the wood edge.

Almost at the base of dead tree LOG 76 is a badgers' lavatory. 3 pieces of fresh dung – still wet so probably deposited this morning or last night. Some older dung now dry also in the pit, partially covered by soil but rather smelly. Did not collect any animals.

Collected a small black Aculeate from the inside of cab of the Rover at the Mount.

44

Went to the Park to examine Stream 1 B and Stream 9.

Stream 1 B is a mixture of Woody and O-Woody. The lower end runs through bushes and scrub of hawthorn and blackberry, but this regions {sic} dominated by herbs. The Woody components are in some cases up to and above 6 ft. high, but there is a good deal here of less than 6 ft. The stream has small pools and rapid runs, even two small waterfalls! The bed in the pools appears to be of silty mud, while in the rapid runs calcified bits with little silt. The bank

{reverse side}

3 JUNE 1960

45 A- Stoneflies

45 B-, C-, D-, E- Hymenoptera

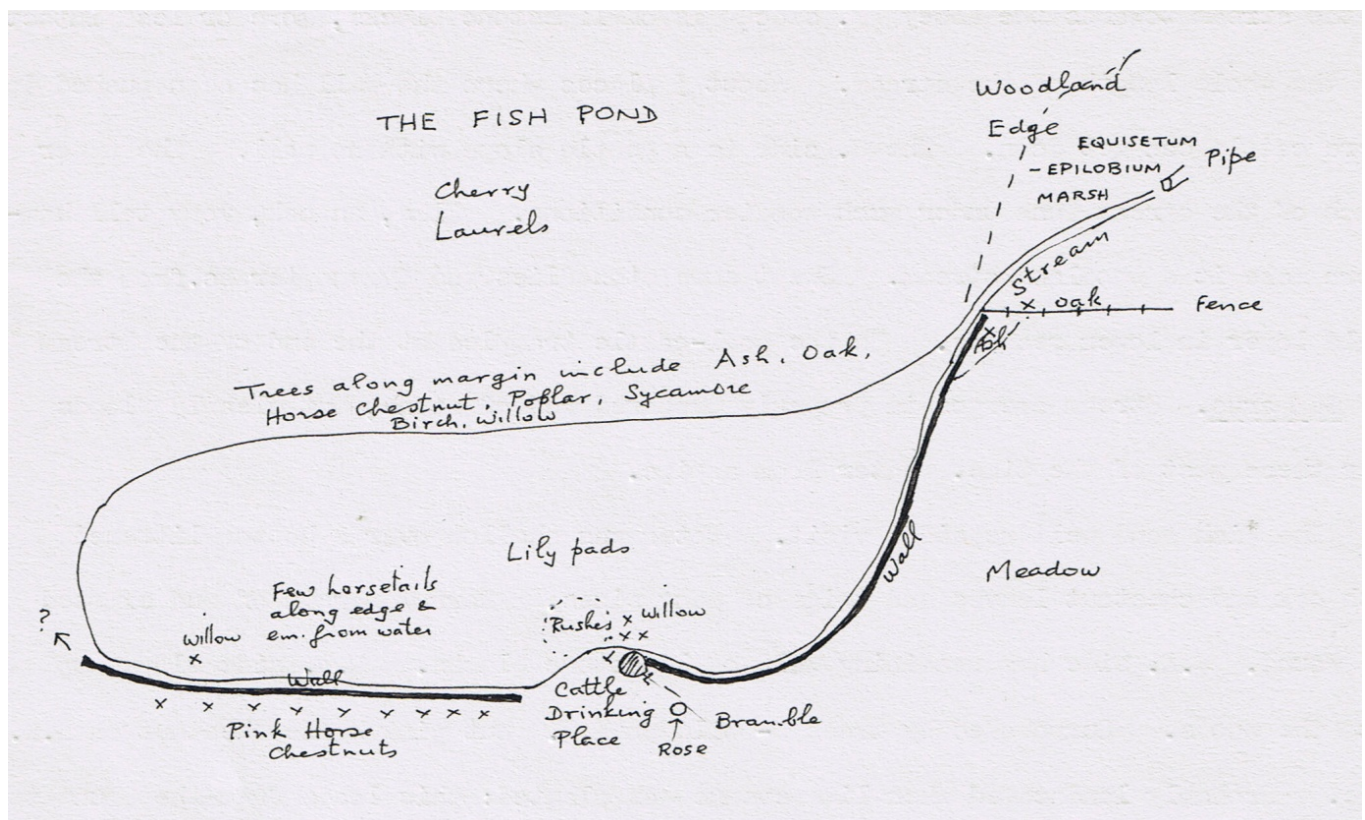
3 JUNE 1960. WYTHAM WOODS ***

of the stream towards the Abbey (north side) is of limestone blocks, more or less intact for the whole length of the stream. About 3 places where the wall has been pushed down where cattle can get down. The south side is a gentle slope with no walls. The upper reaches of the stream runs under much woodier conditions. Elms, an oak, very tall hawthorn make it a woodland stream. Swept some stoneflies and Hymenoptera from the field layer in lower reaches. In the pool-cattle trampled at the end of the Stream saw *Gammarus*. Stream emerges in properly prepared bed of stone, but clearly it floods over these most of the time. Water from a pipe.

45 AB C,D,E

The Fish Pond well repaid a visit. Water was shallow over a bottom littered with oak and chestnut leaves and twigs of many sizes. Narrow margin of mud exposed all round. Southeast side has retaining wall of limestone blocks. North-west side slopes up into the woods. Surrounded by trees – wild on northwest but pink horse chestnut on southwest side. Probably landscape when lime avenue was planted: this leads from the Mount to the Abbey. Southeast side also has willows, blackberry and roses, making an edge into the field. Only one place the cattle to reach the water – see map over.

{reverse side}

3 JUNE 1960

3 JUNE 1960. WYTHAM WOODS ***

Took a most beautiful *Agrion splendens* (Harris) ♂ from the meadow grass at the cattle drinking place. 46 A not kept

Appeared to settle on the scrub height blackberry bush or on the grass. Saw 4 roach (field det. but could only have been roach or rudd) very red fins, mouth opens upwards – and both size and shape seem to me to be roach-like rather than rudd-like. Drifted very gently about, just disturbing the water with their dorsal fins and tail tips. About 4 fish about same size and weight – looked around 14 ins. and 2 lbs +! Saw no sign whatever of fry in the water. Nor any sign of fungus on the fish. B

{reverse side}

47

- A A- n.k.
- B- Sawfly *Eutomostethus luteiventris* (Klug) . R.R. Askew det. 1961.
- C- Beetle
- D- Beetle
- E- *Empis pennaria* Fallén ♀ K.G.V. Smith det. 1960
- F- *Cercopis vulnerata* Germar. C. Elton det. 1960 (n.k.)
- G- *Argyra diaphana* (Fab.) ♂ K.G.V. Smith det. 1960.
- H-
- I- Hymenopteran Acul.

3 JUNE 1960. WYTHAM WOODS ***

Set off to attempt to find Spring 9. While searching in the thick herbs for some sorrel to chew fell into a stream not marked on map! Found that it starts from a spring under the fence between two fields – an upright post is actually on the edge of the tiny pool – 6-9 in. across – circa 18 in. deep. Water flowing fast and very cold – no litter or silt in pool. Overflow is taken by a small drain down towards Stream 1 b. Runs through very thick lush rather marshy vegetation. Spring almost overhung by a hawthorn and runs under 1 large bush. Apart from this is O-Woody. Finally running into a stone trough by a pipe under the field track. At the other end is a hawthorn tree. Trough has thick bed of silt – no calcified bits. Surface of water has layer of fallen hawthorn petals. The water between these has a very gummy tough surface film. Made a collection of all the insects I could find that were trapped in this film. 47
Saw no *Gammarus*, no Hemipterans. But at the spring pool – on the tip of the drain a very small amount of litter had wedged. Oak leaves and hawthorn leaves, both very skeletonised by *Gammarus*, specimens of leaves brought back but not of *Gammarus*.

{reverse side}

3 JUNE 1960

3 JUNE 1960. WYTHAM WOODS ***

In the scrub in this area disturbed by a noisy flock of starlings from the grass, and very many Tipulids. Starlings flew into a large oak. Nightingale sang. Collected 2 plants of ***Rhinanthus minor*** – growing in one of the grassy patches between the hawthorn bushes. 47*

Saw 2 webbing tents on hawthorn bushes. – Plenty of frass lodged in the webbing but saw no caterpillars.

Disturbed a pied wagtail from the small pool at the end of Stream 1B when I walked back.

Half hidden in long grass between two rose bushes in Comp. 30 1 fallow deer's horn.

**R. minor* Ehrh. E.F. Warburg det. 1960

{reverse side}

16 JUNE 1960

50

A- B-	<i>Chrysopilus cristatus</i> (Fab.) (Rhagionidae) ♂♂ K.G.V. Smith det. 1960
C-	<i>Dolichopus unguatus</i> (L.) ♂ K.G.V. Smith det. 1960
D-	<i>Erioischia brassicae</i> (Bouché) ♂ (Muscidae) K.G.V. Smith det. 1960
E- F-	<i>Nyctia halterata</i> (Panzer) ♂♂ (Tachinidae) K.G.V. Smith det. 1960
G- H-	<i>Chrysopilus cristatus</i> (Fab.) (Rhagionidae) ♂♂ K.G.V. Smith det. 1960
J- K-	<i>Herina frondescens</i> L. ♂ ♀ (Otitidae) K.G.V. Smith det. 1960
L-	Hymenopteran
M-	<i>Spanochaeta dorsalis</i> von Roser ♂ (Muscidae) K.G.V. Smith det. 1960
N- O- P- Q- R- S- T- U- V- X- Y- Z- Hymenopteran	

16 JUNE 1960. WYCHWOOD FOREST, OXON.

Beneath a dead rook body – no flesh left: *Xysticus cristatus* (Clerck) mature ♀ alcohol
dragging a large beetle larva. Held by head – dead.

48

Larva circa 15 mm. Silphid (cf. Boving and Craighead's illustration.)

On the edges of grassy fields above ponds. (Newhill Ponds).

From circa 3 ft. 6 ins. on a hawthorn trunk, in mixed oak, hawthorn, ash wood. The specimen was immobile on a wood scar on the trunk. The wood was exposed and had beetle holes in it. Around edges of scar wound callus had formed, so that bark and cortex were still firm. 1

Grynobius excavatus (Kugelann) C. Elton det. 1964.

49

Also made a collection by sweeping from vegetation along streams by Cyder Well and Worts Well.

50

[Taken as T-A/A/W vegetation all /3 or /2.]

{reverse side}

17 JUNE 1960

51

A-	<i>Salticus cingulatus</i> (Panzer) ♂ n.k
B-	<i>Enallagma cyathigerum</i> (Charpentier) immature ♀ n.k I. Efford & S.H. det. 1960.
C-	<i>Stencorus meridianus</i> L.
D-	<i>Sarcophaga carnaria</i> (L.) var. <i>vulgaris</i> Rohd. ♂ K.G.V. Smith det. 1960.
E-	2♂ <i>Chrysis cyanea</i> (L.) I.H.H. Yarrow det. 1960
G-	♀ <i>Halticus villosulus</i> (Kirby) I.H.H. Yarrow det. 1960
H-	♀ <i>Stigmus solskyi</i> Morawitz I.H.H. Yarrow det. 1960

17 JUNE 1960. WYTHAM WOODS.

Lower Follies. Afternoon Very hot and sultry – damp close air.

From the fence posts along the field edge (north field) (see page 37 also) collected two Chrysidids – the smallest species that I saw, two others were too quick for me.

Large fly (51 D), a Chalcid (51 F), a ♂ *Salticus cingulatus* and a sphecid wasp

51 E
D F H

Walking along in the grass by the fence disturbed and took SH 51 B and C. (The longicorn perhaps from the wood?). The damselfly was prov. det. by Ian Efford. Spine on ventral posterior segment apparently the key character. Specimen very pale in colour, and yellow brown with a tinge of blue.

A dirt pile thrown into the field from the ditch was being investigated by two small bees. Collected one, which was exploring a crack in the dirt, head and thorax pushed down the crack.

G

Only just avoided an active *Vespa vulgaris* nest. (Lab. det. from 3 specimens taken after emerging from nest – n.k.). Nest entrance in long grass under fence line, but wasps had trimmed the grass heads and blades so that a

K

{reverse side}

17 JUNE 1960

17 JUNE 1960. WYTHAM WOODS ***

flight way into and out of the nest, was available. Wasps took no apparent notice of me, none came to investigate me. Saw some workers collecting wood scrapings from the fence posts. While watching these wasps was bitten by a clegg ♀ *H. pluvialis* (Lab. det.). 24 hours later there was still a small red bump at the wound site. Took her before she had begun to feed, just after she had inserted mouth parts. 51 J n.k.

Only saw 2 specimens *Clytus arietis* in the whole trip. Both were resting on the shaded side of their posts.

About $\frac{3}{4}$ way along the fence from gate at north end of north field, just in the wood margins a badger's earth. Could only see one entrance. A small dung pile at the edge of the ditch with fresh faeces in it. Could see no flies about it.

{reverse side}

19 JUNE 1960

19 JUNE 1960. WYTHAM WOODS.

Higgins Copse, The old Nursery and the Fish Pond. 1.30-6.30 p.m. G.M.T. Hot, sunny, with little wind.

Set out to look at the fallen wood in the Old Nursery. The whole area is swamped in nettles, elder shrubs, burdock and willow herb, so that the logs cannot be seen. Very noticeable that there were no insects on the elder flowers: I saw a Syrphid visit 1 bunch of flowers but that was all.

Went down to Higgins Copse, as I had not been down before. The wood is very dense with no paths. West edge has a great deal of elm, both trees and suckers. Elm, common I think, occurs throughout the wood, well grown trees, with large amounts of fallen wood around them, and as saplings. In one area there is a fine grove of elm trees, very tall and dead straight, very close together. In the north-east corner and area of hazel shrubs with oak and ash. Ash also occurs along the east edge, and with oak as scattered trees in the whole wood. Both ash and oak have a good deal of dead wood in the living trees. The field layer of nettles, mercury

{reverse side}

19 JUNE 1960

55 A - Ichneumonid

57

A- pupa

B- 2 *Scolytus scolytus* (Fab.)

C- Chalcid

19 JUNE 1960. WYTHAM WOODS ***

and bramble. In the south end of the wood, the field layer dominated by goose-grass which swamps and covers everything else.

Pieces of bark and sapwood from an elm log. Fresh frass lodged in the crevices of the bark, and one scolytid scrambling over the log. 57

Although the log was without leaves the bark was firm, the wood solid, and the sapwood appear to be healthy. The log had an old branch, dead without bark and beetle bored, attached. A pupa extracted from an old gallery resembles Clerid. Log was lying under canopy of parent tree, and in a nettle bed, plants up to 3 ft. 6 in. high. 57A

In the elm grove a sapling about 14 ft. had had its top broken off and was dying. Took a dead branch – 1½-2 in. diameter from the 3 ft. 6 in. up from the ground. 55

{reverse side}

19 JUNE 1960

53

- A- *Scolytus intricatus* in spirit
- B- *Scolytus intricatus* (Ratzeburg)
- D- Staphs
- E- Hym
- F- Staph
- G- Sciarid ♂ ♀
- H- Chalcid

54

B- Hym

58

A-, B- C- Hym

- D- ♀ *Limosina* (= *Leptocera*) *sylvatica* (Meigen) K.G.V. Smith det. 1960.
- E- *Brachyopa insensilis* Collin K.G.V. Smith det. 1960.
- F- ♂ *Limosina* (= *Leptocera*) *sylvatica* (Meigen) K.G.V. Smith det. 1960.

59

A-, B- C-, D-, E-, Hym

- G- *Bicellaria spuria* (Fallén) ♀ K.G.V. Smith det. 1960.
- H- *Opomyza germinationis* (L.) ♂♂ K.G.V. Smith det. 1960.
- J- *Conicera dauci* Mg. ♂ K.G.V. Smith det. 1960.
- K-
- L- *Campichaeta obscuripennis* (Meigen) ♂ K.G.V. Smith det. 1960.

19 JUNE 1960. WYTHAM WOODS ***

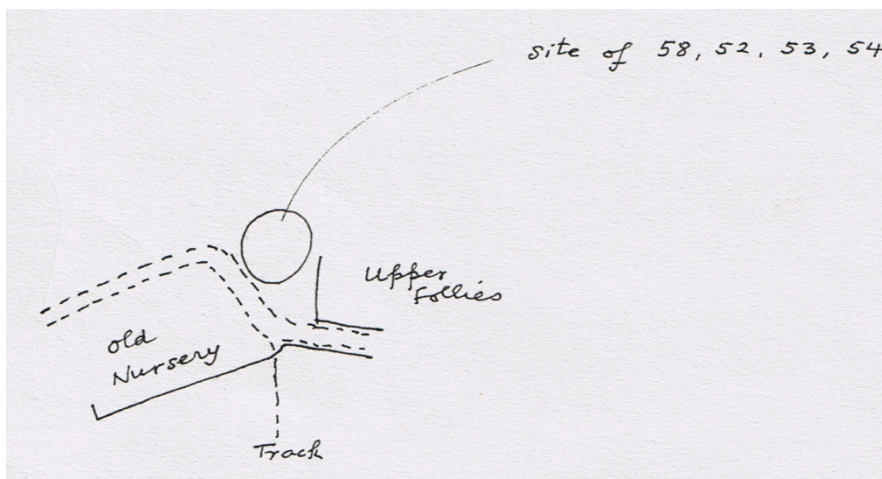
In the area south east of track passed Old Nursery (see map below) took a collection from 2 sap flows. These were both on elm beside the track. One had flowed so freely that a pool of sap had collected in the bole of the tree. (Taken as T/5 (D) (Edge)/3 or 4) 58

Took an elder trunk. Dead, very dry, with one strip still living up one side 2 ft. 9 in. high and 3½ in. in diameter. (Broken up into two tins, 52A and 52B). Growing under heavy shade from an oak tree. (Taken as T/5 (D)/3 or 4)

One of the big oaks had dropped a branch, from which I collected some bark. Branch was supported at butt end, circa 10 ft. high, bark collected between 4 ft. 6 in.-5 ft. 6 in from ground. (Taken as T/5 (D) D/D wood D/D) 53

Nearby an elm branch, again held clear of ground by lower branch of parent tree. Collected portion between 6 and 10 ft. high. Wood dry and rotten. (Taken as T/5 (D)/4) 54

Swept insects from *Equisetum* & *Epilobium* from sides of stream running into Fish Pond. 59



{reverse side}

19 JUNE 1960

60

- A- *Sympherobius elegans* (Stephens) S.W.H. det. 1960. (Specimen lost).
- C- Agromyzid fly ♀ *Phytomyza ranunculi* (Schrank) K.G.V. Smith det. 1960.
- D- Ephydrid fly, *Philygria stictica* (Meigen) K.G.V. Smith det. 1960.
- E- Phorid fly, ♀ *Megaselia fuscinervis* (Wood) (Meigen)
- F- Hemiptera. Mirid. *Atractotomus magnicornis* (Fallén) G.G.E. Scudder det. 1960.
- G- 9 Beetle larvae – adults emerged 24 July 1960. 1 adult 2-spot ladybird k.
- H- Lacewing larva 1 adult = small specimen of *Chilocorus semipustulatus* (Scriba) (Coccinellidae) C. Elton det. 1964

28 JUNE 1960. WYTHAM WOODS.

Wytham – Plantation 1. Comp. 4 (between Marsh 3 & Marsh 2). Afternoon Cold wind, overcast.

By shaking the boughs of the spruces into a sweep net took a mixture of animals. A large number of caddis flies, Chalcids, and Psocids – n.k. 1 single small brown lacewing, (60 A), a few small Diptera (60 B-E) and some Hemiptera (60 F). All taken on spruce between 6-8 ft.

60A B-E F

The beetle larvae were all taken on the trunks of ash trees. There were very large numbers of them on almost every tree. The larvae looked as if they were feeding on algae encrusting the bark. The heaviest populations around 3-6 ft. but on odd trees I could see larvae up to circa 20 ft. up the trunks. Could not find any larvae on the spruces, but the rough bark may have hidden them. Took none by shaking into the net.

{reverse side}

3rd JULY 1960

61 Tree was almost at wood edge, but because there was an edge of which the tree was not part, should classify as T 5 rather {than} T 5 edge.

- A- Leaf-cutting bee ♂ ***Megachile ligniseca*** (Kirby) I.H.H. Yarrow det. 1960
- B- Solitary wasp ♂ ***Clytochrysus cavifrons*** (Thomson) I.H.H. Yarrow det. 1960 (as *Ectemnius* (C.) c.)
- C- Fly
- D- Chalcid
- E- Hym. Acul.
- F- Empid fly, ♀ ***Tachypeza fuscipennis*** (Fallén) K.G.V. Smith det. 1960.
- G- 1 ♂, 1 ♀ ***Ptilinus pectinicornis*** L.
- H- Hemipteran ***Campyloneura virgula*** (Herrich-Schaeffer). G.G.E. Scudder det. 1960. (as *Campyloneura* v.)
- J- ***Passaloecus corniger*** Shuckand (Sphecidae) I.H.H. Yarrow det. 1960
- K- ♂ ***Ablephiparus podacricus*** (Sphecidae) (Van der Linden). (As *Crossocerus* p.)

{reverse side of page numbered 'opp. 53 A'; nothing on front side}

19th JUNE 1960

59

- P- ***Chrysogaster*** (s.g. ***Orthoneura***) ***brevicornis*** Loew ♀ K.G.V. Smith det. 1960.
- Q- ***Lyciella rorida*** (Fallén) = ***Cnemonantha*** ♀ K.G.V. Smith det. 1960.

3 JULY 1960. WYTHAM WOODS.

Marley Wood Plantation. Afternoon. Warm, overcast, dry.

Walked along the inside edge of the wood beside the fields looking for upright dead trees. Found a black poplar, with several trunks up from bole, one trunk was dead and except for bottom few feet, without bark. Wood had masses of emergence holes all the way up.

Collected insects visiting the dead trunk, height 4 ft.-circa 10 ft. 61

The flies (SH 61 C & F) seemed to be using the trunk as a convenient perching place, as did the bug (61 H) but the rest of the catch was all caught after they had investigated beetle holes, cracks or knot holes. The Hymenoptera usually clean their antennae after probing a hole and were easier to catch then than at any other time. Some were taken in flight after I had seen them busy at a site on the trunk.

Further up the wood were two more dead trunks ? Poplar. Although neither had insects busy on them within reach, both had small clouds of insects around their trunk tops. The top in both cases sticking out clear above the surrounding vegetation. Barkless in both 62

{reverse side}

3 JULY 1960

63

A-
B-

Mycetophilid fly *Ceroplatus testaceus* Dalman K.G.V. Smith det. 1960

Agonum dorsale (Pontoppidan)

3 JULY 1960. WYTHAM WOODS ***

cases. At least two sizes of insect present. Smaller ones much more numerous. From hovering flight – thought they were Hymenoptera.

Also took a dipteran and a carabid from a rotten willow log in the field beside the hedge.

Came back along field edge, caught some insects busy in the grass. Flying at between 6 in. - 6 ft. except 62 D – this was resting under a dock leaf.

63 A,B

{reverse side}

7 JULY 1960

64

A- *Hemerobius humulinus* L. S.W. Hurry det. 1961 specimen lost

B-, C- ♂, ♀ *Symphorobius elegans* (Stephens) S.W. Hurry det. 1960 specimens lost

E- Hym.

F-, G-, H -, J- Dip.

65

B- *Chrysopa ventralis* Curtis S.W. Hurry det. 1960 specimen lost

C- *C. carnea*

D- Caddis

E- *Panorpa germanica* L. n.k. S.W. Hurry det. 1960

F-, G-, H-, Hym.

J-, K- Dip.

7 JULY 1960. WYTHAM WOODS.

Plantation 1, between Marsh 3 & Marsh 2. Warm between cold rain showers, windy.

Walked round the edge of the plantation collecting by sweeping from the lowest foliage of the spruces [heights from 4 ft. 6 in – 8 ft.] Much the same sort of animals as collected on 28 June, but rather fewer in number, bad weather? The spruces surrounded by deciduous trees along the edge of the plantation.

64 65

{reverse side}

15 JULY.

15 JULY

A wasp flew into the Museum B.A.P. Abdomen constricted between black and yellow bands.
♀ ***Cerceris arenaria*** (L.) I.H.H. Yarrow det. 1960 Presented to Hope Department. Not
listed by O.W. Richards in Oxon.V.C.H. 1939

68

{reverse side}

JULY 1960

69

A-,B-,C-,D-,E-

Ichneum.

F-,G-,H-,J-,K-,L-,M-,N-,O-,P-,Q- Flies

JULY (no day given) 1960

Collected from flower heads of *Heracleum sphondylium* (C.E. field det.) at edge of Marsh 14 wood. For further notes see C.E. 15 page – 69