5 The Viking Great Army north of the Tyne

A Viking camp in Northumberland?

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A site in the Coquet valley, Northumberland, has yielded an extensive Viking-Age metal-detector assemblage, with striking parallels in material retrieved from documented Viking camps in England and Ireland. This paper introduces the site, its topography and small finds and details the results from initial geophysics and lidar surveys. We argue that the site was strategically situated and long-lived, with evidence for occupation spanning the Roman to later medieval periods. We note, in particular, indications of high-status early medieval activity, which stand out in a Northumbrian context. We propose that this regionally important, but hitherto unknown site was occupied in the 870s in connection with the Viking leader Halfdan's campaigns against the Picts. As such, it contributes to growing evidence for the size and character of Viking encampments and the movements across Britain of the Viking *micel here*.

Introduction

Archaeological investigation of potential Viking camp sites has grown considerably in recent years, providing entirely new insights into the size, composition, and activities of Viking armies across Europe, and beyond (Williams 2020; Hadley & Richards 2016; Russell & Hurley 2014). Here, we introduce a further, hitherto unknown camp site with striking resemblance in landscape context, topography, and small finds to other archaeologically surveyed camp sites from England and Ireland. The site at East Thirston, Northumberland, is in the far north of England. Although historically unrecorded, it probably relates to the activities of the Viking army leader Halfdan and his raiding of the Picts and Strathclyde Britons in AD 874/5. We propose that Viking occupation dates to a period following overwintering at Repton in 873/4 and the division of the army into three separate forces, but prior to the establishment of a camp at Aldwark, a site also known as ARSNY (A Riverine Site Near York) (Williams 2020). Our investigations of the site to date include lidar and geophysics survey alongside an assessment of the metal-detector finds, recovered over a period of 15 years. Together, the data indicate a strategically situated, and long-lived high-status site that stands out in a Northumbrian context. We suggest that East Thirston was an important centre of Roman activity and housed high-status early Anglo-Saxon graves, prior to being used as a temporary camp site by Viking Great Army members. We hope that this introduction to the site contributes to the ongoing discussion about the size, character, and function of Viking camps, the movements of the Viking *micel here* and the military infrastructure that underpinned raiding and conquest.

The site and its landscape context

East Thirston, Northumberland, nestles in the valley of the River Coquet, which flows from its source in the Cheviot Hills east towards its mouth into the North Sea near Amble (Figure 5.1). Within Northumbria, the Coquet valley was a focus for early Anglian/ Anglo-Saxon settlement, comprising a settlement core of 'anciently cleared long-tilled land' (Roberts 2010: Fig. 13.2). Although direct evidence for early medieval occupation is slim, the upper Coquet valley housed the important church of Rothbury, famous for its elaborate early ninth-century stone cross (Cramp 1983: 278; 1984: 217–21), while the lower Coquet valley included the *vill* and church at Warkworth. The name East Thirston is obscure, but may derive from the Old English 'Thraesfrith's farm/settlement' (Watts et al. 2004: 608). It lies at a strategically important stretch of the River Coquet, near a late medieval crossing point to the village of Felton (another Old English name, derived from *feld*, meaning open country or arable land, and *tun*, farmstead or village) (OS grid reference NZ194996). Here, in the north of Felton, a recent strip and record excavation revealed a rural Anglo-Saxon settlement. Radiocarbon dates indicate occupation between AD 620–760 (68% probability) and AD 780–985 (95% probability), suggesting the possibility that it was occupied during the proposed Viking activity at East Thirston (Muncaster 2018).

Figure 5.1 The location of East Thirston.

Due to the confluence of several smaller burns (Back Burn from the north and Thirston Burn from the south) and rising land directly to the east, this part of the Coquet valley is much wider than the surrounding areas. The site at East Thirston sits at approximately 53 m above sea level. As a result, it affords extensive views towards the coast, stretching, today, as far south as Blyth, north towards Felton/Acton, and south towards Eshott. It was also well-connected by overland routes. The Roman road known as Devil's Causeway crossed the Coquet around six kilometres west of East Thirston (just east of Brinkburn). This relict routeway would have provided access both to the lower Tyne valley (to Corbridge, where it connected to both Dere Street and Stanegate) and routes into northern Northumbria as far as Berwick-upon-Tweed.

The site lies around 750 m south of the River Coquet. It is delimited to the north, south, and west by Thirston Burn, a deep river, prone to flooding, which forms a tributary of the Coquet at Mouldshaugh. Keeping in mind its elevated position, East Thirston forms a conspicuous promontory of high ground, with steep natural drops of between 20 and 30 metres on three sides. Although not directly on the River Coquet today, aerial photography and the Digital

Terrain Model (DTM) of the area from lidar data reveal a 600-metre-wide floodplain immediately north of the site and a more limited floodplain to the south/south-east, carved out by fluvial action (Figure 5.2). This fluvial action has also deposited a number of alluvial deposits and river terraces, forming the superficial deposits and soils in these areas, in contrast to the higher elevated areas where soils have developed upon Devensian glacial till deposits.

Figure 5.2a Lidar (1 m resolution) data displayed as a Digital Terrain Model overlaid onto 1:25,000 scale OS map, showing the locations of Roman, Anglo-Saxon and Viking-Age metal-detector finds recorded by the PAS.

Figure 5.2b Lidar data (1m resolution) showing the extent of the floodplain and the distribution of lead gaming pieces recorded by the PAS.

Future geoarchaeological analysis is planned to better understand and date these landscape features, but it is possible that the site was once surrounded on three sides by an expansive river system: the widest point of the Coquet. With the exception of two Roman-period coins, the only metal-detector finds from the floodplain surface are late or post medieval in date, which may suggest a change in the character and use of this area at that point. If this was the case, East Thirston would have been a riverine site on an elevated promontory, with access to a wide stretch of open water: an ideal location for keeping and manoeuvring a fleet. Topographically, it bears resemblance to ARSNY, located on a 10 m high ridge surrounding a floodplain on the bank of the River Ouse (Howard 2020), Repton, which sits in a wide floodplain of the River Trent, and Torksey, an island site surrounded by marsh, also on the banks of the River Trent (Hadley & Richards 2016: 31–3). Woodstown, near Waterford, Ireland, is also a riverine site, located on the eastern bank of the River Suir, with a wetland area forming the southern boundary and a defensive ditch on the landward side (Hurley 2014: 348).

The eastern extent of the site at East Thirston is not yet clear and thus the overall size is unknown. At a minimum, the metal-detector finds span an area of just over 15 ha. Hypothesising an eastern ‘boundary’ where paleochannels to the north and south cut into the site, in effect causing the promontory to narrow (Figure 5.2), the size would be more like 49 ha. This range is smaller than the site of Torksey (c. 55 ha) (Hadley & Richards 2016: 26) but is more comparable with ARSNY (c. 31 ha) (Williams 2020: 92). The enclosed areas at Repton and Woodstown comprise just 1.46 ha and 2.9 ha respectively (Hurley 2014: 348), although it is now doubtful that Viking occupation was limited to the enclosed areas (see Williams 2020: 42, 89 for a discussion). ARSNY is the most appropriate comparison for East Thirston as both sites likely relate to the activity of the Viking army in Northumbria following its division into three parts upon leaving Repton (Williams 2020: 92).

In April 2018, we conducted magnetic gradiometer and ground penetrating radar (GPR) surveys over targeted areas within the site. Covering an area of just over 6 ha, the magnetic gradiometer survey revealed a number of anomalies that were not visible from the surface or from available aerial photography (Figure 5.3). These included modern pipelines, earlier field boundaries, remains of ridge and furrow cultivation, and, within the ridge and furrow, four ring-shaped anomalies. These circular anomalies have either dipole or elevated positive magnetic contrast signatures, dipole indicating a strong ferrous response from metallic objects and elevated positive contrasts indicative of possible pits, or areas of deeper topsoil/objects with higher magnetic susceptibility. Some are correlated with aerial photography (July 2009), exhibiting differential moisture holding patterns in the ripening crop. This suggests that these are most likely pits. The four ring-shaped anomalies range in size between 8 and 20 m but are faint due to heavy truncation from cultivation. GPR surveys targeted three main areas within Field 1, confirming the ring-shaped anomalies from the magnetic data and also showing a rectangular anomaly apparent only in the aerial imagery, potentially indicating a rectangular structure in the subsurface at around 40 cm depth. The geophysical surveys did not reveal evidence for a defensive ditch, as at Repton and Woodstown (Biddle & Kjølbye-Biddle 1992; Russell 2014: 28). However, if there were a ditch, it would perhaps lie further east where paleochannels cut into the site, and this area was not surveyed (Figure 5.2). Nevertheless, the potential rectangular structure is of interest. Further, more detailed, archaeological survey is planned in order to refine the chronology and characteristics of this site, alongside targeted excavation to evaluate any archaeological remains.

Figure 5.3 The magnetic gradiometer data overlaid onto the First Revision OS map, showing the location of lead gaming pieces recorded by the PAS. (1894–97).

Metalwork

The site at East Thirston has been metal-detected for a period of 15 years by a small local team. This activity has revealed a remarkable assemblage of artefacts, including the richest collection of metal-detected early medieval artefacts in Northumbria (Figure 5.4). The assemblage is exceptional in a regional context, both in terms of the quantity of material and the long chronology of activity indicated; it stands apart from other metal-detector identified sites in Northumbria, including the early Anglo-Saxon cemeteries at Etal (Collins 2010: 387) and Eslington (Collins and Turner 2018) and the predominantly late Roman assemblage from Great Whittington (Collins and Biggins 2013).

Figure 5.4 Selection of Roman, Anglo-Saxon and Viking-Age metal-detector finds from East Thirston:

a Roman headstud brooch (NCL-512AFA);

b Denarius of Antonius Pious (NCL-E6B7C6);

c Anglo-Saxon belt mount (NCL-659C32);

d Merovingian *tremissis* (DUR-184009);

e Viking-Age lead gaming piece (NCL-7C3F94);

f Trewhiddle-style strap-end (NCL-781B67);

g Copper-alloy styca of irregular type (NCL-4E6B72);

h Glass inset lead weight (DUR-8BB722)

Scale: Images (d) and (g) 2:1. All other images 1:1.

While most of the more recently discovered finds have been reported to the PAS, some older material is in private possession, although the finders have provided the present writers with descriptions of both artefacts and find locations.[1] The Viking-Age items include stycas, strap-ends, lead gaming pieces, and inset lead weights, and have clear parallels with metalwork assemblages at Torksey and ARSNY, while the earlier material indicates high-status occupation in both the Roman and early Anglo-Saxon periods. There is no evidence of clustering – material from all periods is co-terminus, spread across the detected fields (Figure 5.2).

(a) Roman-period finds

With the exception of a Neolithic arrowhead and a Bronze Age scraper, the earliest items discovered at the site belong to the Roman period. They comprise three brooches, two further dress accessories, a vessel fitting, and ten coins. The dress accessories date to the early Roman period. They include a copper-alloy finger ring with an oval setting for a now-missing gemstone, dating from the first to third centuries AD (NCL-CA1CA5) and a button-and-loop fastener of Wild's class III, dated to the late first to second century (NCL-62CF78; Wild 1970: 140). In addition, there are three copper-alloy brooches: a Colchester-derivative brooch (NCL-789E65), a fragmentary early dragonesque brooch with turquoise and yellow enamel inlay (NCL-D8DCE6; Collins 2014: 168), and the head of a blue-and red-enamelled headstud brooch

[1] We are especially grateful to Andrew Clark for information on the finds.

(NCL-512AFA) (Figure 5.4a), none of which post-date c. AD 200. A petal-shaped mount may have once decorated a vessel or harness fitting (NCL-740961; Collins 2014: 168).

By contrast, the ten Roman coins from East Thirston have a longer chronology, spanning the first to late fourth century AD (Table 5.1, Figure 5.4b). There is a concentration of second-century coins in the name of Antoninus Pius, suggesting a peak of activity during the period of construction of the Antonine Wall between the Forth and the Clyde (AD 139–60). It may be that Roman occupation at Thirston reflected military attempts to gain control of the land between the Antonine and Hadrian's Wall at this time (Collins 2014: 171). The nature of the assemblage contrasts with that from rural farmsteads (compare Proctor 2009) with the headstud brooch and button-and-loop fastener having military associations (McIntosh 2011: 166, 177; Wild 1970: 146). A military association, perhaps in tandem with a market function, seems highly likely; however, no fort structures have thus far been identified, despite the ideal landscape setting afforded by East Thirston.

Significantly, a substantial hoard containing 99 silver denarii was deposited about a mile to the south-east of the site sometime after AD 227 (NCL-C39B46). While first- and second-century material is relatively commonplace in Northumbria, third- and fourth-century items are rare north of Hadrian's Wall, reinforcing the exceptional nature of the archaeological record at East Thirston (Collins 2014). Assuming a link to East Thirston, this suggests a highly significant and long-lived Roman-period site with military and market associations in the far north of England. It reinforces the strategic position of the site, highlighting the Devil's Causeway as the most likely approach to the site.

No.	**Description**	**Date minted**	**PAS ID**
1–2	Two unidentified Roman copper-alloy coins	-	NCL-3639E0
3	A copper-alloy sestertius, probably of Vespasian	69–79	NCL-D89184
4	A silver denarius of Antoninus Pius, from his fourth consulship (Figure 5.4b)	138–161	NCL-E6B7C6
5	A copper-alloy sestertius of Antoninus Pius, minted in Rome	138–161	NCL-007D36

No.	Description	Date minted	PAS ID
6	A copper-alloy sestertius of Antoninus Pius, minted in Rome, pierced	138–161	NCL-D75B95
7	A copper-alloy sestertius of Faustina, probably minted in Rome	138–161	NCL-EEE757
8	A silver denarius of Commodus, minted in Rome	190–191	NCL-C80222
9	A copper-alloy barbarous radiate of uncertain issue	275–285	NCL-256C36
10	A copper-alloy nummus of the House of Valentinian	364–378	NCL-2580B3

Table 5.1 Roman-period coins from East Thirston.

(b) Early Anglo-Saxon finds

In a Northumbrian context, the five items of early Anglo-Saxon metalwork currently recorded from East Thirston represent a substantial assemblage (Collins 2010). All items relate to sixth-century Anglian dress, and likely indicate the disturbance of a hitherto unrecorded early Anglo-Saxon cemetery, adding to the small number of fifth- to sixth-century burial places known from the region (Lucy 1999; Collins 2010). Two items, a fragmentary girdle hanger and the arched bow of a cruciform brooch, are typical of female Anglian dress, whereas the exact function of a third fragmentary item is uncertain, but may belong to a second girdle hanger (NCL-F39FF6; NCL-F4A9D6; NCL-1C2914). Of particular interest is an incomplete copper-alloy belt mount with white and blue millefiori-infilled T-shaped cells (NCL-659C32) (Figure 5.4c). The mount is now missing its rim and back-plate, but belongs to Marzinzik's buckle type II.15a, a type ultimately related to Continental sword belt buckles and dated to the sixth to early seventh centuries (Marzinzik 2003: 43–4). Better preserved parallels form part of high-status belt suites in both male and female Anglo-Saxon graves, including at Buckland, Dover, Kent, and Alfriston, Sussex (ibid.). It is possible that the mount from East Thirston was used in connection with a copper-alloy buckle pin, found nearby (NCL-CA3BB1).

The final item belonging to this period stands out in both a regional and national context. It is a gold Merovingian *tremissis*, with a left-facing bust on the obverse and a chalice on the reverse

(DUR-184009; Naylor 2020: 355, Fig. 1c) (Figure 5.4d). Probably minted in the Lozère region of western France, it is part of the so-called 'national' series, which ran from the 570s to 670s (Naismith 2017: 43). In addition to examples from hoards and graves, there are over 150 single finds of Merovingian gold coinage in England, spread evenly over eastern England as far north as Yorkshire and with a marked concentration in Kent (Williams 2010). A find location this far north is thus notable – the East Thirston *tremissis* is the only genuine example known from Northumbria, although a plated forgery was excavated from a building at the *villa regia* of Yeavering and a *tremissis* was recently found in Coldstream, in the Scottish borders (Hope-Taylor 1977: 182–3; Hunterian Collection GLAHM:37209). This small corpus demonstrates the ultimate connectedness of this northern zone with southern England and/or the Frankish world and reinforces the high-status nature of early Anglo-Saxon activity at the site.

How the *tremissis* from East Thirston was used is unclear. Early evidence for Merovingian *tremisses* in England is largely derived from graves, suggesting a predominantly symbolic value. Although the other, roughly contemporary finds from the site are suggestive of a cemetery, the coin shows no evidence of re-use as jewellery as is often the case with grave finds (Williams 2006: 188). The large number of single finds now indicates that gold coinage also circulated as high-denomination currency, and it is possible that its presence at East Thirston reflects accidental loss whilst in commercial use (Williams 2010).

(c) Viking-Age finds

Among the metal-detected finds there is a clear concentration of Viking-Age coins and artefacts. They relate to dress, leisure activities, and trade and exchange and are thus representative of assemblages from other known or postulated camp sites.

The site at East Thirston was first drawn to our attention by a group of lead gaming pieces. In total, between 12 and 14 lead gaming pieces have now been recovered from the site, seven of which are currently recorded on the PAS (NCL-7C3F94; NCL-C12321; NCL-CFFC7; NCL-FBC856; NCL-795828; NCL-CFFFC7; DUR-5F614C) (Figure 5.4e). These are hollow, crudely made sub-cylindrical lead items, often with three protrusions at the top. Hadley and Richards suggest that they were first manufactured at Torksey and, while this interpretation seems unnecessarily narrow, they are a recurring feature at known winter camp sites and may be interpreted as one of the hallmarks of the Viking Great Army (Hadley & Richards 2018: 3). They are recorded in large numbers at Torksey (Hadley & Richards 2016: Table 1) and, in smaller quantities, at both Repton and ARSNY (Geoff Bambrook, pers. comm.). Four items have also been recorded at Hedeby and Füsing (Schleswig), where they have been interpreted

as belonging to warriors returned home from military campaigns in Western Europe, and subsequently employed to garrison the Danevirke defences (Dobat 2017). Their widespread occurrence in Viking military contexts suggests army members played board games such as *mill* or *hneftafl* during periods of downtime and/or deployed the gaming pieces in gambling, potentially of newly acquired wealth (Dobat 2017; Hadley & Richards 2018).

Also among the Viking-Age material are copper-alloy items relating to Anglo-Saxon dress, including three dress pins and seven strap-ends (Figure 5.4f). The seven strap-ends date to the ninth century, all being classified as Thomas Type A1a strap-ends, with a split end secured by two rivets, a terminal in the form of an animal head as seen from above, and a single field of Trewhiddle-style decoration (Thomas 2000: 71–3; 2001: 39–40, Fig. 4). According to Gabor Thomas, this sub-type is geographically widespread, but was particularly popular in northern England, with examples concentrated in Lincolnshire, the Humber, and North Yorkshire (Thomas 2000: 228; 2001: 40, Fig. 4.1b). It may be that the strap-ends from East Thirston originated in northern England, and reached the site having been brought north following the army's relocation from Repton to the Tyne. Notably, a type A1a strap-end was contained in the hoard from Talnotrie, Dumfries and Galloway, deposited c. 875, a hoard that may have been deposited during Halfdan's raids against the Picts and Strathclyde Britons (Graham-Campbell 1995: 4, Fig. 4; Brooks & Graham-Campbell 2000: 89–90). Class A1 strap-ends are only broadly dated to the ninth/early tenth century (Thomas 2006: 157, 176), but the item from the Talnotrie hoard provides evidence for the use for Trewhiddle strap-ends in a Scandinavian context in northern Britain in the 870s.

The homogenous character of the strap-end assemblage from Thirston is paralleled at ARSNY (Williams 2020: 50) and, although they have not yet been published in detail, the majority of the 130+ ninth-century Anglo-Saxon strap-ends from Torksey are likewise decorated in the Trewhiddle style (Hadley & Richards 2016: 57, Fig. 28). Why should there be such a preponderance of this particular type of Anglo-Saxon dress accessory at Viking camps? At Thirston, none of the strap-ends have been deliberately cut, and most are very worn, giving the impression of having been lost while on clothing. Indeed, one item appears to preserve textile remains in its split end (NCL-CA544). Hadley and Richards suggest that the material may reflect the presence at camp sites of Anglo-Saxon hostages, slaves or, potentially, alliances acquired during campaigning, or, alternatively, the adoption of Anglo-Saxon dress cultures by Viking army members (2016: 57). Any, or all, of these explanations are possible. Certainly, evidence at both Torksey and ARNSY for the manufacture of strap-ends suggests that they were valued utilitarian items (Williams 2020: 53; Hadley & Richards 2016: 52, Fig. 22). Class

A strap-ends have a light and rather flimsy construction, and one of their potential functions was to fasten the end of straps on purses or shoulder-bags (Thomas 2000: 266). It is possible that they met a particular clothing need of army members required to keep newly acquired wealth about their person.

In addition to the strap-ends, East Thirston has also yielded three copper-alloy dress pin heads, all with broken shafts (NCL-D02E07; NCL-FEA2F0; NCL-FB9B50). The East Thirston assemblage includes one biconical pin head and two globular pin heads, one of which (NCL-FEA2F0) is decorated with multiple ring-and-dot motifs. These are common Middle Anglo-Saxon pin-head forms, broadly dated to the eighth and ninth centuries: their use at the rural settlement at Cottam in the East Riding of Yorkshire spans both the Anglian and Anglo-Scandinavian periods (Williams 2020: 58; Haldenby & Richards 2009). The pins may therefore relate to pre-Viking activity at East Thirston. However, at ninth-century Anglo-Saxon sites pins are usually recorded in roughly equal numbers as strap-ends, whereas at the Viking camps, as at East Thirston, strap-ends dominate the dress assemblages (Hadley & Richards 2018: 3). Given that comparable pins have been recorded from ARSNY (Williams 2020: 57–8) and Torksey (Hadley & Richards 2016: Table 1, Fig. 23), it is tempting to view these items as being associated with Viking occupation in the 870s.

Four stycas, the copper-alloy coins of mid-ninth-century Northumbria, have thus far been recovered from Thirston (NCL-4E6B72; NCL-79B177; DUR-397205; pers. Comm. Andrew Clark). They are all very worn, with only two being legible: one is a coin of Osberht (ruled 848–867) and the other an anonymous 'irregular' type (N 191.8) broadly dated to c. 850–867 (Figure 5.4g). Traditionally it was thought that stycas stopped being produced after c. 855, meaning that they could relate to immediately pre-Viking activity at East Thirston. However, the chronology underlying the latest stycas, many of which are blundered and/or anonymous, is uncertain, with scholars now suggesting that they may have continued in production after the Viking conquest of Northumbria in 867 (Williams 2020: 79; Naismith 2017: 120). Over 170 stycas have been found at Torksey, even though the site is outside the normal circulatory sphere for this Northumbrian coinage (Hadley & Richards 2018: 3). Stycas are also present in unusually large numbers at ARSNY and occasionally appear in late ninth-century hoards and burials of Scandinavian character, including in the hoard from Talnotrie (Graham-Campbell 2020: 458) and, as potential mounts for weights, in the burial from Kiloran Bay, Colonsay, dated to the late ninth century (Graham-Campbell 2021: 271). The two legible Thirston stycas are late on in the series, and parallel the latest stycas documented at ARNSY (Kelleher & Williams 2020). It thus seems likely that their use at Thirston was contemporaneous with the

lead gaming pieces and other items which, we suggest, are associated with the Viking Great Army (Williams 2020: 79–80, 103–6).

This is further supported by the fact that one of the illegible Thirston stycas appears to have originally been attached to a lead weight, as indicated by a copper-alloy disc on its reverse (NCL-4E6B72). Lead weights with coin (mainly styca) insets are part of a wider tradition of inset lead weights which originated with the Viking Great Army, and which may have been produced at ARNSY (Williams 2020: 83). Other instances of coin inset weights indicate a main period of use in the 860s and 870s (Williams 1999; Kershaw 2020: 121).

One of the potential functions of styca-inset lead weights, as with lead weights in general, was to weigh out currency for use in a bullion, or metal-weight, economy (Kershaw 2017). One further, intact lead inset weight is recorded from East Thirston, and provides another potential link to this distinctly Scandinavian economic practice (DUR-8BB722) (Figure 5.4h). It is a cylindrical lead weight with a circular offcut of now cracked light blue glass set into its surface. While the glass is undiagnostic, the use of glass insets on lead weights is paralleled at Torksey (Hadley & Richards 2016: 49, Fig. 20) and Woodstown (Wallace 2014: 237, Fig. 7.80). An example from Dumbarton Rock, Strathclyde, set with glass from a bangle, was retrieved from a context associated with the destruction of a rampart, potentially linked to the Viking assault in 870/1 (Graham-Campbell & Batey 1998: 98–9, Fig. 6.4). Notably, lead weights have been found to correspond to the Scandinavian øre unit of c. 24–26.6g, strengthening their connection to the bullion economy (Kershaw 2020: 121). The East Thirston weight is no exception. It weighs 48.5g, roughly two Scandinavian øres.

The rich assemblage of metal-detector finds from East Thirston bears a striking resemblance to other known Viking camp sites. Nonetheless, several aspects are not yet apparent at East Thirston. No Irish metalwork is recorded, for instance. No craftworking activity is evident, nor are there any secure finds of weaponry.[2] Perhaps most notably, no Viking-Age silver has been recovered, either in the form of imported coins, such as dirhams or Anglo-Saxon or Carolingian silver coinage, or ingots or hack-silver. Similarly, no standardised copper-alloy weights of either oblate-spheroid or cubo-octahedral form are known, although the former weight form is thought to have had a main period of use from the later 870s-80s, which would post-date the proposed occupation at East Thirston (Williams 2020: 20). The reasons for these absences are unclear. It is possible that they reflect a less dense occupation of the site – perhaps by an offshoot of the army, rather than the whole force, on a scouting or raiding expedition.

[2] A reported discovery of a sword pommel could not be verified.

Alternatively, it may simply reflect fewer overall detector hours on site compared to detecting at Torksey and ARSNY.

Taking in a broader landscape perspective, it is worth noting a small cluster of items found in Ulgham, six miles to the south-east of East Thirston on the River Lyne. These include a Thomas Type A strap-end (NCL-D60C81) and two early medieval pin heads (NCL-94DF63; NCL-A62467), along with two items from Ireland: an eighth or early ninth-century gilded copper-alloy bridle mount with four-stranded interlace ornament (NCL-D66725) and an inset lead weight with a square mount consisting of a central square surrounded by four L-shaped cells, likely originally filled with enamel (NCL-D4EBD5). The latter derives from Irish enamelled harness fittings (Graham-Campbell 1986), with a similar offcut recorded in the assemblage from Woodstown (Ó Floinn 2014: 183, Fig. 7.46, including a discussion of other parallels). It is well established that Viking camps served as bases for local raiding forays – do the items from Ulgham relate to such an expedition from East Thirston?

Historical context

While the metal-detector finds point to Viking activity at the site in the 860s or 870s, they do not offer a more precise chronology. It is thus necessary to turn to the written sources to assess the likely historical context of the camp at East Thirston. These indicate two possible scenarios. The first is that Viking occupation of the site relates to the activities of the Viking Great Army in 872. Some versions of the *Anglo-Saxon Chronicle* report that, in this year, the Viking army went to Northumbria, prior to their arrival at Torksey, Lincolnshire.[3] Dorothy Whitelock believed that this event was occasioned by a Northumbrian revolt against Archbishop Wulfhere and the client king Ecgberht, installed by the Vikings following their capture of York in 867 (1996: 194, note 1). Later sources state that Ecgberht ruled north of the Tyne, making a base at Thirston plausible, although Nicholas Higham has suggested that the suppression was focused in southern Northumbria (Anglo-Saxon Deira) (1993: 179). Other scholars have dismissed information on the Viking quelling of the revolt on source-critical grounds (Dumville 1987: 45; Downham 2007: 69).

The second, more likely, scenario relates to the activities of the Viking Great Army following their encampment at Torksey, Lincolnshire, in 872/3 and at Repton, Derbyshire, in 873/4, but prior to their occupation at ARSNY, which can be associated with Halfdan's arrival and

[3] Curiously, the event is not recorded in the 'Northern recension' version of the *Anglo-Saxon Chronicle*, written at York in the later tenth century (Dumville 1987: 48; Downham 2007: 69, footnote 32).

settlement in Northumbria in 876 (Williams 2020: 81). The *Anglo-Saxon Chronicle* relates that, upon leaving Repton, the Viking army divided, the leaders Guthrum, Oscetel, and Anwend heading to East Anglia with 'a great host', and Halfdan travelling with 'part of the host' into Northumbria. In the winter of 874/5, the *Chronicle* continues, Halfdan, with 'part of the host', took up winter quarters on the Tyne, using it as a base to make 'frequent raids against the Picts and against the Strathclyde Britons'.[4] This division of the army is important, for it would imply a smaller force heading into Northumbria than was present at either Torksey or Repton. Moreover, the force was the same as that which later occupied ARSNY in the late 870s, no doubt depleted in number through casualties in warfare.

The written sources for northern history, including several emanating from Durham, are unanimous that Halfdan entered Northumbria on the Tyne, and thus his route from Repton would have involved travelling north-eastwards by ship downstream along the Trent to where it joins the river Ouse to form the Humber estuary.[5] From there, he would have sailed into the North Sea, and thereafter northwards along the Northumbrian coast, passing the River Tees to reach the Tyne. The exact position of Halfdan's base on the Tyne is unclear. Symeon of Durham writes that Halfdan 'landed in the vicinity of Tynemouth with the intention of wintering there and, after the winter was over, of devastating the whole region north of that river' (Rollason 2019: 101 (book II, xxvii)). Tynemouth is a prominent rocky promontory, and home to a church of St Oswine, which was sacked by Vikings in 800 (Higham 1993: 179). Nearby is South Shields Roman fort (*Arbei*), a site purported to be Oswine's birthplace, with archaeological evidence for post-Roman occupation, including high-status Middle Anglo-Saxon material (Wood 2008: 12). As long-standing centres of authority with existing monastic/military infrastructure, these sites possess features paralleled at other army camp sites, such as Wareham (known from textual sources only) and Repton, and may have acted as Halfdan's base.

Nevertheless, Symeon's description appears to be based on the *Anglo-Saxon Chronicle* entry for this year, which states only that Halfdan took up winter quarters on the River Tyne

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[4] Shane McLeod has questioned whether the river in question was the River Tyne in modern-day East Lothian, Scotland, which was part of Anglo-Saxon Northumbria, rather than the major Tyne which flows into the North Sea at Tynemouth (2015, 3, footnote 13). Given the common reference to the Tyne in all the written documents, including in southern English versions of the Anglo-Saxon Chronicle, I think it more likely that Halfdan overwintered on the major Tyne.

[5] These accounts, including Simeon of Durham's *Tract on the Origins and Progress of this the Church of Durham*, and the anonymous *Historia de Sancto Cuthberto*, date to the eleventh to thirteenth centuries, and their reliability for ninth-century history has been questioned (Dumville 1987). However, there is little reason to question incidental details.

(Rollason 2019: 101, note 47). David Petts has suggested Jarrow slake ('Jarrow's lake') as a potential location for Halfdan's camp (Petts 2009: 84). These were the mudflats lying immediately to the east of Jarrow monastery on the south side of the Lower Tyne, and would have been a convenient place to keep a fleet (Wood 2008). King Ecgfrith, the late seventh-century founder of Jarrow, appears to have done just this, for in the Middle Ages the slake was known as *Portus Ecgfredi* (Ecgfrith's harbour) (Wood 2008).[6] If this is correct, Halfdan's base was located at the heart of a cluster of Anglo-Saxon monasteries focused on the Lower Tyne – monasteries, which, by 874, are likely to have been severely despoiled and depopulated, if not completely abandoned (Cramp 2005; Wood 2008).[7]

There is one further possibility. The *Historia de sancto Cuthberto* notes that, having entered the Tyne, Halfdan travelled 'as far as *Wircesforda*, devastating everything and sinning cruelly against St Cuthbert' (Johnson South 2002: 53). *Wircesforda* is, unfortunately, unidentified. The name suggests a base further upstream from Jarrow, at the location of a ford. In the nineteenth century, the first ford on the eastern stretch of the Tyne was located at Newburn, roughly 20 kilometres upstream from Jarrow, but still within the stretch of river deemed to be navigable in the early medieval period (Ferguson 2011: 287). This site was used as a crossing point for Scottish armies in the fourteenth century, and has been posited as a potential fording site in the Roman period (Symonds 2020: 99).

Whatever the exact location of Halfdan's 'winter quarters', raiding among the Strathclyde Britons and Picts would have required journeying both northwards and westwards, and it is in pursuit of these engagements that occupation at East Thirston is best explained.[8] While no further details of Halfdan's raiding are given in English sources, the *Chronicles of the Kings of Alba* state that Danes and Scots fought at Dollar in 875, the Picts being slaughtered as far as Atholl (Downham 2007: 143; Alex Woolf interprets Atholl as a separate, second battle: 2007: 112). It adds that the Viking forces then spent a whole year in Pictland, and it is probable that this activity is connected with the death of the Pictish king Constantín in 876 (Downham 2007:

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6 In 685 Ecgfrith sailed from Jarrow slake to Pictland, where he was defeated in battle at Nechtansmere. In doing so, he may have foreshadowed the journey north undertaken by Halfdan almost two centuries later.

7 Alongside Jarrow and the linked monastery of Wearmouth (on the River Wear), these included Tynemouth, *Donamutha* (which Wood argues was located close to Jarrow), and, further up the Tyne, Gateshead and Bywell.

8 The Tyne continued to serve as an important base for the Viking leader. Sources recording Halfdan's later career relay that he later fled from the Tyne with three ships, and was never seen again (Johnson South 2002, 86–7). It is likely that the Tyne was used as a point of departure for Ireland on more than one occasion. Halfdan was active in Ireland in 875, when the Annals of Ulster record that he murdered a son of his brother, Olafr (Downham 2007, 70).

143). Dollar is situated a few miles north of the Firth of Forth in Clackmannanshire and would have bordered both Northumbria and Strathclyde (Woolf 2007: 111–112). Atholl was further north, Alex Woolf suggesting a location for the battle at 'the mouth of a stream running into the Tay or the Tummel', presumably in the region of Pitlochry (2007: 112).

It is likely, then, that Halfdan and his followers reached Pictland by ship. Strathclyde may have been reached overland or by ship, either by sailing around the northern tip of Britain, crossing the Forth-Clyde isthmus via a series of waterways and short portages – the route favoured by Smyth (1977: 258 and Map 7, but see too: Edmonds 2007: 31–2; Graham-Campbell & Batey 1998: 98), or travelling up the Tyne and connecting with the Roman road (Stanegate) at Corbridge, leading westwards to Carlisle and the Solway Firth. Thus, Halfdan likely left behind the rocky coastline flanking the Tyne estuary, sailing northwards past an increasingly low-lying coastline of vast sandy beaches (Petts 2009: 82). His journey would have been interspersed by a small number of basalt rock islands created by the Whin Sill. Of these, the most southerly, lying around 30 kilometres north of Tynemouth, was Coquet island, once the site of an early Anglo-Saxon monastic cell (Petts 2009: 82, 84). It would have served as a convenient navigational waypoint for coastal traffic, which, most notably in the context of East Thirston, marked the mouth of the River Coquet at modern-day Amble (Petts 2009: 86).

Continuing on this hypothetical journey, to reach our site, Halfdan would have rowed upstream following the serpentine route of the Coquet for c. 20 kilometres. This route would have first taken him past the *vill* of Warkworth and its eighth-century church, contained within a distinctive U-bend in the river. Significantly, this lower stretch of the Coquet valley extending as far as the River Aln to the north and the River Line to the south, and including Felton/East Thirston, had belonged to the Lindisfarne community (O'Brien et al. 2018). However, it was seized by King Osberht in the 860s and held by him until his defeat by the Vikings in York in 869, following which the lands passed into Scandinavian hands. In practice, it is likely that Scandinavian rule was exercised through Northumbrian puppet kings: in turn, Ecgbert (d. 873), Ricsige (d. 876), and Ecgbert II (d. 878) (Woolf 2007: 78–9). Nevertheless, rowing up the Coquet and indeed establishing a site at East Thirston, the Viking army was not occupying 'enemy' territory. In this context, it makes sense to view the proposed camp site at East Thirston as a temporary base, scouting location or way station for further military action, rather than a base from which to subdue the local area, since this was already under Scandinavian rule.

Finally, Halfdan would have arrived at a wide stretch of the river at Felton. The status of this settlement in the 870s is uncertain. A recent strip and record excavation just to the north of the village revealed an early-to-mid-Anglo-Saxon settlement, radiocarbon dated to between AD

620–760 (68% probability) and AD 780–985 (95% probability) (Muncaster 2018). The settlement consisted of a number of rectangular, post-built structures in addition to features identified by the excavators as sunken-featured buildings, but which are perhaps more likely to be pits (Helena Hamerow, pers. comm.). Metallurgical finds indicate iron-smithing and smelting. Whether the settlement was occupied at the time of the proposed Viking camp across the river, or whether it was succeeded by a later settlement, is unclear, but given the scarcity of evidence for an Anglo-Saxon building culture in the region, the proximity of this settlement to East Thirston is noteworthy. A church built around 1200 lies to the south of Felton, near the River Coquet, and is assumed to be contemporary with the laying out of medieval burgage plots at Felton (Northumberland HER N4344). It is nevertheless possible that it replaced an older, pre-Conquest church. Felton lies mid-way between Warkworth and Rothbury, both of which had early churches situated close to the Coquet; Felton too may have had a pre-Conquest church in a comparable location, that may have offered a source of wealth for the Vikings (Hodgson 1893: 268). Whatever the case, the wide stretch of water at Felton would have been dominated by the steep slopes of the promontory on the south side of the river at East Thirston. Affording easy access to both the Roman road infrastructure and to the Northumbrian 'coastal highway' (Ferguson 2011), and with commanding views to the coast and along the Coquet valley, it was an ideal base for army members planning attacks on the north.

Conclusions

The proposed camp site at East Thirston shares a number of features observed at other, archaeologically investigated Viking camp sites. These include:

- a strategic, riverine location affording easy access to established overland routes as well as the coast;
- a naturally defensive position on high land, surrounded by water, offering security without the need to invest heavily in a defensive infrastructure;
- the re-use of pre-existing, high-status sites, enabling army members to plug into existing networks for the supply of food and other necessities;
- metalwork suggesting contact with the local population through Anglo-Saxon dress accessories and stycas, mercantile activity and gaming, and indicating activity in the 860s/70s.

While the overall number of metalwork finds is low compared to other investigated camp sites, detecting has also been more limited at East Thirston, and we anticipate that continued searching will yield further items. When assessed together with the written sources, we are confident that the site at East Thirston represents a Viking camp, most likely occupied in the mid-870s. It brings into focus the raiding activities of the Great Army beyond the Tyne,

highlighting a potential staging post in their engagements with the Picts and Strathclyde Britons.

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