How to audit a new build housing development

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WHAT IS AN ECOLOGICAL AUDIT?

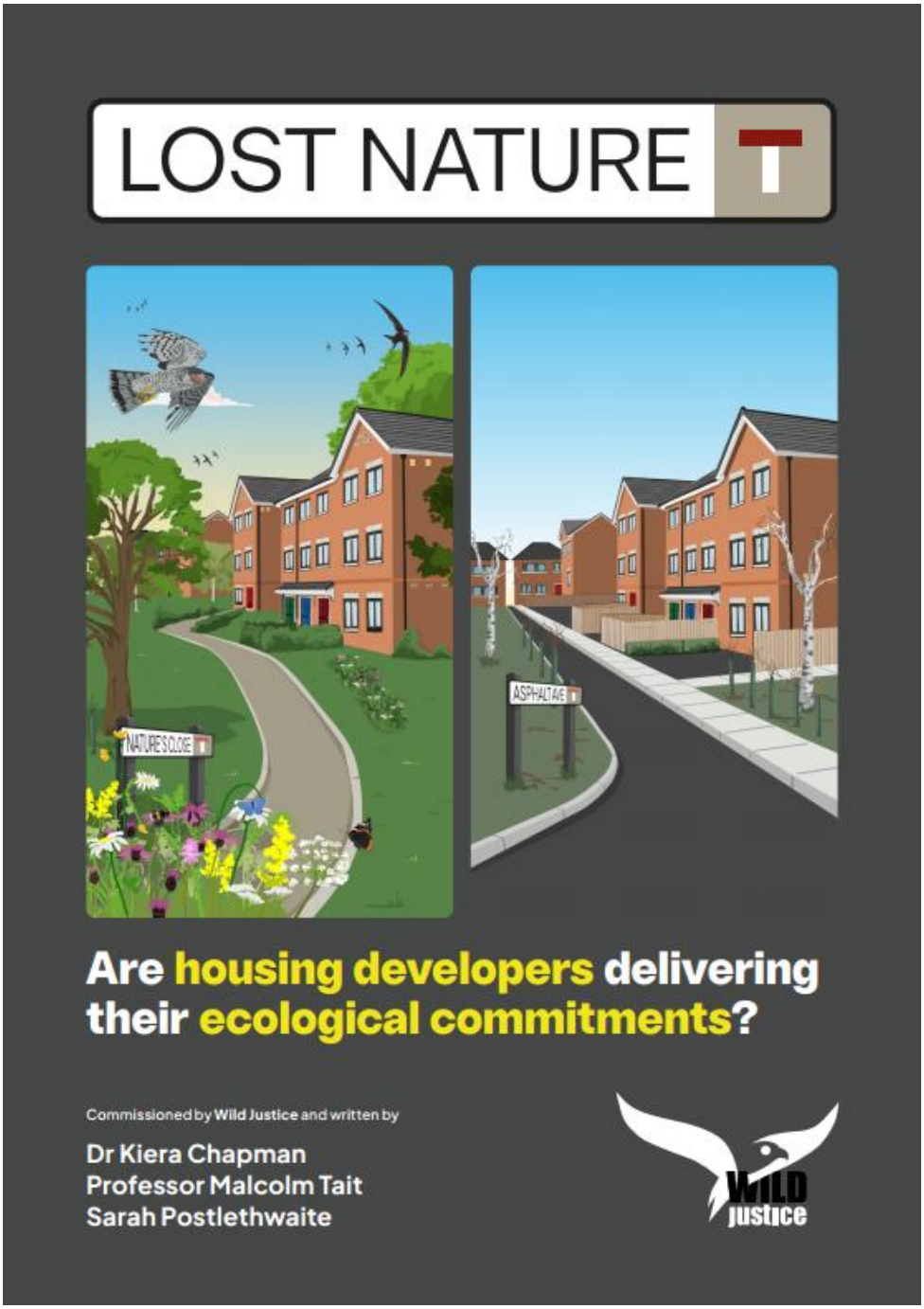
Planning permission for housing is granted by Local Planning Authorities (LPAs). When developers are given this permission, it comes with a set of legally binding conditions. Some of these conditions commit developers to installing ecological enhancements and mitigations to help nature deal with the change in land use. These might be things like wildflower meadows, hedgehog highways, native trees, or bat and bird boxes.

An ecological audit is a survey that tests whether developers have put in these ecological features on the ground. It measures whether developers are complying with the conditions of their planning permission.

In the summer of 2024, Wild Justice funded us to conduct an ecological audit of 42 new build housing estates across England. We found that just 53% of the ecological features that developers should have put in place were missing. When we excluded street trees, this figure fell to 34%.

This guide will help you to do what we did. It will tell you:

- How to audit a local development
- How to get local planning enforcement teams involved so you can hold developers to account.



You can read more about our audit here:
https://wildjustice.org.uk/general/lost-nature-report/

WHY IS AUDITING IMPORTANT?

The Labour government has committed to building 1.5 million homes over the course of the next Parliament. Their argument is that they can do this without causing ecological damage by forcing developers to install ecological enhancements and Biodiversity Net Gain plans.

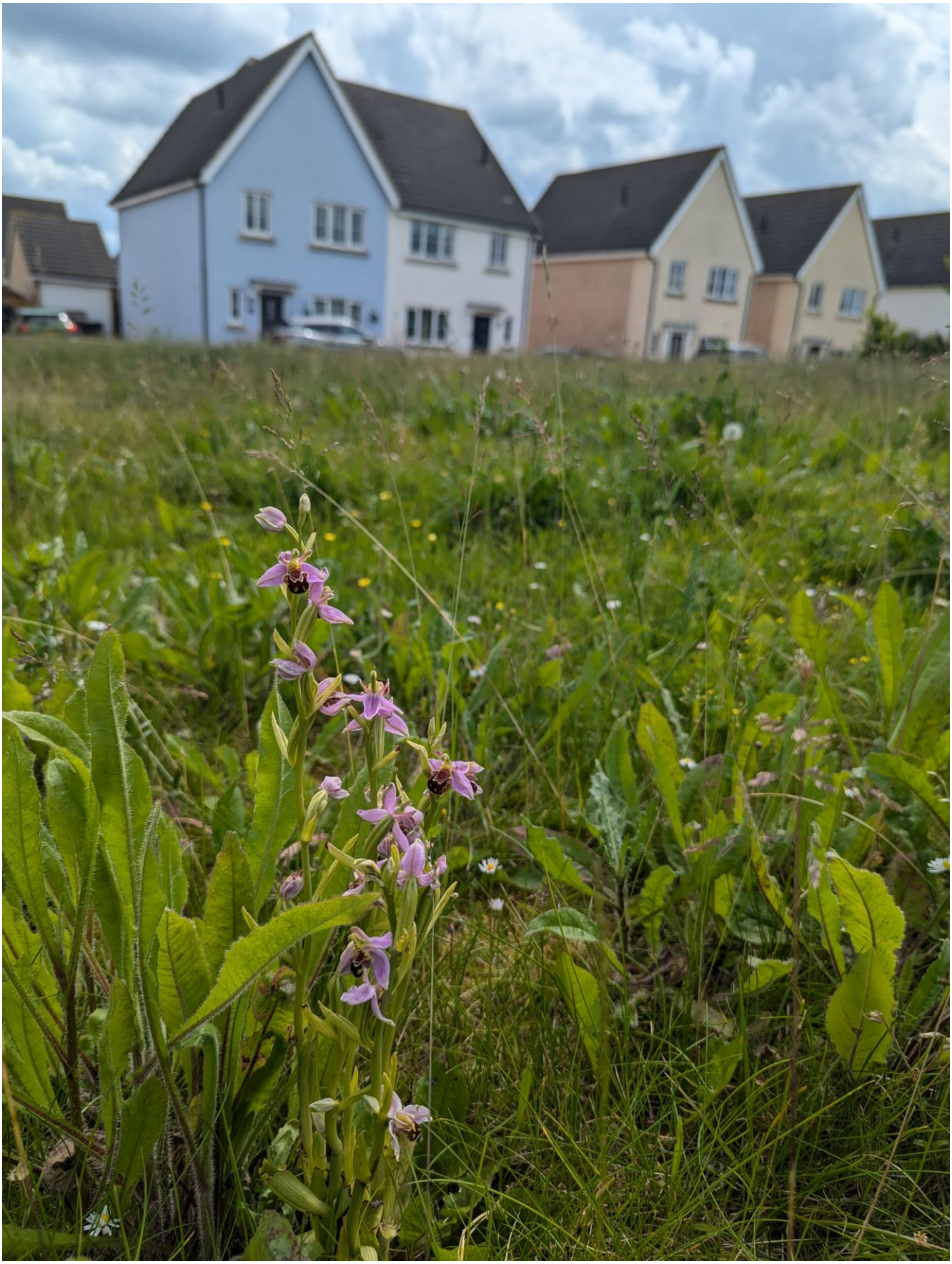
Biodiversity Net Gain is a piece of legislation that was introduced in spring 2024 and it mandates that developers install features for nature that will lead to a 10% increase in biodiversity either on the development site or offsite.

But we found that developers are routinely failing to install these ecological features. We think that our findings from the audit mean that this net gain will exist only on paper and that the reality on the ground will be a net loss.

These replacement habitats are not hypothetical environments for imaginary creatures that live on documents or in spreadsheets. They are real, material interventions to help living beings to survive a devastating change in land use.

People sometimes try to sugar-coat this, imagining that, when development starts, wildlife happily decamps from one site to another equally favourable one close by. While some creatures may escape destructive effects in this way, the reality is that **many will simply die**. A site where there are dormice, but where all the mitigations for this species are absent, is quite likely to lead to the death of these creatures on that site.

Many such erasures, happening here and there across the local area, can be a form of ‘death by a thousand cuts’, leading to the local extinction of a species.



BEFORE YOU START

The first step in undertaking an audit is to make sure you have the right documents. You can normally download these from the local council's planning portal. This is usually hosted on the local council's website. The aim of the site is to present documents to the public so that you can exercise your democratic right to have a say over the future of the places where you live, work, and spend your leisure time.

There are often several versions of the relevant documents, and it is vital that you use the correct ones, or your work will be invalid.

For more information on how to obtain these documents see our separate guide: 'Using planning portals to get ecological information'.

You will need:

- The Decision Notice for the site. This will give you the planning conditions, or 'promises' that the developer has made with regard to nature.
- The soft landscaping plans, which will show you what should be where.
- The Landscape and Ecology Management Plan (LEMP), sometimes called the Habitat Management and Maintenance Plan (HMMP) on newer sites. This often contains a map of bird and bat boxes, hibernacula, insect boxes, etc.
- Biodiversity Net Gain calculations (for more recent sites)
- Any plans for SuDS (Sustainable Urban Drainage Schemes), if these are a wildlife-friendly feature on your local development.
- Any separate Biodiversity Enhancement Scheme documents.

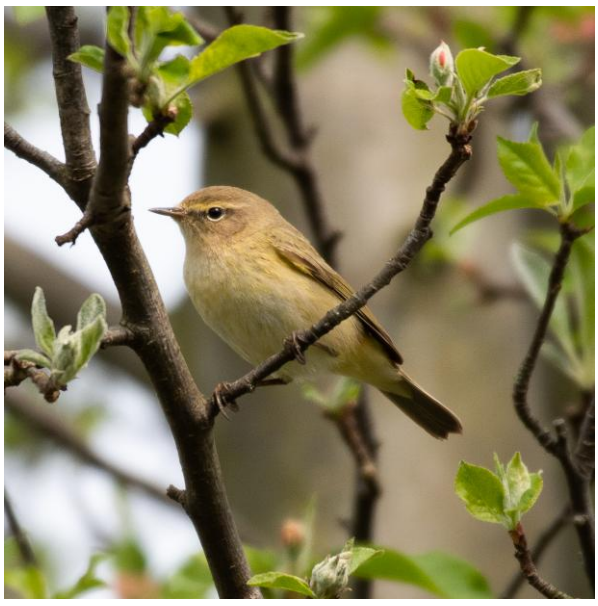
It is also worth noting down some other details for the site. You should find most of these on the Decision Notice:

- The developer's name.
- The size of the development (i.e. number of houses): note that this can sometimes vary, as developers can add/remove housing. Make sure you have the latest information.
- The size of the site (i.e. in hectares or acres). You can often find this on the officer's report or in the 'planning statement' that accompanies the development.
- Date of Outline, Reserved Matters and Full planning applications (and their reference numbers): this helps planning enforcement to know what policies were in place when the development was greenlit.
- The date(s) that you visited the site.

What you are measuring

The principle of the audit is quite simple: you compare the plans and what is there on real life, and measure what is present and what is missing.

Technically, you are not measuring the ecological value of a site, but **developer compliance with planning conditions**.



AUDITING FOR NATURE: THE BASICS

When to do the audit

The audit must be done in the growing season, ideally **between late April and September**.

This is because you will need to assess not only whether a feature is present but whether it is actually alive. So you will need the leaves to be out to do this!

How to use plans

If you have the right equipment and software, you can download the plans onto a tablet and mark off features as present/absent on a screen. However, this can be very difficult in bright light. We found it easier to print out A3 copies of the plans and to use a brightly coloured pen to place a tick or cross beside each feature.

What to ignore

Soft landscaping plans can look incredibly detailed, but there's a lot of information on them that you can ignore. Don't bother counting:

- Anything in private gardens, because it is often impossible to tell whether a feature like a tree is not there because the developer didn't plant it, or because the homeowner has removed it.
- Ornamental planting directly surrounding houses. Soft landscaping plans often include planting that is of low ecological value, which is designed to look attractive rather than to help nature, e.g. laurel hedges, hydrangeas etc. This is often a missed opportunity to put in more optimal species for biodiversity. However, for the purposes of this audit, ignore this kind of planting.

- Anything that you can't access easily (for example, spaces for nature that are fenced off, so you can't see whether bird boxes have been put up or not). Be respectful of private spaces, including driveways.
- Anything that is dangerous or difficult for you to investigate. Safety comes first!
- Retention of trees. This is because there can be complicated stories around the retention or non-retention of trees on a housing estate that require a bit more digging on planning portals!
- Ecologically sensitive lighting schemes, because these require specialist equipment to assess.

What to do when you are uncertain

It is very important that the data you collect is accurate. Planning enforcement teams are very overstretched because of cuts to local government. **A deliberately unfair or skewed assessment can do harm,** drawing their attention away from important breaches elsewhere. If you are not sure that you can assess something, we recommend that you acknowledge that. For example, if you don't have the botanical skills to be confident that you can tell the difference between amenity grassland that has been left to grow and a sown wildflower meadow, record this as a question mark on your plan.

SPECIES-SPECIFIC MITIGATIONS

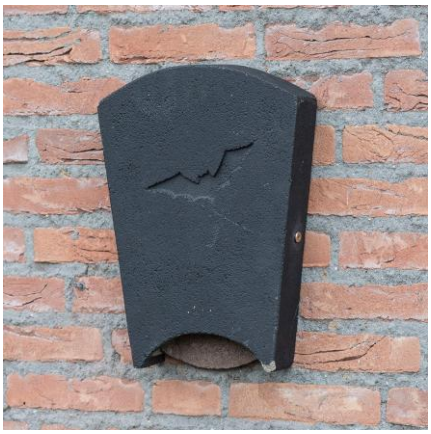
Bat boxes

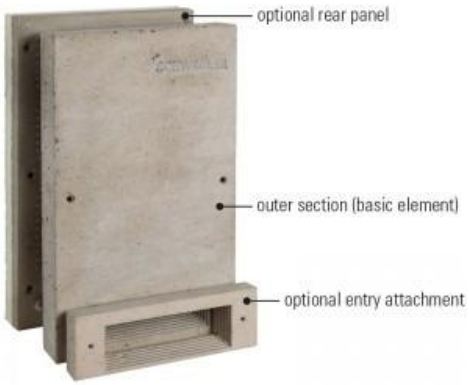
The LEMP or HMMP should tell you how many bird and bat boxes are provided, and it might even have a helpful map to tell you where they are supposed to be. (If there isn't a map, you are going to have to walk very slowly, being very sharp-eyed! Some of these boxes are hard to spot.)

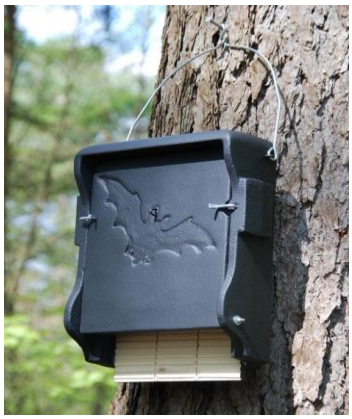
There are four types:

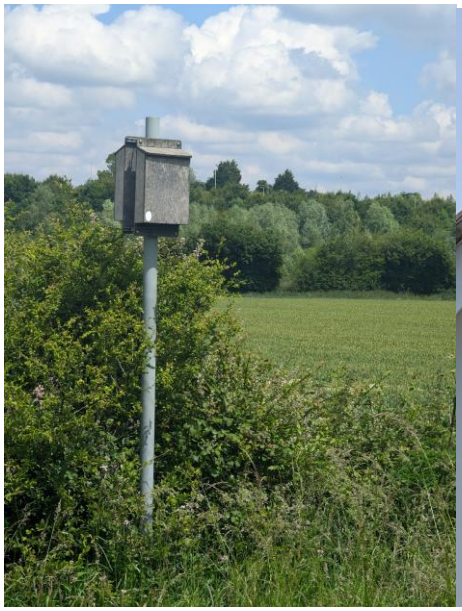
- Integrated bat boxes, which have to be put into the brick walls of houses or the tiles of a roof during construction. These can be easy to confuse with decorative features.
- Non-integrated bat boxes, added to the wall after construction has finished. These are usually more obvious to spot.
- Tree-mounted bat boxes, which are put up in trees near the site.
- Pole-mounted bat boxes, which are mounted on their own pole in open space

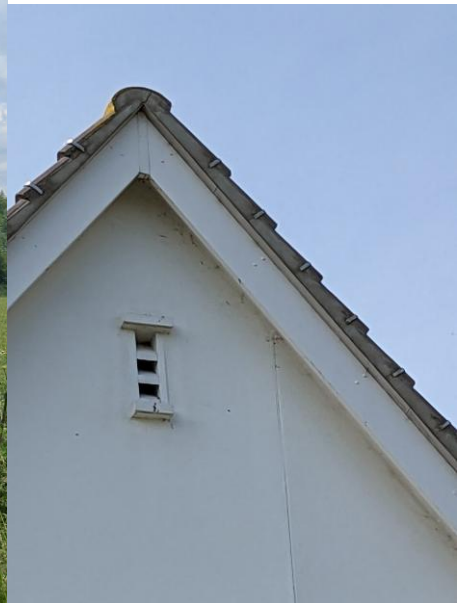
Keep an eye out for the orientation of bird and bat boxes. Sometimes they are installed upside down, which makes them useless! If you can see clearly and confidently that something is the wrong way up, note this fact so that you can report it.











Top row, left to right: Non-integrated bat box, integrated bat box, tree-mounted bat box

Bottom row, left to right: Tree-mounted bat box, pole-mounted bat box, decorative feature on a house (not a bird or bat box).

Counting bat boxes

In theory, counting bat boxes should be straightforward. You need to find out the number of bat boxes that were promised from the planning conditions and/or the LEMP/HMMP and compare this to the number on site.

However, the reality can be a bit more complicated. This is partly because different people might be responsible for installing different kinds of bat boxes. For example, the constructor is probably responsible for ensuring that integrated bat boxes are put into the walls of the houses. But non-integrated bat boxes might be installed by the site's ecologist. You might well find that one group of boxes is present, and one group is missing.

We therefore recommend that you break the boxes down into subtypes. (Though if this all feels too complex, don't worry too much about it!)

Imagine that the LEMP tells you that there are supposed to be 20 boxes on a site (5 integrated, 5 non-integrated, and 10 tree-mounted). However, when you visit, you find none of the integrated bat boxes are there, and only 2 of the non-integrated, and 5 of the tree-mounted are present. The totals are:

Total number of bat boxes required by the LEMP: 20
Total number of bat boxes I found onsite: 7.
Total number of integrated bat boxes required by LEMP: 5
Total number of integrated bat boxes onsite: 0
Total number of non-integrated bat boxes required by LEMP: 5
Total number of non-integrated bat boxes onsite: 2
Total number of tree-mounted bat boxes required by LEMP: 10
Total number of tree-mounted bat boxes onsite: 5
Total number of pole-mounted bat boxes required by LEMP: 0
Total number of pole-mounted bat boxes onsite: 0

Where you can't access an area to see whether there is a box in place or not, take that box out of the calculation. Imagine that your LEMP tells you that there are supposed to be 10 boxes, comprising 2 integrated, 2 non-integrated, and 6 tree mounted. However, when you visit the site, you find that the integrated and non-integrated boxes are there (4 in total), along with three of the tree-mounted boxes, but the other three are in woodland that has been fenced off so that you can't see in to assess whether they are there. We therefore remove those three from the calculation, leaving the totals as:

Total number of bat boxes required by the LEMP: 10 (but could only assess 7)
Total number of bat boxes I found onsite: 4
Total number of integrated bat boxes required by LEMP: 2
Total number of integrated bat boxes onsite: 2
Total number of non-integrated bat boxes required by LEMP: 2
Total number of non-integrated bat boxes onsite: 2
Total number of tree-mounted bat boxes required by LEMP: 6 (but couldn't assess 3)
Total number of tree-mounted bat boxes onsite: 3
Total number of pole-mounted bat boxes required by LEMP:0
Total number of pole-mounted bat boxes onsite: 0

Now your turn! Imagine that your LEMP tells you that there are supposed to be 6 boxes in total, 3 integrated and 3 non-integrated. However, when you visit the site, you find that there are six non-integrated. While the provision isn't exactly what was stated in the LEMP, six boxes were requested and six are onsite. How might you record this?

The answer is on the next page.

Total number of bat boxes required by the LEMP: 6

Total number of bat boxes I found onsite: 6

Total number of integrated bat boxes required by LEMP: 3

Total number of integrated bat boxes onsite: 0

Total number of non-integrated bat boxes required by LEMP: 3

Total number of non-integrated bat boxes onsite: 6

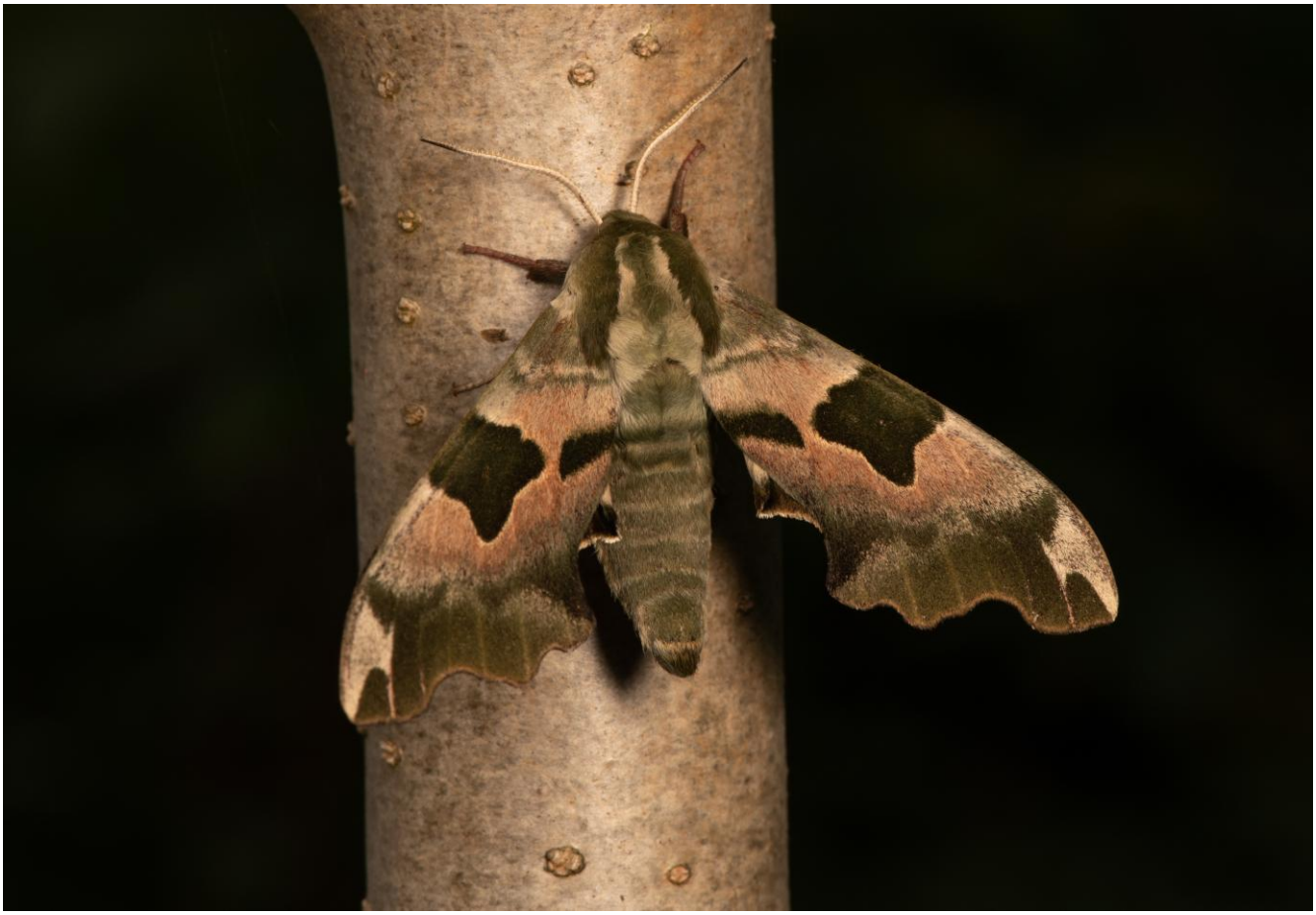
Total number of tree-mounted bat boxes required by LEMP: 0

Total number of tree-mounted bat boxes onsite: 0

Total number of pole-mounted bat boxes required by LEMP:0

Total number of pole-mounted bat boxes onsite: 0

In a case like this, we recommend being flexible. While the provision on-site isn't exactly what was promised, there has been a clear effort to deliver the right number of boxes. We wouldn't report this to a planning enforcement team.



Bird boxes

Everyone knows what a bird box looks like, right?

Well, maybe not. Like bat boxes, there are different kinds of bird boxes making these one of the harder features to assess.

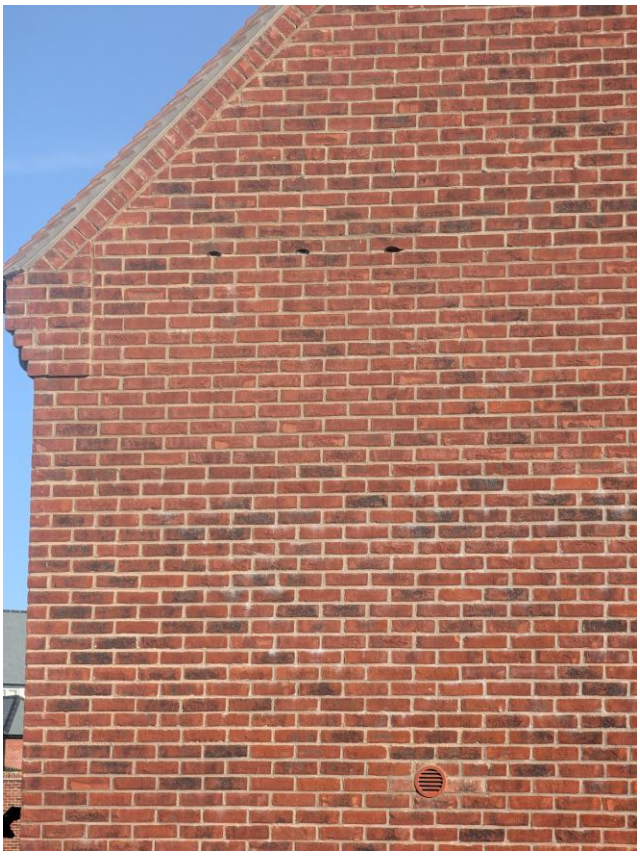
- **Swift boxes** can be integrated or non-integrated. Integrated swift boxes look like tiny lozenge-shaped holes on the brick walls of houses. They often blend into the colour of the brick or render, so can be hard to spot. Non-integrated swift boxes are much larger and are often mounted under the eaves.
- **Sparrow terraces** can also be integrated or non-integrated. Integrated ones look like a line of circular holes. Again, these can be hard to spot. Non-integrated ones are a box with a slightly sloping front attached to a house.
- Rarely, you may come across **house martin cups**, which look like upside-down domes of mud fixed to a horizontal piece of wood, generally mounted under eaves.
- **Tree-mounted bird boxes** are more familiar from the regular garden variety but are often made of wood-effect concrete so that they last longer.

Again, it can be useful different kinds of bird box separately, because different types of boxes are installed by different people on a construction site. Integrated bird boxes have to be installed by the developer during construction, but tree-mounted bird boxes are often installed by an ecologist. Knowing which kind are missing can help pinpoint where the system is failing.

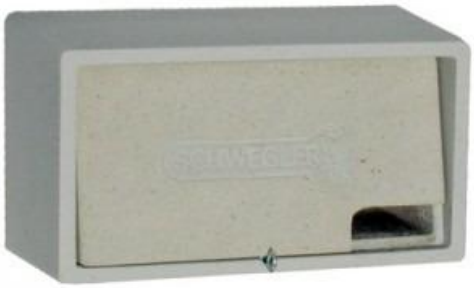
So, for example, imagine the LEMP for your site requires 5 integrated swift boxes, 3 non-integrated sparrow terraces and 10 tree-mounted bird boxes. However, when you visit, you find 2 non-integrated swift boxes, 1 integrated sparrow terrace, and 5 tree-mounted bird boxes.

Using the same principles as you employed for bat boxes, how would you record this? Answer on the next page!

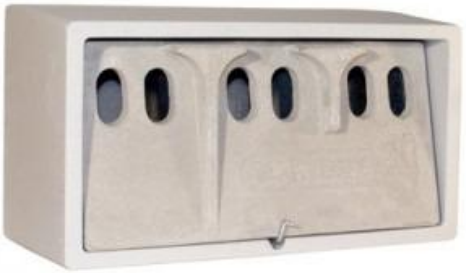
Total number of bird boxes required by the LEMP: 18
Total number of bird boxes I found onsite: 8
Total number of integrated swift boxes required by LEMP: 5
Total number of integrated swift boxes onsite: 0
Total number of non-integrated swift boxes required by LEMP: 0
Total number of non-integrated swift boxes onsite: 2
Total number of integrated sparrow boxes required by LEMP: 0
Total number of integrated sparrow boxes onsite: 1
Total number of non-integrated sparrow boxes required by LEMP: 3
Total number of non-integrated swift boxes onsite: 0
Total number of house martin cups required by LEMP: 0
Total number of house martin cups onsite: 0
Total number of tree-mounted bird boxes required by LEMP: 10
Total number of tree-mounted bird boxes onsite: 5.



Integrated swift boxes can be hard to spot! All you may see is a lozenge-shaped opening.



Integrated swift boxes. The one below can be used as a non-integrated box too. Note that these can also be brick coloured.



Integrated and non-integrated sparrow terraces

Tree mounted nest boxes for small birds

Hedgehog highways

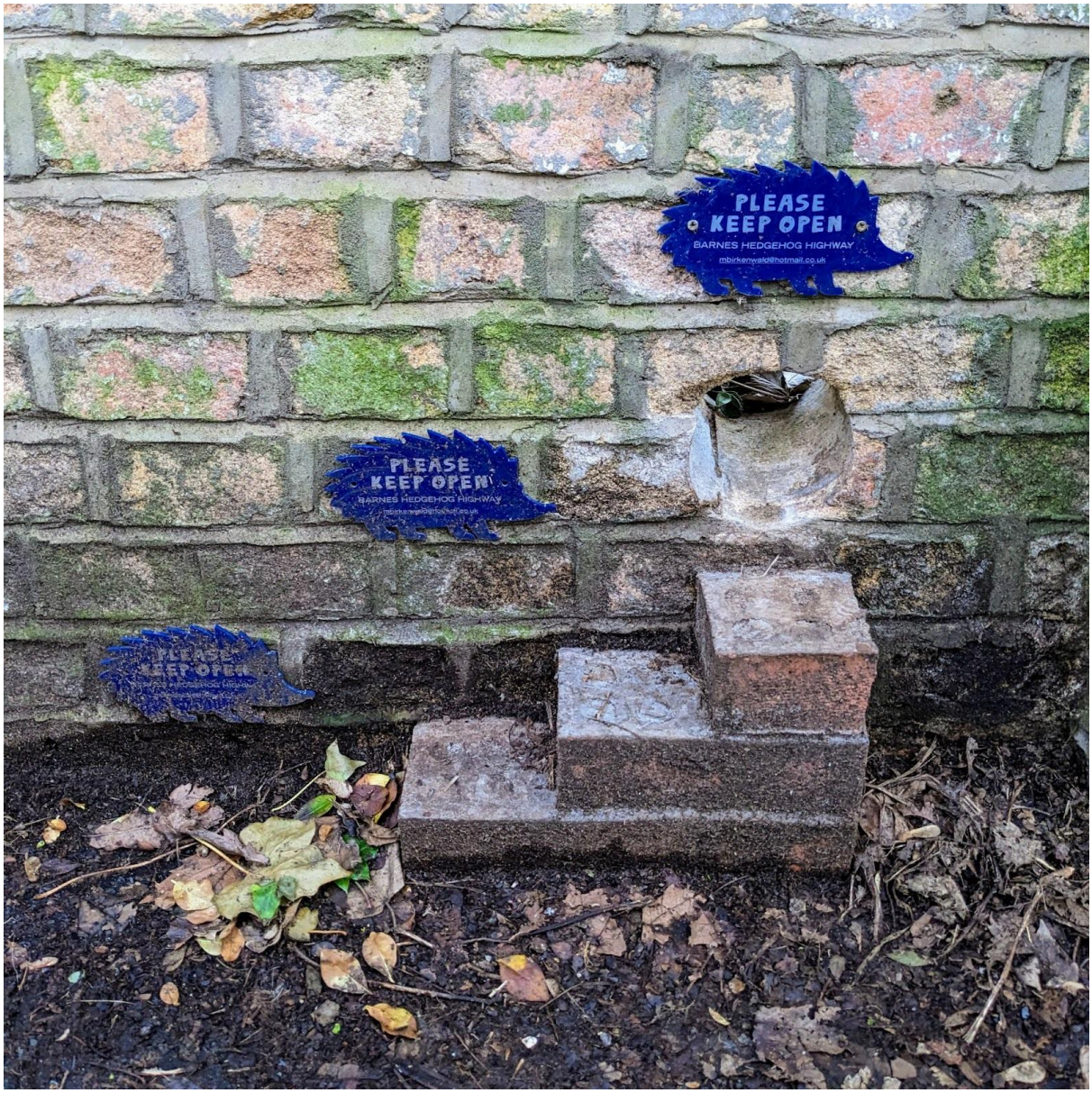
A ‘hedgehog highway’ is a series of gaps in urban boundaries that allow hedgehogs to forage freely across a site. These ought to be installed across all development sites, but sadly they are rarely included.

If your LEMP requires the developer to install a hedgehog highway, there should be a plan showing where fences are to be made permeable. You will be glad to hear that there is no need to look at every single hole individually! Many will be inaccessible in private gardens, anyway, making this an impossible task. Instead, just assess the fences and barriers that you can see in public space and ask whether the developer has taken reasonable steps to make them permeable to these animals.

Ideally, a hedgehog highway will have noticeable gaps and clearly marked signs so that people moving into the new houses realise why there is a gap in their fence and do not block it with bins or other garden items. This is rarely achieved in practice, however. Sometimes, developers just raise garden gates and claim that they have created a hedgehog highway. However, many that we saw were far too small to allow these mammals to pass through. Hedgehogs need a space that is at least 13 x 13 cm to move freely so try to estimate whether the majority of gates onsite achieve this clearance.

Use your judgement to say whether a developer has installed something that will be effective across the new landscape or not. Across a site we count hedgehog highways as **implemented or not implemented**:

Hedgehog highway required in LEMP? Yes/No
Hedgehog highway implemented: Yes/No



Steps and a hole in the wall for hedgehogs on the Barnes Hedgehog Highway, London.

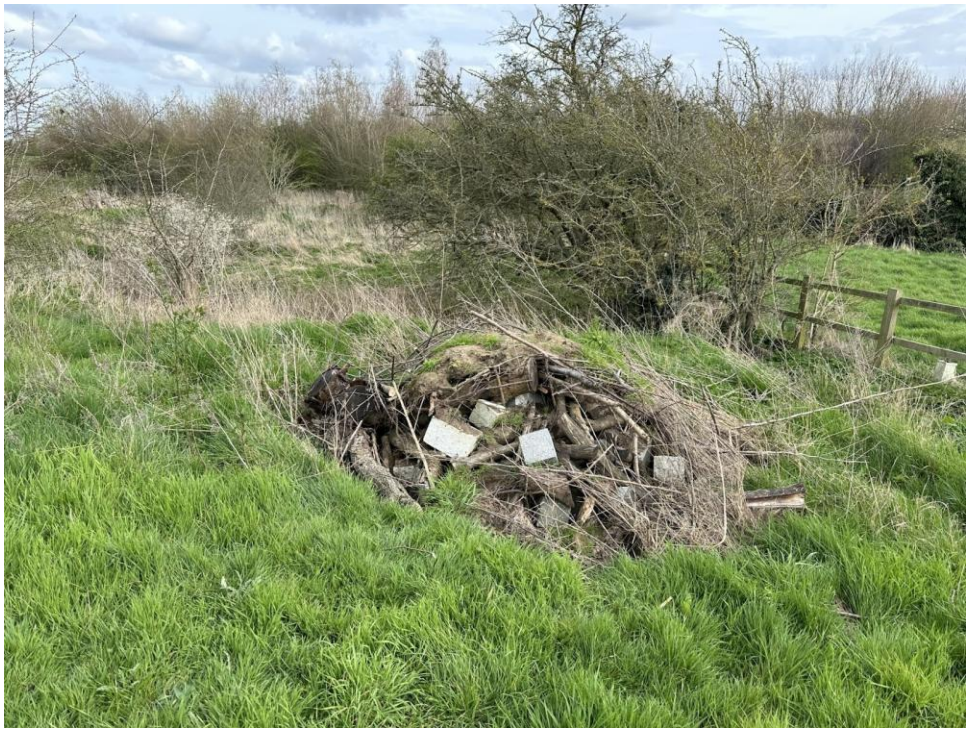
Hibernacula

A hibernaculum is just a shelter where animals can rest over winter. They are used by insects like solitary bees, reptiles like common lizards, and amphibians like frogs and newts.

Hibernacula are really cheap and easy for developers to create. Some are simple piles of branches and wood from trees felled during construction. Others are holes filled with branches, bricks and rocks, and covered with soil.

Find the number of hibernacula required on the site from the landscape plans and the LEMP/HMMP. Score how many are actually there in real life:

Hibernacula required by LEMP: 5
Hibernacula I found onsite: 1



Hibernaculum.

Insect boxes

Insect boxes look a bit like bird boxes, but with much smaller holes. Some may just have a single hole, others have many holes. Lacewing boxes have sides that look like vents, a bit like a small version of the boxes for telecommunications cables on your street.

Again, if insect boxes have been required, they should be marked on landscaping plans or the LEMP/HMMP. Score them like this:

Insect boxes required by LEMP: 4
Insect boxes I found onsite: 2

Lacewing box and insect box

Other species mitigations

One of the advantages of the site-specific approach to ecology is that every site is different.

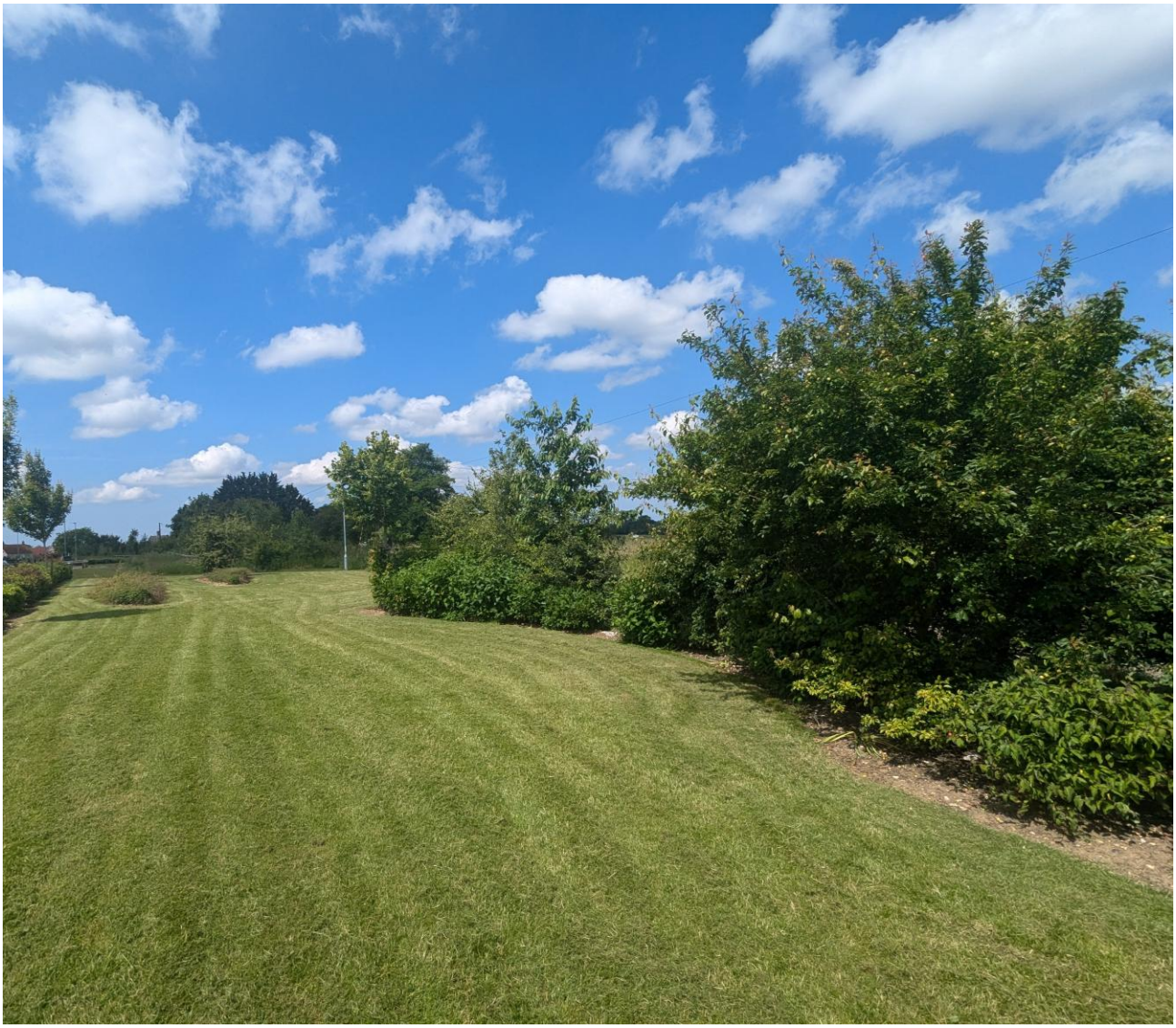
There are many other kinds of species-specific mitigation that our audit doesn't cover because they are not found everywhere. For example, areas with dormice may have specific mitigations for these. Please look at the landscaping plans and the HMMP/LEMP and assess these the same way as you would assess these other features.

HABITAT-BASED MITIGATIONS

This audit does not measure the size of the habitats that are being created, just whether they are present or not. This is because habitat plans for large sites are very complex, many different areas of wildflower grassland, native hedges, or scrub. Measuring all of these would take a very long time.

Instead, we count each area provided as one. For example, if your plan shows an area of amenity grassland with three patches of wildflower meadow around it, and only one is present and the area looks to be about a third of that which should be provided, then we record this as 1 / 3. Note that amenity grassland is not counted here, as it delivers low ecological benefits.

Sometimes landscapers can't put in exactly what is on the plan, for very good reasons for this. **You will need to exercise a bit of commonsense here**. If there are 3 areas of wildflower grassland specified on the plan, but the developer has clearly delivered one large area instead, then count this as 3/3, all present and correct. If, however, the loss of two means that the overall area is significantly decreased, count it as 1/3 or 2/3 depending on what has been delivered compared to what was conditioned. **Try to be as fair as you can**, in recognition of the fact that sometimes there are good reasons why things have to be done differently in real life compared to plans.



An area of species-rich grassland, which has been incorrectly mown

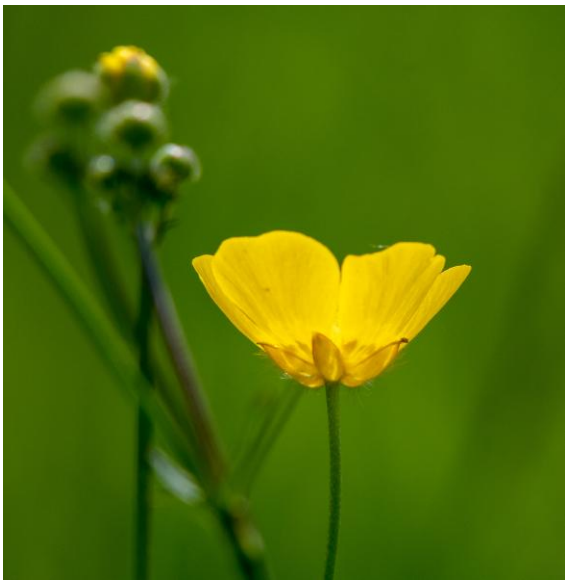
Grasslands

There are lots of different kinds of grassland. The type that should be on your site will be specified in the landscaping plans. In this audit we focus on three kinds that are commonly found on new developments: wildflower grassland, wet grassland, and tussocky grassland.

Grassland is subject to multiple failures of creation and maintenance. At times, it can be very difficult to tell what has happened: did a landscaper fail to sow a seed mix, or was it sown, then the area so poorly managed that species diversity has been subsequently reduced? The outcome in both cases is similar: the loss of species richness, but the agent is different (landscaper/developer versus estate management company).

You can break this situation down into two questions:

1. Can you see some areas of long unmown grass on the site?' (a question that most people should be able to answer) and
2. Is there evidence of a seed mix having been sown (this requires much more botanical skill to answer - if you do not know, don't be afraid to say that you're uncertain.



Wildflower grassland

One of the most common habitats that developers provide is meadow, also known as wildflower grassland. Unfortunately, this is also one of the more difficult habitats to assess. It takes a bit of botanical skill to tell the difference between an area of amenity grassland that has been left unmown and a sown wildflower meadow or area of species-rich grassland that has been protected during construction.

Only give an assessment of whether the area has been correctly sown if you are confident that you have the botanical identification skills that are needed to do this. The seed mix that is often specified is Emorsgate EM2 or EM5.

Number of areas of wildflower grassland specified in the LEMP: 12
Number of areas of long unmown grass that I can see on the site: 6
Number of areas sown correctly: 6 (or I don't have the knowledge to assess this)

Wet grassland

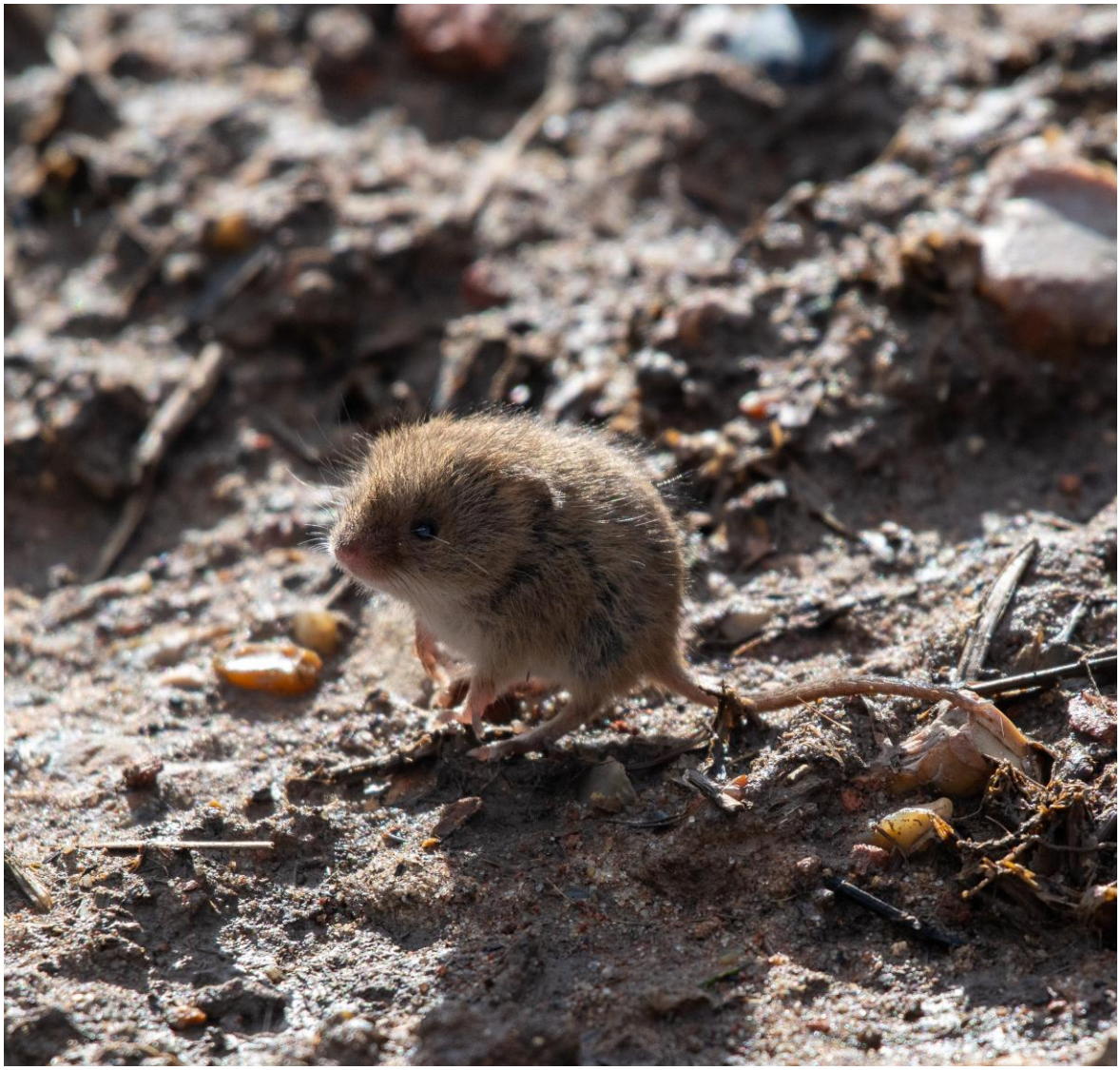
Sometimes landscape architects specify an area of wet grassland around SuDS or ponds to provide additional habitat for amphibians. This is a difficult habitat to assess, demanding more advanced botanical skills. **Only assess it if you are confident that you have the identification skills that are needed - you will need to be able to identify specific grasses**. The specified seed mix for these areas is often Emorsgate EM8 (Appendix 1).

Number of areas of wildflower grassland specified in the LEMP: 6
Number of areas of long unmown grass that I can see on the site: 3
Number of areas sown correctly: 3 (or I don't have the knowledge to assess this)

Long/tussocky grassland

Areas of long grass are sometimes specified for reptiles and small mammals. This is a difficult habitat to assess, demanding a degree of botanical skill. **Only assess it if you are confident that you have the identification skills that are needed - you will need to be able to identify specific grasses**. The seed mix that is often specified is Emorsgate EM10 (Appendix 1).

Number of areas of tussocky grassland specified in the LEMP: 1
Number of areas of long tussocky grass that I can see on the site: 1
Number of areas sown correctly: 1 (or I don't have the knowledge to assess this)



Trees

Assessing trees may well be one of the most time-consuming tasks in your audit. On a large site, there can be hundreds and landscapers do not always put them in the exact place that they are marked on the plan. It is therefore best to count the number that are present and compare this to the total promised for the site on the plans.

Where the development site is large and complex, you might want to break it into smaller areas and count the trees in each, then add up the total.

Count trees in public spaces only - street trees and trees in parks count, but trees in private gardens should not be tallied up. This is because you cannot be sure whether the developer hasn't put them in, or whether the homeowner has taken them out.

An additional complication is that trees die! In the late spring and summer time, when the leaves are out, it is usually obvious when a tree is totally dead. However, trees that are in the process of dying can be harder to assess. As a general rule of thumb, a tree can be counted as dead for the audit if 70-80% (or greater) of its canopy lacks leaves.

A site that is supposed to have 120 trees, but where only 90 have been planted and 30 of those are dead is marked like this:

Total number of trees required in the landscaping plans: 120
Number planted and alive: 60
Number planted and dying or dead: 30
Number missing: 30

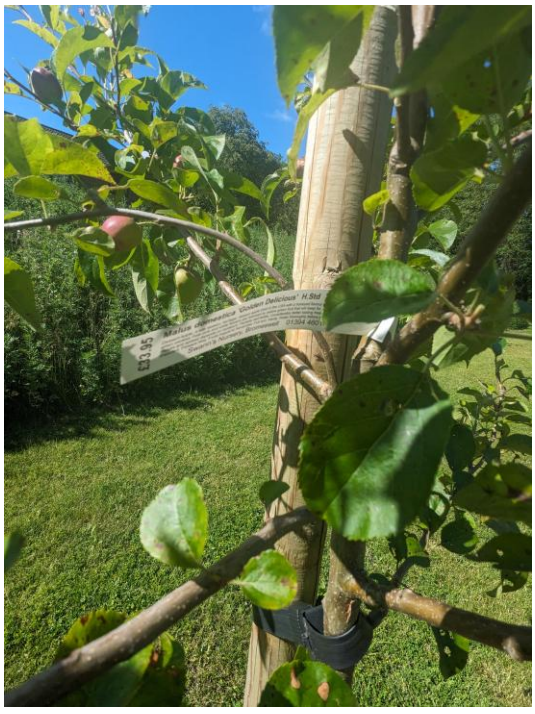
Orchards

Traditional orchards are an increasingly rare habitat type and are particularly threatened by development. We therefore have a special category for orchard trees, as this can be a specific mitigation requested by an ecologist.

Where an orchard has been requested, it should be clearly visible from the landscaping plans, and may also be mentioned in the LEMP. Typical orchard trees may include the obvious fruit trees (apple, pear), along with nut-bearing species. They are often planted close together: a number of apple trees scattered across a wide landscape does not make an orchard!

If there are any labels on the trees, do check these for the variety - one of the things we found in our audit was the substitution of specified heritage trees for common and cheaper supermarket varieties.

Total number of orchard trees required in the landscaping plans: 100
Number planted and alive: 30
Number planted and dying or dead: 60
Number missing: 30



This was supposed to be a heritage apple variety, to replace an older orchard destroyed by the development. It is, in fact, a Golden Delicious.

Native hedgerows

Developments often install lots of small areas of native hedgerow, so it is useful to count these separately. Try to distinguish between ornamental hedges, which often use species without much wildlife value like laurel, from native hedges. You will often find that the planting mix is specified on the landscaping plans, making this an easier task than it might sound.

If there are supposed to be 5 areas of hedgerow, but only two have been planted, with another one in a very unhealthy/dying state, you would enter:

Number of areas of hedge in LEMP: 5
Number present and healthy: 2
Number present and dying or dead: 1
Number missing: 2

If you have the botanical skills to do so, note any differences between the species specified in the LEMP and the species you see onsite. Especially, watch out for any hedges that are supposed to be native that have been replaced by non-native species. Do not worry if you do not have these skills. Sometimes whole hedgerows are missing, and this is very valuable information!

Do look for any obvious problems with hedgerow maintenance. For example, if the reason that an area is unhealthy or dead is that a hedge seems to have been mown with a strimmer after it was planted (something that we found on several sites) it is worth reporting this. It suggests a problem with maintenance, rather than the developer.

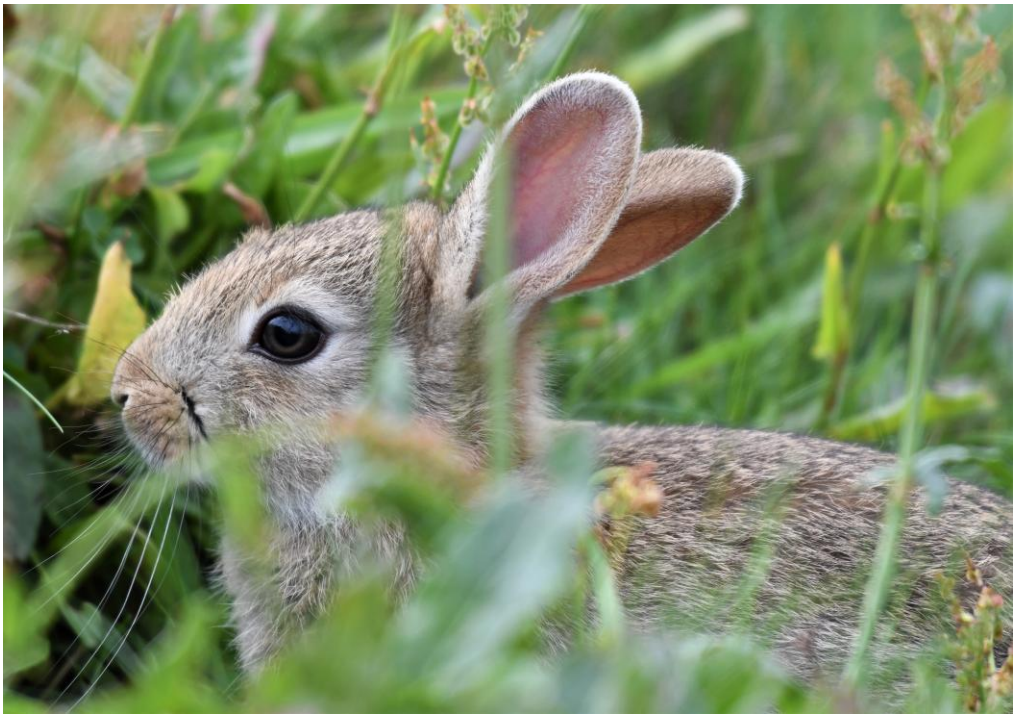
Scrub

Native scrub can be an enormously valuable habitat for wildlife. Many soft landscaping plans specify areas of scrub, though these are sometimes called something else on plans, for example ‘native thicket mix’ or ‘native shrubs’.

Again, please assess this by number of areas. Try to be fair, so if two smaller areas have been replaced with one larger one of roughly the same total size, count this as the two areas being present, 2/2.

Number of areas of scrub in LEMP: 10
Number present and healthy: 2
Number present and unhealthy: 0
Number missing: 8

It is perhaps unlikely that you will find ‘unhealthy’ scrub, but we have included the category to cover the scenario that an area of scrub has been mown with a strimmer after it was planted, as with hedgerows. Do note any maintenance problems you notice.



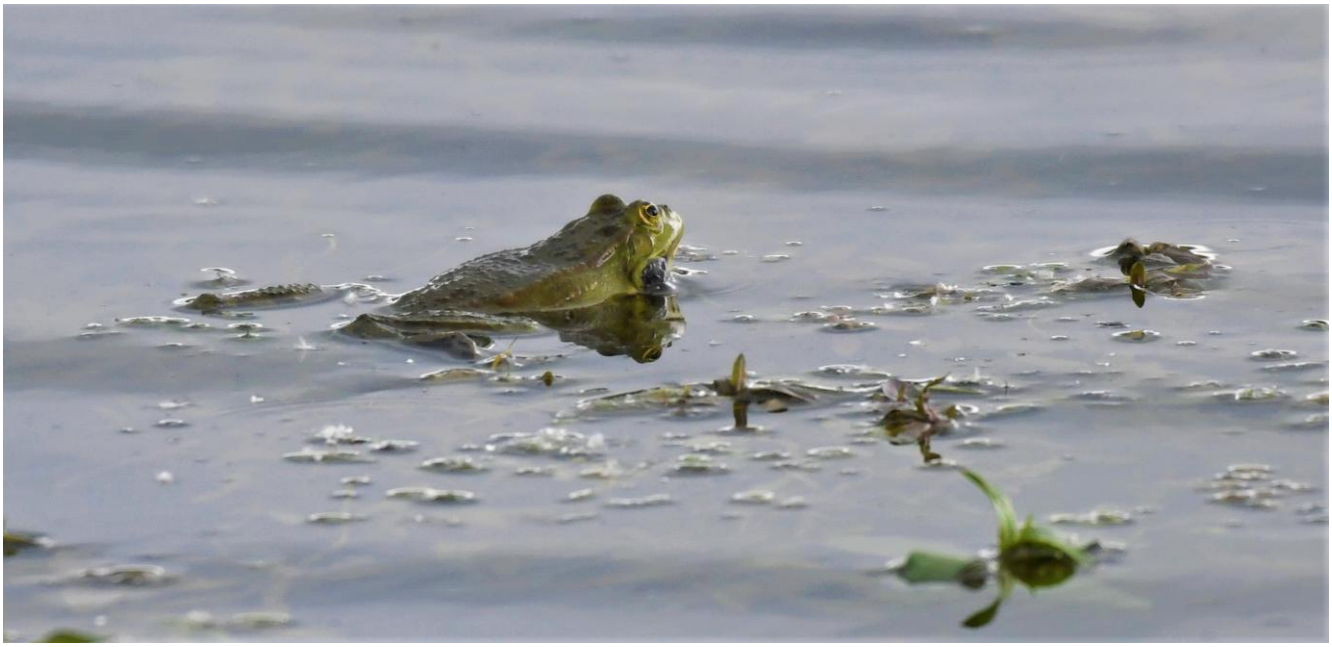
Ponds and SuDS

For the purposes of the audit, think of a pond as just the water that is supposed to be present. We will assess marginal planting and wet grassland separately.

You may need to look up any SuDS design plans and use these alongside the soft landscaping plans. Some SuDS are designed to be dry basins, others are supposed to be wet all year round. You will need to check the detail for your site to see what the original intention was for your scheme. It would be unfair to judge a dry basin as an absent pond!

Imagine a situation where the SuDS plans ask for a permanently wet SuDS pond, which is present, but the landscaping plans for 7 additional wildlife ponds, only two of which are delivered.

Number of areas of permanently wet SuDS in LEMP: 1
Number of areas of permanently wet SuDS onsite: 1
Number of areas of pond in LEMP: 7
Number of areas of pond present: 2



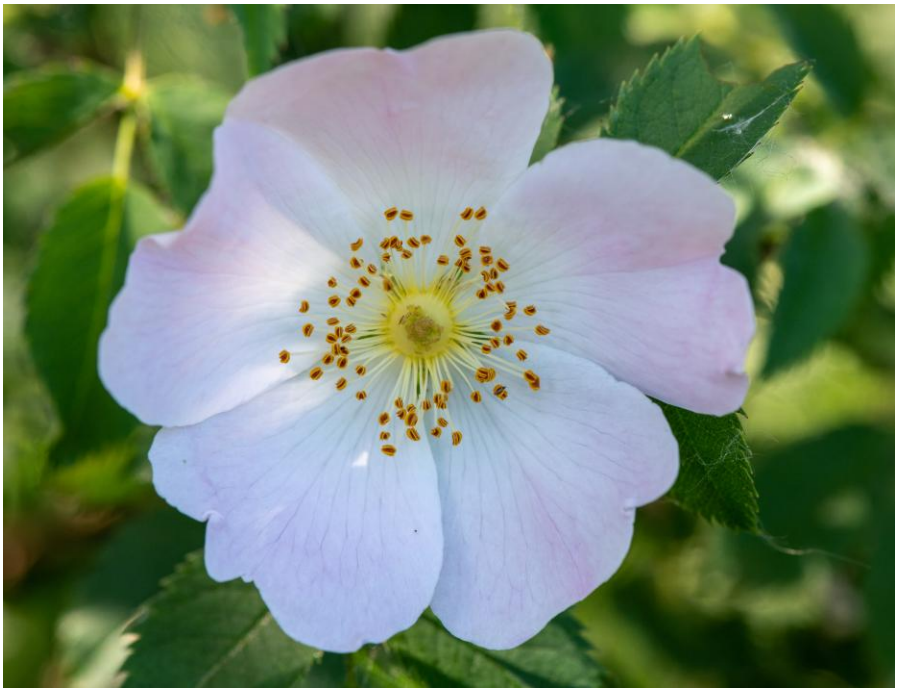
Marginal aquatic planting

Many SuDS plans will specify marginal aquatic planting, i.e. pond plants that thrive in the shallow water around the edge of a pond. Some landscaping plans will specify species like Caltha palustris.

Please assess this by number of areas, so if there are supposed to be three areas of marginal planting, and you cannot see any, then grade this as a 0/3.

Sometimes it can be very difficult to assess marginal aquatic plantings because other vegetation, for example bulrush, now covers the whole surface of the pond. If this has happened, but the pond was intended to have areas of vegetation and areas of open water (a requirement, for example, of many newt species) it is worth reporting as it suggests that something might have gone wrong with the management.

Number of areas marginal planting in LEMP: 3
Number of areas of marginal planting present: 0
Note: Thick vegetation (bullrush) now covers 80% of the pond surface.



Woodland edge plug plants

Woodland can suffer when development happens close by because of 'edge effects', where activity and light from nearby development harm species that were formerly less disturbed in the woodland.

To prevent this, some landscape architects design in woodland edge seed mixes and plug plants to protect existing woodland.

Plug plants are assessed by a fraction based on the number of areas that are present. If there are supposed to be two areas, but only one has been planted, this is recorded as 1/2.
Do record problems with management e.g. 'Woodland edge area no longer exists as it has been mown'.

Number of areas of woodland edge plug planting in LEMP: 2
Number of areas of woodland edge planting present: 1

Woodland edge seed mix

Like woodland edge plug plantings, this is designed to protect the edge of woodland from the effects of nearby development. Typically, the seed mix is tolerant of shade, for example Emorsgate EG9 (Appendix 1). **Only assess it if you are confident that you have the identification skills that are needed - you will need to be able to identify specific grasses**.

Number of areas of woodland edge seed mix specified in the LEMP: 3
Number of areas of woodland edge seed mix that I can see on the site: 1 (or I don't have the knowledge to assess this.

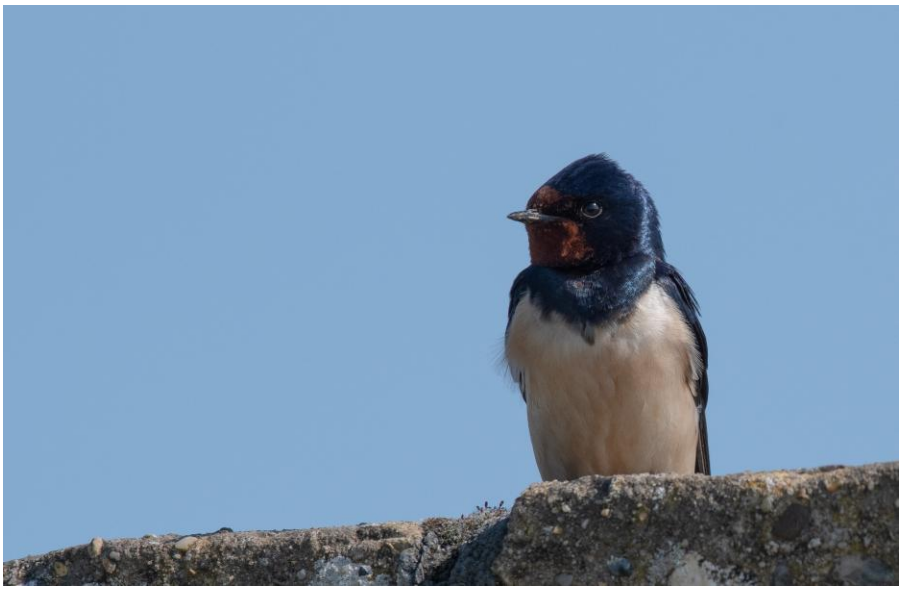
HOW TO REPORT WHAT YOU HAVE FOUND

Once you have audited the whole site, we recommend that you go through your marked-up plans and calculate the totals **as soon as possible.** It is incredible how quickly the memory of a site can fade if you leave this task more than a few hours.

Tally up totals for each of the categories. This should give you a sense of how much is missing. If you found a significant gap between plans and what is there in reality, on the ground, then write to your local planning enforcement team. You can usually find their details by Googling the local authority's name and 'planning enforcement team'.

Please note that many planning enforcement teams are very overstretched, with neither the budget nor the staff to deal with the volume of work that they have. It is not their fault that ecological features are missing - developers, and to some extent estate management companies are responsible for this. **It is therefore important to be polite, getting them onside rather than alienating them.**

That said, enforcement teams should respond and should investigate breaches on behalf of local people. If you do not receive a response within 6 weeks of your request, please contact them again with a similar letter.



SAMPLE TABLE OF FINDINGS

DESCRIPTION	Number conditioned	Number delivered onsite
Bat boxes		
Bird boxes		
Hedgehog highways		
Hibernacula		
Insect boxes		
Wildflower grasslands		
Wet grassland		
Tussocky grassland		
Trees		
Orchards		
Native hedgerows		
Scrub		
SuDS		
Ponds		
Marginal aquatic planting		
Woodland edge plug plants		
Woodland edge seed mixes		

A SAMPLE LETTER TO PLANNING ENFORCEMENT

Dear X,

You may have read in the news about the Lost Nature report. Researchers from the University of Sheffield looked into the failure of developers to comply with ecological planning conditions and found that just 53% of ecological features that were conditioned were actually in place on the ground.

I am a local nature lover and on <date of survey> I audited a development in our local area using the same methodology as the Sheffield team. The site is called: <name of development> and it was built by <developer name>.

The planning application number is <insert >.

I was shocked to find that a number of ecological features were missing. In particular:

<give very brief details of the worst things you found>.

I would very much like your enforcement team to look into these issues, with a view to ensuring that the situation is put right.

I would also like to make the point that this shortfall shows that we need more resourcing for enforcement teams within Local Planning Authorities if we are to deliver the government's planned housing targets without causing significant biodiversity loss.

Appendix 1: Seed mix composition

If you have botanical skills, you can compare what you see onsite with the seed mix that should have been sold. These are very different from supermarket mixes, and are often sold by specialist companies, most frequently Emorsgate. The Emorsgate website contains details of the composition of each mixture. We have included details of the most common mixes here.

Emorsgate EM2 Standard General Purpose Meadow Mixture

EM2 is a complete mix composed of 15% native wild flowers and 85% slow growing grasses (by weight).

Wild flowers – 15%

0.75% Achillea millefolium – Yarrow

2.25% Centaurea nigra – Common Knapweed

1.20% Daucus carota – Wild Carrot

0.30% Galium verum – Lady's Bedstraw

0.60% Knautia arvensis – Field Scabious

1.95% Leucanthemum vulgare – Oxeye Daisy

0.75% Malva moschata – Musk Mallow

2.25% Plantago lanceolata – Ribwort Plantain

1.50% Poterium sanguisorba ssp sanguisorba – Salad Burnet

0.45% Primula veris – Cowslip

1.50% Ranunculus acris – Meadow Buttercup

0.75% Rhinanthus minor – Yellow Rattle

0.75% Silene vulgaris – Bladder Campion

Grasses – 85%

8.50% Agrostis capillaris – Common Bent

29.75% Cynosurus cristatus – Crested Dogstail

25.50% Festuca rubra – Red Fescue

4.25% Phleum bertolonii – Smaller Cat's-tail

17.00% Poa pratensis – Smooth-stalked Meadow-grass

Emorsgate EM5 Meadow mixture for loamy soils

EM5 is a complete mix composed of 20% native wild flowers and 80% slow growing grasses (by weight).

Wild Flowers 20%

0.60% Achillea Millefolium – Yarrow

0.80% Agrimonia eupatoria – Agrimony

1.40% Betonica officinalis – Betony

2.40% Centaurea nigra – Common Knapweed

0.60% Daucus carota – Wild Carrot

1.00% Galium verum – Lady's Bedstraw

0.60% Geranium pratense – Meadow Crane's-bill

0.40% Lathyrus pratensis – Meadow Vetchling

1.60% Leucanthemum vulgare – Oxeye Daisy

0.40% Lotus corniculatus – Birdsfoot Trefoil

1.00% Malva moschata – Musk Mallow

1.60% Plantago lanceolata – Ribwort Plantain

1.00% Poterium sanguisorba – Salad Burnet

1.00% Primula versis – Cowslip

1.60% Prunella vulgaris – Selfheal

2.00% Ranunculus acris – Meadow Buttercup

0.40% Ranunculus bulbosus – Bulbous Buttercup

1.00% Rumex acetosa – Common Sorrel

0.60% Taraxacum officinale – Dandelion

Grasses 80%

8.00% Agrostis capillaris – Common Bent

1.60% Anthoxanthum odoratum – Sweet Vernal-grass (w)

0.80% Briza media – Quaking Grass (w)

52.00% Cynosurus cristatus – Crested Dogstail

11.20% Festuca rubra – Red Fescue

6.40% Phleum bertolonii – Smaller Cat's-tail (w)

Emorsgate EM8 Meadow Mixture for Wetlands

EM8 is a complete mix composed of 20% native wild flowers and 80% slow growing grasses (by weight).

Wild Flowers 20%

0.70% Achillea Millefolium – Yarrow

0.60% Agrimonia eupatoria – Agrimony

0.10% Angelica sylvestris – Wild Angelica

0.20% Betonica officinalis – Betony

3.20% Centaurea nigra – Common Knapweed

1.40% Filipendula ularia – Meadowsweet

0.40% Galium album – Hedge Bedstraw

2.00% Galium verum – Lady's Bedstraw

0.80% Lathyrus pratensis – Meadow Vetchling

0.60% Leontodon hispidus – Rough Hawkbit

1.20% Leucanthemum vulgare – Oxeye Daisy (Moon Daisy)

0.60% Lotus corniculatus – Birdsfoot Trefoil

0.10% Lotus pedunculatus – Greater Birdsfoot Trefoil

1.00% Medicago lupulina – Black Medick

2.00% Plantago lancelata – Ribwort Plantain

0.40% Primula veris – Cowslip

0.80% Prunella vulgaris – Selfheal

1.20% Ranunculus acris – Meadow Buttercup

0.80% Rhinanthus minor – Yellow Rattle

0.60% Rumex acetosa – Common Sorrel

0.30% Sanguisorba officinalis – Great Burnet

0.50% Silene flos-cuculi – Ragged Robin

0.20% Taraxacum officinale – Dandelion

0.30% Vicia cracca – Tufted Vetch

Grasses 80%

4.00% Agrostis capillaris – Common Bent (w)

4.00% Anthoxanthum odoratum – Sweet Vernal-grass (w)

0.80% Carex divulsa subsp. divulsa – Grey Sedge (w)

33.60% Cynosurus cristatus – Crested Dogstail

1.60% Deschampsia cespitosa – Tufted Hair-grass (w)

20.00% Festuca rubra – Red Fescue

3.20% Hordeum secalinum – Meadow Barley (w)

5.60% Phleum bertolonii – Smaller Cat's-tail (w)

5.60% Poa trivialis – Rough-stalked Meadow-grass

1.60% Schedonorus arundinaceus – Tall Fescue

Emorsgate EM10 Tussock Meadow Mixture

EM10 is a complete mix composed of 20% native Wild Flowers 20%

0.80% Achillea millefolium – Yarrow

0.60% Agrimonia eupatoria – Agrimony

0.20% Arctium minus – Lesser Burdock

2.00% Centaurea nigra – Common Knapweed

1.00% Centaurea scabiosa – Greater Knapweed

2.00% Daucus carota – Wild Carrot

1.60% Dipsacus fullonum – Wild Teasel

0.60% Filipendula ulmaria – Meadowsweet

1.80% Galium album – Hedge Bedstraw

0.40% Geranium pratense – Meadow Crane's-bill

0.80% Knautia arvensis – Field Scabious

0.40% Lathyrus pratensis – Meadow Vetchling

1.60% Leucanthemum vulgare – Oxeye Daisy

0.40% Malva moschata – Musk Mallow

1.80% Plantago lanceolata – Ribwort Plantain

0.80% Poterium sanguisorba – Salad Burnet

1.20% Silene dioica – Red Campion

0.40% Vicia Cracca – Tufted Vetch

1.60% Silene vulgaris – Bladder Campion

Grasses 80%

4.00% Agrostis capillaris – Common Bent

8.00% Alopecurus pratensis – Meadow Foxtail (w)

4.00% Carex divulsa ssp divulsa – Grey Sedge (w)

24.00% Cynosurus cristatus – Crested Dogstail

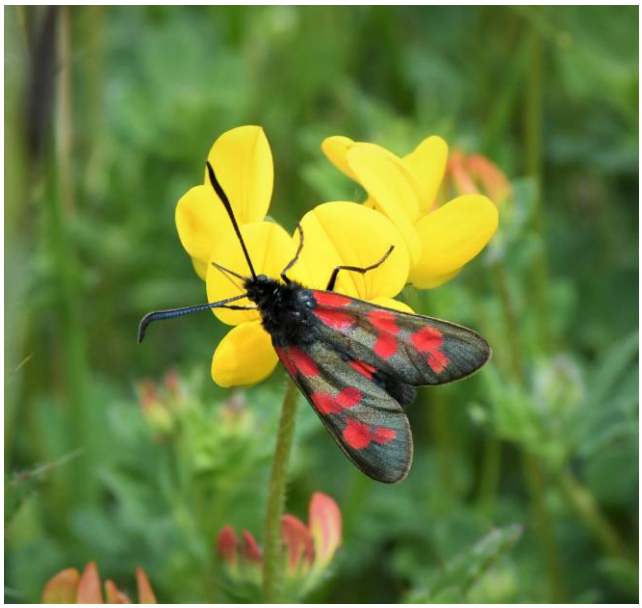
4.00% Dactylis glomerata – Cocksfoot (w)

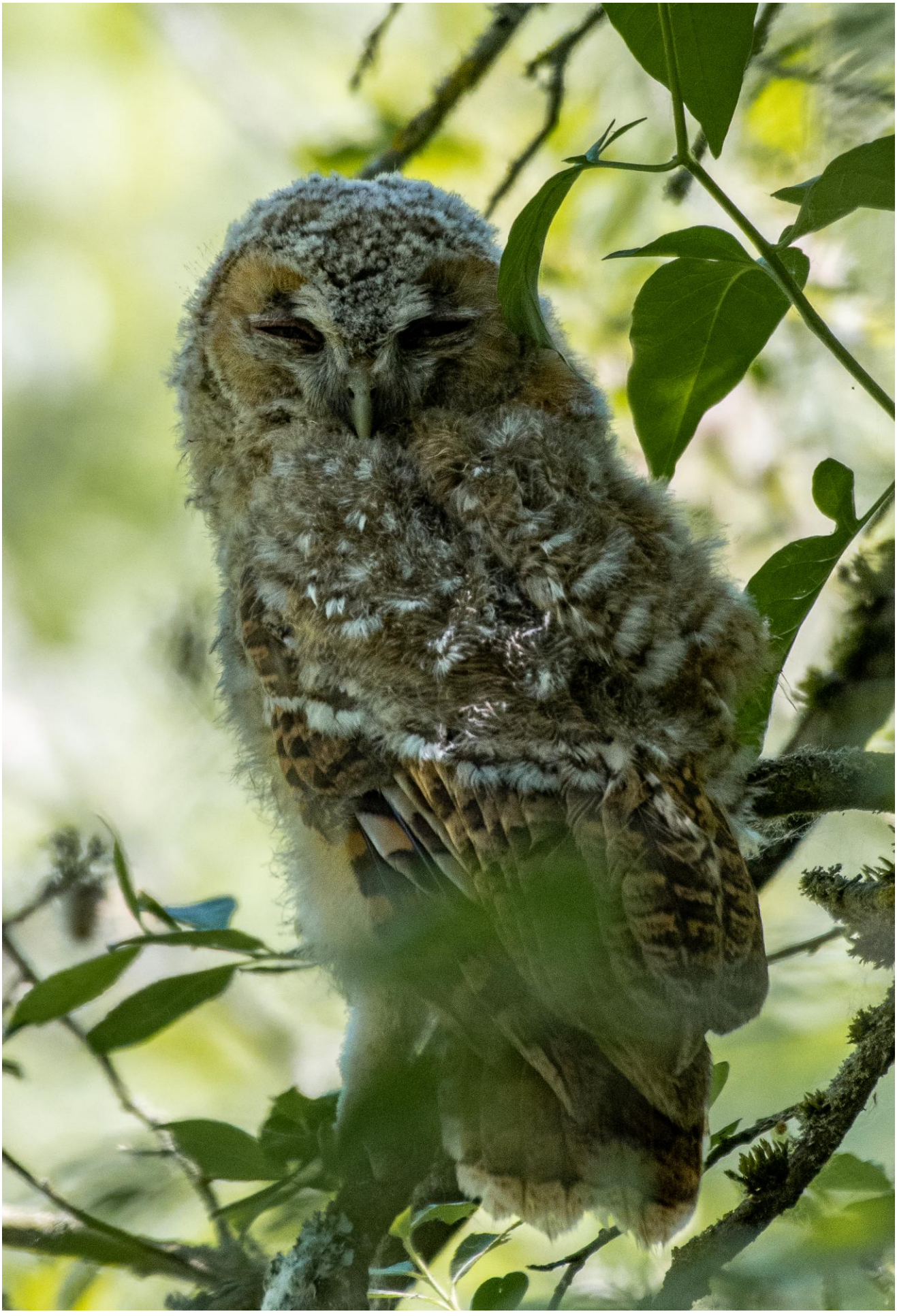
4.00% Festuca ovina – Sheep's-fescue

16.00% Festuca rubra ssp rubra – Slender-creeping Red Fescue

8.00% Phleum bertolonii – Smaller Cat's-tail (w)

8.00% Schedonorus arundinaceus (Festuca arundinacea) – Tall Fescue (w)





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