Metal-detecting and geophysical survey at Great Whittington, Northumberland

Rob Collins and J. Alan Biggins

SUMMARY

Objects found through hobby metal-detecting and reported to the Portable Antiquities Scheme have provided significant evidence for long-term settlement in Whittington parish, Northumberland. The artefacts range in date from the Mesolithic to the present day, with a significant proportion attributed to the Roman and medieval periods, and a small but significant presence of late Iron Age and Early Medieval activity. The large number and diversity of Roman period objects is particularly interesting for two reasons: the finds assemblage is atypical for non-military and non-urban sites in the frontier zone; and the site is approximately 2 km north of Hadrian's Wall. On the basis of known artefact spreads, geophysical survey was conducted in two fields in November 2011 but produced no close relationship between identifiable subsurface features and artefact distributions

INTRODUCTION

Objects reported to the Portable Antiquities Scheme (PAS) in 2007 from outside the village of Great Whittington, Northumberland, highlighted potential Roman activity. The initial discovery consisted of a small group of eight late Roman coins, the latest of which was a *Gloria Romanorum* issue of 406–8 (Collins 2008). Subsequently, a pair of *paterae* were reported from a different area outside the village, and these were acquired by the Society (Allason-Jones 2010). The first author (RC), in his capacity as the Finds Liaison Officer for the area, has worked closely with those individuals metal-detecting in the vicinity to record as many accurate findspots as possible.

As of 4 December 2012, there were 156 records of objects on the PAS database reported from the area outside the village, consisting of 149 records from the parish of Whittington and seven from the adjacent parish of Wall. These objects range in date from the Mesolithic to the modern era, though very few objects of modern date have been recorded (in accordance with the standard practice of the PAS). The date range, based on the number of records on the PAS database, is seen in Table 1, and this indicates the prominence of Roman and medieval period objects and coins. The Appendix provides a summary listing of the objects recorded, rather than complete catalogue entries. A full description and illustration can be found on the PAS database (finds.org.uk/database (accessed 9th June, 2013)), using the Find ID provided in the Appendix.

The objects of medieval and post-medieval origin found around Great Whittington are fairly representative of objects of the same date found elsewhere in Northumberland and recorded by the PAS. It is the Iron Age, Roman, and (to a lesser extent) the Early Medieval assemblages that are highly significant. In contrast with the Yorkshire region, very few metal objects of Iron Age and Early Medieval date are found by metal detectorists in the North East, such that the mere presence of a small handful of objects represents a significant discovery.

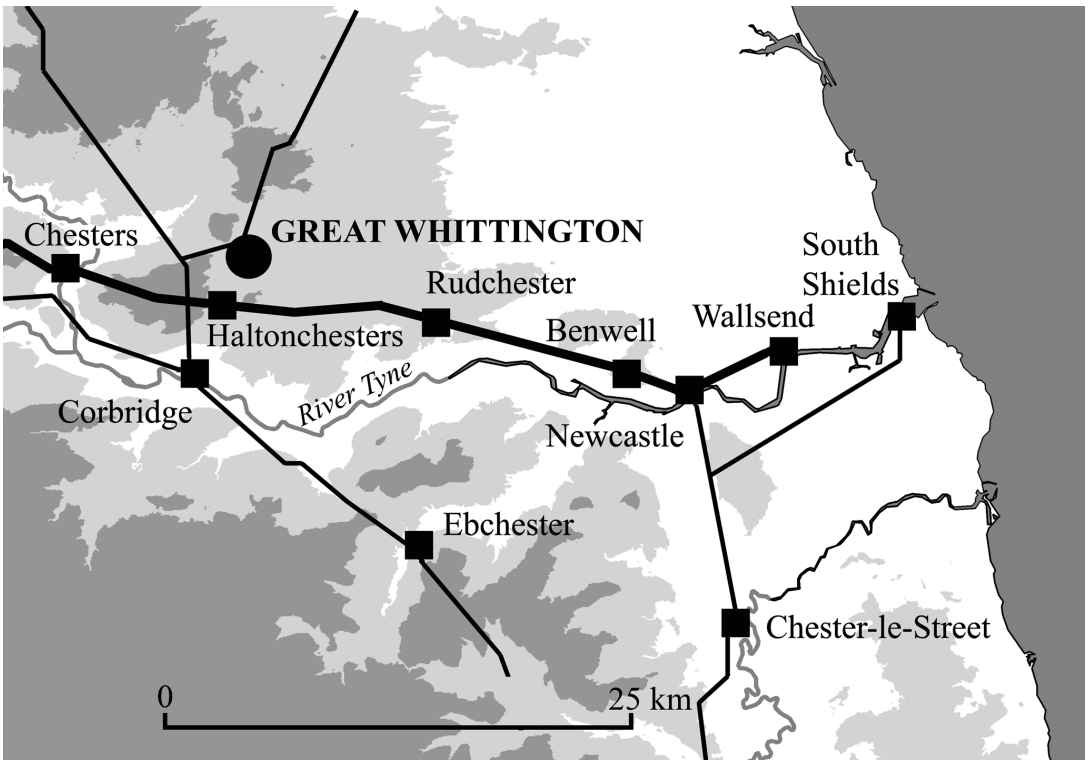


Fig. 1 The location of Great Whittington relative to Hadrian's Wall and Roman forts in the North East. Map made using OS/EDINA cartographic data, © Crown Copyright.

Table 1 The number of objects by period, with coins separated out. The Roman coin total does not include the small fifth century coin group that should be treated as a single find

Period	Number
Mesolithic	3
Neolithic	9
Bronze Age	1
Iron Age	5
Roman	25
Roman coins	27
Early Medieval	4
Medieval	21
Medieval coins	29
Post-Medieval	9
Post-Medieval coins	11

The Roman assemblage is significant because of the quantity and diversity of objects discovered, relative to other metal-detected areas of the North East and to sites that have been excavated.

LOCATION AND HISTORY OF THE VILLAGE

The village is approximately 2.2 km north of Milecastle 21 (Down Hill), and 2.5 km NNE of Halton Chesters fort on the Wall. Dere Street is 2.1 km to the west, and another Roman road, the Devil's Causeway, probably passed to the northwest about 900 m away. (Its exact path in the vicinity is unproven, despite a postulated route being depicted on Ordnance Survey maps.) The village sits on a limestone and sandstone outcrop above the surrounding fields where the objects have been discovered (fig. 1). Springs feed the Blowbridge Burn that emerges west of the village and passes to its south converging with the spring-fed Sharpley Burn that emerges in the fields north of the village and passes to its east, eventually joining the River Pont.

Historically, the village has been the centre of a township and attached to Corbridge parish, with the manor and land ownership closely linked to the neighbouring township of Halton (Craster 1914, 417–31). The settlement probably predates the Norman Conquest. Court records attest to a manor from at least 1212, although the date of its foundation is uncertain.

METAL-DETECTING SURVEYS AND THE PAS

Objects discovered by metal detectorists have been recorded since 2007, and the steady accumulation of data since that date has enabled a relatively clear picture to emerge in respect to the fields immediately surrounding the village (fig. 2). This is not to say that all objects deposited in these fields have been recovered, as a number of factors impact on the survival and collection of objects by metal detectorists, not least weather and moisture conditions, the state of the field(s) being searched, the choice of equipment and programme, and the actual use/swing of the equipment (Brickstock *et al*. 2007). Furthermore, not every field surrounding the village has been searched, and those that have been surveyed have been scrutinized inconsistently. Arable fields are generally favoured, whilst pasture is often (though not completely) overlooked. These factors must be borne in mind when considering the assemblage available for study.

Another important factor is the reporting and recording of artefacts, distinct from the search and discovery of such objects. The analytical focus of this paper is only on those objects recorded by the PAS. Some objects found have not been recorded, generally due to their relatively recent date of manufacture, and some individuals that have found objects eligible for recording have not reported them. Whilst objects that do not qualify as Treasure are not legally required to be reported under English law, efforts are being made by the first author (RC) to record those objects that have not yet been reported. At present, he is unaware of any objects that would significantly alter interpretations of the site and data presented below. In the case of reported but unrecorded objects, the standard practice among officers of the PAS is not to record objects less than 300 years old unless they have some further significance.

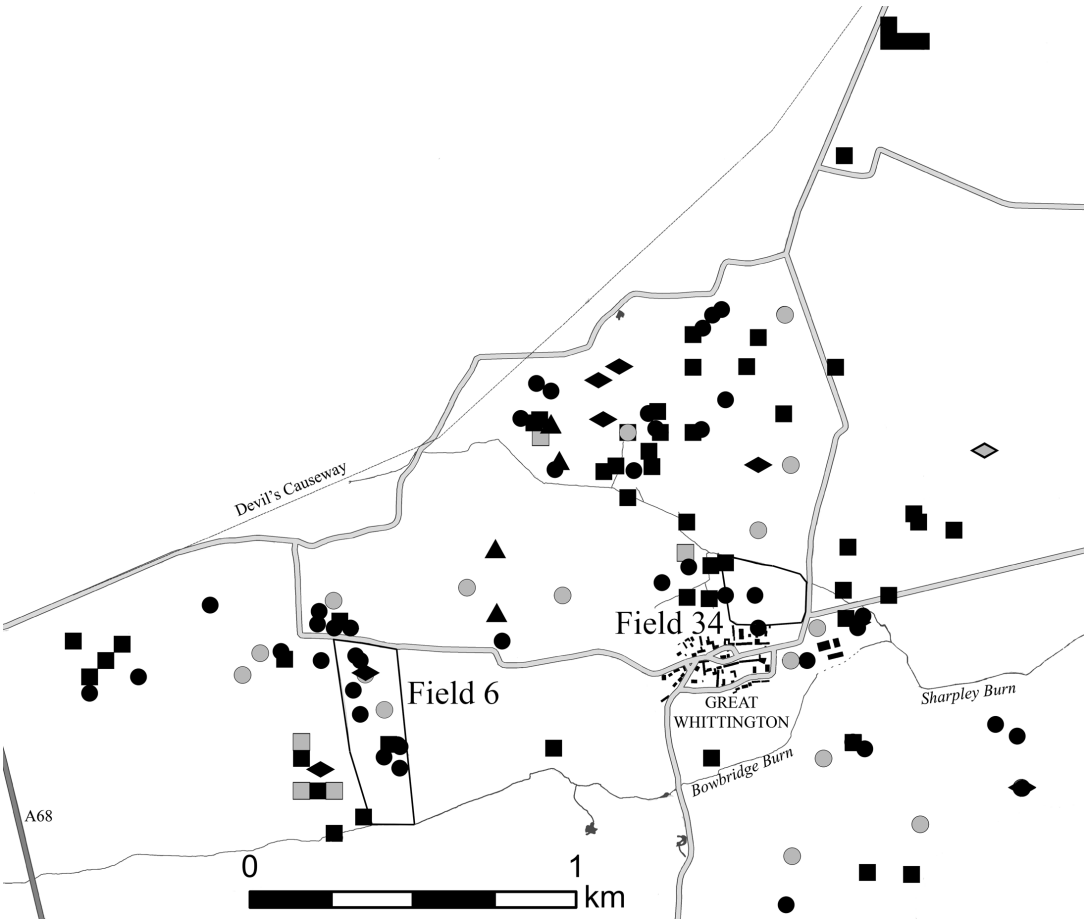


Fig. 2 The distribution of PAS-recorded artefacts around Great Whittington by period: Mesolithic and Neolithic are represented by a black lozenge; a grey lozenge for the Bronze Age; grey squares for Iron Age; black squares for Roman; black triangles for Early Medieval; black circles for medieval; grey circles for post-medieval. The postulated line of the Devil's Causeway is shown. Map made using OS/EDINA cartographic data, © Crown Copyright.

ANALYSIS OF THE ARTEFACTS

MESOLITHIC AND NEOLITHIC

There is a small assemblage of prehistoric stone objects from the fields north of the village and a smaller cluster west of the village. Two flakes and a scraper of Mesolithic date have been identified, but the clusters consist primarily of Neolithic material, with a number of well-defined objects recorded, including two groundstone axes, a flint thumbnail scraper, and a flint leaf-shaped arrowhead. The cluster to the west of the village is rather diffuse, but the northern cluster is more concentrated and this may indicate a focus of Neolithic activity.

Fig. 3 Iron Age objects from Great Whittington: 1. NCL-2AB2C5, strap fitting (harness); 2. NCL-346DE5, miniature socketed axe; 3. NCL-34A996, terret; 4. NCL-34C417, strap fitting (harness); 5. NCL-BC1EE6, Nauheim brooch.

BRONZE AGE

Only one object of Bronze Age date has been recorded, a copper-alloy fragment of a dirk (NCL-BCC384), dating to *c.* 1500–1100 BC (Burgess and Gerloff 1981). This paucity is not surprising, but three (presumed) cairns not otherwise attested in literature or the county's Historic Environmental Record can be observed on the ground at NY99527126, 99607125, and 99637120. There is only a slight swelling above the ground surface to indicate the presence of these cairns, which appear to have been ploughed-out over some time. Craster (1914, 418) notes the discovery of an 'ornamented bronze axe' from Whittington Fell formerly in the Greenwell collection and now in the British Museum (acc. no. WG.1814; Burgess and Schmidt 1981, 71, no. 407). Given the presence of the cairns, it is expected that more Bronze Age material will be encountered.

IRON AGE

Generally speaking, there is a very poor record of metalwork dating to the Iron Age in the North East of England (Dungworth 1997), but Great Whittington has produced a small handful of objects that may be attributed to the late Iron Age rather than to the Roman period.

The only object definitely made during the Iron Age is a copper-alloy Nauheim-derivative brooch (fig. 3.5), dating *c.* AD 0–50 (Mackreth 2011, 18–19). These brooches are more generally found in England south of the Humber (Mackreth 2011, 14–21), but the PAS has recorded several from Yorkshire; the find from Great Whittington is the northernmost example of the type. It is feasible, however, that this brooch was introduced and lost on the site during the Roman period.

The items related to horse harness may also date to the Iron Age, executed as they are in late la Tène style, though their production and use could certainly have been Roman in date: a copper-alloy terret dating to 100 BC–AD 200 (fig. 3.3); and a copper-alloy strap junction dating to 200 BC–AD 200 (fig. 3.4; Taylor and Brailsford 1985). Another discovery of Iron Age date is a strap junction probably used in harness (fig. 3.1).

One of the most unusual objects of any date to have been found at Great Whittington is a copper-alloy miniature socketed axe (fig. 3.2). Whilst it is a socketed axehead, an object usually attributed to the Bronze Age, Robinson (1995, 60–1) has suggested that the majority of these objects were made in the late Iron Age or early Roman period. Like the example from Great Whittington, the majority of these objects known do not have archaeological contexts but are found associated with Iron Age or Roman material. A close parallel came from a late Iron Age burial in Arras, Yorkshire, excavated in 1815 (Greenwell 1906, 303, fig. 57). However, the Arras example is only 25 mm long, compared to the 48.5 mm of the Great Whittington specimen. The Great Whittington example is double the upper range of the average size (16–25 mm) for miniature socketed axes (Kiernan 2009, 118–19). The exact purpose of miniature objects is imperfectly understood, but they most frequently have a votive or religious context or association. Certainly, this object does not appear to have been used as an axe prior to its deposition.

ROMAN

Leaving aside the coins, twenty-five objects of Roman date have been recorded, and these form the most numerous and significant assemblage found around the village. The objects have been separated into functional categories in the Appendix, with the majority of objects classified as dress accessories, military equipment, harness equipment, or as objects with a possible religious significance. Such objects are normally found on their own; their occurrence in relatively high numbers around Great Whittington testifies to the unusual nature of the archaeological evidence of the area. Each major category of material will be treated in turn.

Dress accessories: brooches

The majority of dress accessories are brooches, almost all of which date to the early Roman period and are made from a copper alloy. The earliest brooch is the Nauheim-derivative type (NCL-BC1EE6) noted above; the others broadly date to *c.* AD 50–250. They include a trumpet brooch (NCL-802ED7) and a headstud brooch (NCL-7FB222), both of which are common forms on the northern frontier and in *Britannia* as a whole, dating to the late first-late second century (McIntosh 2011; Mackreth 2011). A fine example of a dragonesque brooch, Hunter class B6b, lacks any decorative features on the body of the brooch (fig. 4.5). This class of dragonesque brooch is more likely to be found on 'native' or rural sites rather than military or urban sites (Hunter 2010, 101). A complete Fowler A3 penannular brooch (fig. 4.2) was also

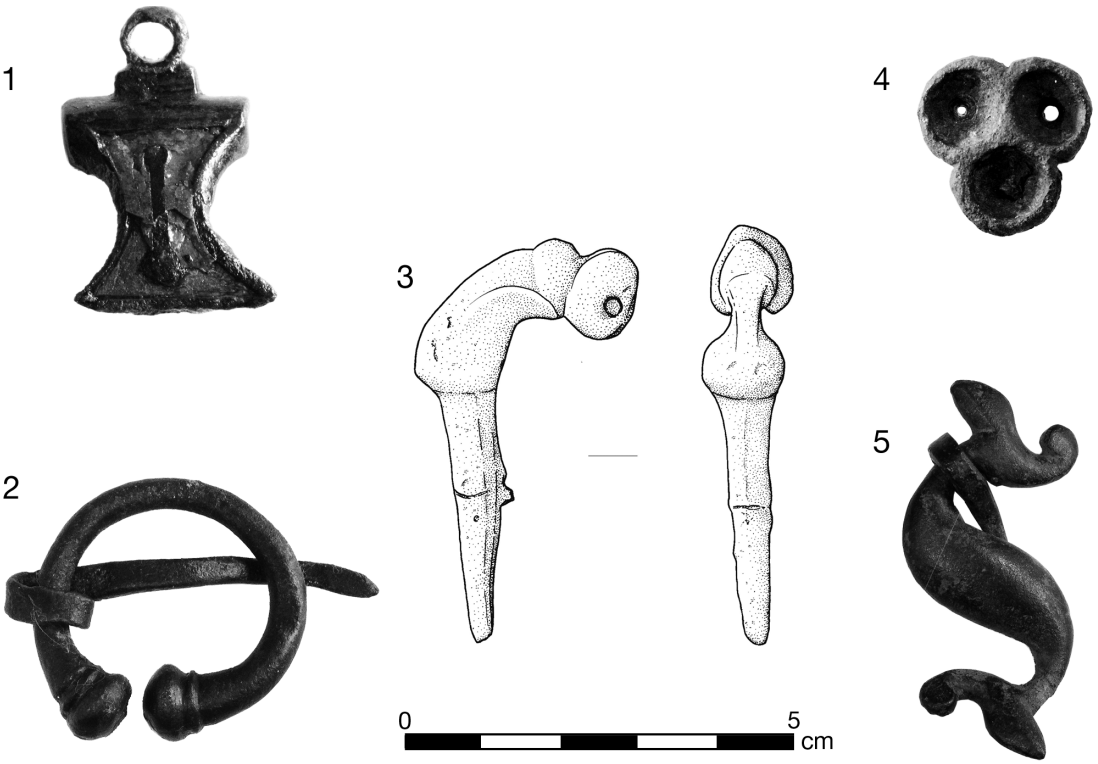


Fig. 4 A selection of Romano-British brooches: 1. NCL-1B2CB5, enamelled T-shaped; 2. NCL-BBB6E2, Fowler A3 penannular; 3. NCL-7FD5A4, trumpet-variant; 4. NCL-34AD01, trefoil-cup; 5. NCL-2B2544, dragonesque.

found, its type identified from the globular terminals with a basal collar; this design is thought to be long-lived, but examples from sites in northern England are most frequently from contexts dated to the second and third centuries (Mackreth 2011, 213). A nearly complete knee brooch (NCL-1B5052) with rounded bow and fan-shaped head-plate also dates to the later second to early third century (Mackreth 2011, 190).

In addition to these easily recognized brooch types, three more brooches of uncommon or unparalleled form have been recorded. An incomplete example of a rare type of T-shaped bow brooch (fig. 4.1) has been found, bearing striking blue enamel. A more complete and almost identical example was found at Newstead, and another from Caerleon was found in a context dated to 160–230 (Elliot and Hunter 2012, 192). The general rarity of parallels has suggested to Elliot and Hunter that these brooches may be a product of the northern frontier. Mackreth (2011, 100, X.4, no. 2924) provides a further similar example from the South West, but places the brooch in a 'disparate group' characterized by large cells for enamel. The example from Caerleon provides a broad contextual date range, but typological features of the form suggest that the date range can be shifted to the late-first to late-second century.

The second unusual brooch is nominally a plate brooch, but one which consists of three small bowls arranged in a trefoil fashion, with lugs to take a hinged pin on the reverse between two bowls (fig. 4.4). A small circular perforation at the base of each bowl suggests a

missing inset — probably of bone or coral rather than enamel, given the depth of each bowl. Unfortunately, there is no parallel for the brooch, though flat plate brooches in a trefoil pattern with enamelled surfaces are known (Mackreth 2011, pl. 118, no. 11268). The dating of the brooch, even considering its flat cousins, cannot be narrowed; it demonstrates a late la Tène style that is recognizable in the later Iron Age, but the use of lugs to take a hinged pin firmly places the brooch in the Roman period.

The third notable brooch is a bow brooch that has a basic form of the trumpet brooch, but differs significantly in detail (fig. 4.3). The head is globular rather than bell-shaped, with a pinched upper bow and a swollen decorative feature on the peak of the bow, the detail removed by wear and corrosion. The lower bow is also pinched and leads to a tapered foot, with only the slightest remains of a catchplate on the reverse. The head would have taken a hinged pin, now missing. There is no parallel to this brooch known to the author, but the moulded decoration has a 'swirly Celtic' appearance, hinting at the zoomorphic and rendering a slightly insectile impression. The general form of the brooch would place it in a date range of the late first to late second century, in keeping with the trumpet brooch.

The trumpet, headstud, knee, and penannular brooch forms have a strong association with military zones in *Britannia* (McIntosh 2011, 166, 177, graph 20), and their presence so close to Hadrian's Wall is not surprising. The enamelled T-shaped bow brooch may also be a form linked to the frontier or to the military community. The dragonesque brooch is a distinctly Romano-British form, with this particular variety more common on rural sites. The trefoil-cup brooch and trumpet-variant also appear to be distinctly Romano-British in styling, though the lack of parallels makes further comment difficult.

Other dress accessories

Other dress accessories are represented by single examples. A copper-alloy finger ring can be identified as a Guiraud type 1a (NCL-C88983; Guiraud 1989), broadly dating to 50 BC–AD 100, and a copper-alloy pinhead (NCL-34C688) which cannot be dated more closely other than to say it is a Roman form. An incomplete copper-alloy end-looped pestle (NCL-44F4E7) dating to AD 100–300 has also been found: these objects are more common finds in the south of England, though a few examples are known from the military zone (Jackson 2010, 56–60). More intriguing is a gold loop, almost certainly lost from a piece of jewellery (NCL-B5B047), probably of Roman date.

The majority (9) of brooches and dress accessories were found in the fields north and east of the present village, with less than half that number (4) found in the fields south and west of the village (fig. 5). Whilst not clustered together closely enough to indicate the location of a Romano-British settlement, the overall distribution may suggest that settlement activity occurred to the north of the present village.

Military objects

A small but significant group of military objects has also been recorded (fig. 6). Readily recognizable are an openwork copper-alloy buckle, of late second-late third century date, with inward scrolling terminals and an extending rectangular plate, found across the Roman Empire (fig. 6.3; Oldenstein 1976; James 2004, 79, no 72), and a peltaic copper-alloy sword scabbard chape, dating AD 100–300 (fig. 6.4; Bishop and Coulston 2006, 133, 161). A copper-

Fig. 5 The distribution of Roman brooches (black squares) and other dress accessories (black circles) relative to other Roman objects (smaller black circles). Map made using OS/EDINA cartographic data, © Crown Copyright.

alloy guard from an early Roman sword (fig. 6.1) can be identified as a Piggott type IVB, dating to AD 50–150 (Piggott 1950). A final piece of likely military equipment is a copper-alloy conical mount with a shank, which may be a stud from a type of third-century helmet, or the prick from a late Roman spur (fig. 6.2; Bishop and Coulston 2006, 176, fig. 113.1, 177, fig. 114.1; Allason-Jones and Miket 1984, 206, no. 3.688). A copper-alloy button-and-loop fastener of Wild class VIb (NCL-34B047), dating to the second century, is of a size to recommend its use in harness, and this too may be related to military metalwork (Wild 1970). It is also possible that this fastener should be associated with the Iron Age terret ring and strap junction mentioned above.

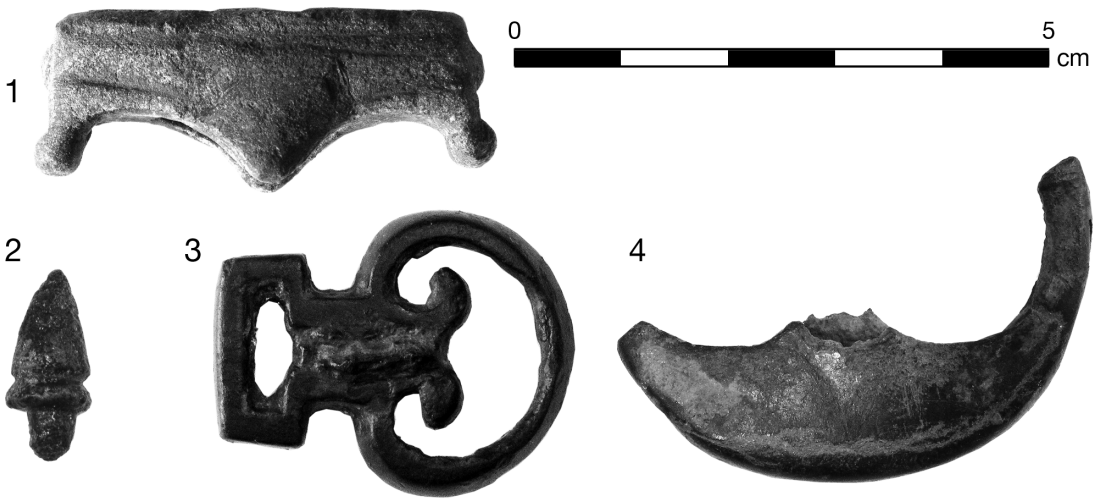


Fig. 6 Roman military equipment from Great Whittington: 1. NCL-1CABE7, sword guard; 2. NCL-BCDEC6, prick/mount from a spur or helmet; 3. NCL-9F54E2, buckle; 4. NCL-21E084, sword scabbard chape.

Objects of religious significance

In addition to the miniature socketed axe, noted above, three other objects of possible religious or ritual significance have been reported. A pair of copper-alloy *paterae* (NCL-335745 and NCL-33CC76), one found inside the other, have been described by Lindsay Allason-Jones (2010). In an entirely different area, the lower leg of a copper-alloy figurine (NCL-BD0923) executed in a classical (rather than provincial) style was found. There are no telling features on the leg to identify the subject, and whilst a deity is the probable figure being represented, the object itself may have had a domestic function rather than a religious one, perhaps as a candlestick or a vessel mount.

Perhaps significantly, objects that may have had a ritual or votive purpose or deposition are clustered, along with objects associated with horse harness, in two fields to the southwest of the present village, whilst military objects have been found exclusively to the north of the village (fig. 7).

A copper-alloy mount in the form of a helmeted/capped head (NCL-35F013) depicts Minerva, but the mount itself was probably a functional component of a suspended metal vessel. The head bears a crested helmet, the forward-drooping point of the crest acting as a hook for suspension. Figural escutcheons of vessels depicting Minerva are known from various excavations (eg. Stonea, Cambridgeshire: Jackson and Potter 1996), and the incorporation of Minerva may indicate a ritual use of the vessel. Whilst the object has been subjected to minor corrosion, eliminating any detailed decoration, it cannot be considered as purely Mediterranean in its execution as the figurine fragment above; more provincial in style, it is still closer to a Roman form than to a native one.

Roman coins

A total of 27 Roman coins have been recorded: the earliest issue is a Republican denarius of Marc Antony dating to 32–31 BC, and the latest a nummus of the House of Valentinian, dating

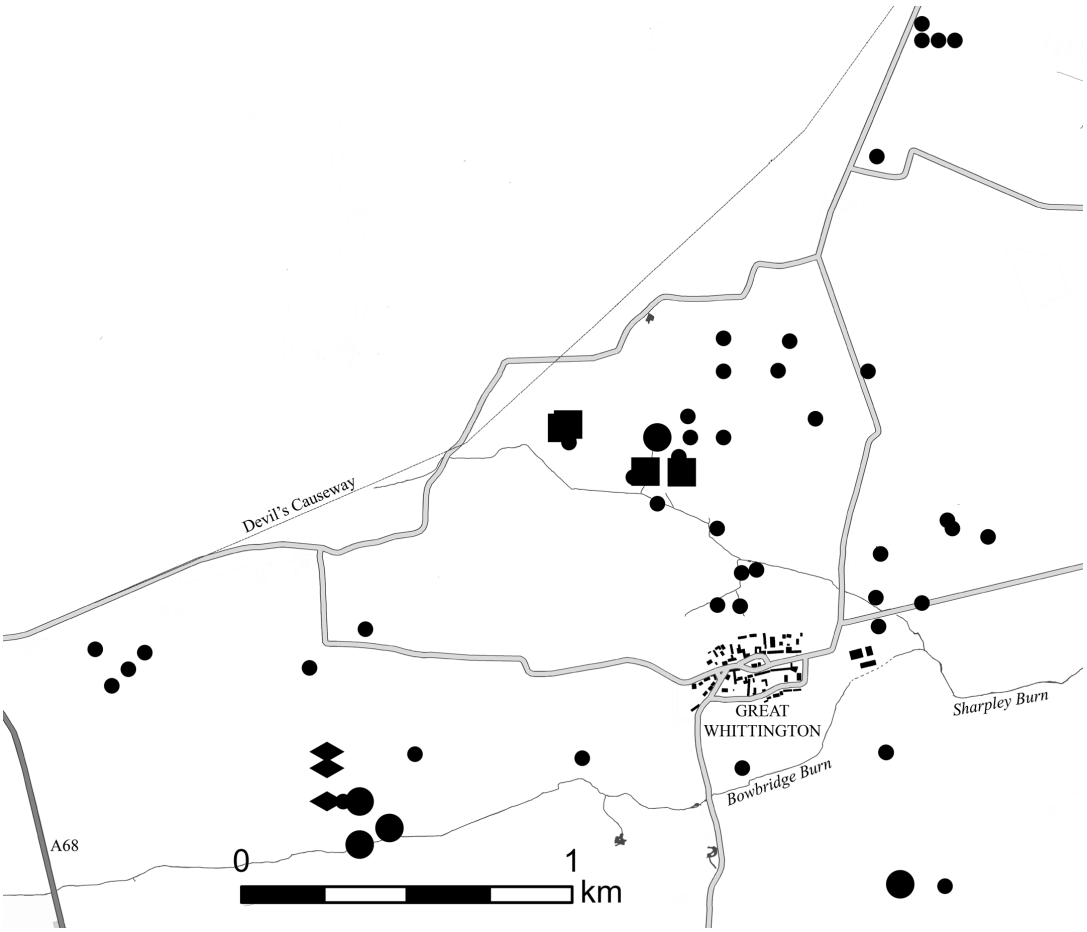
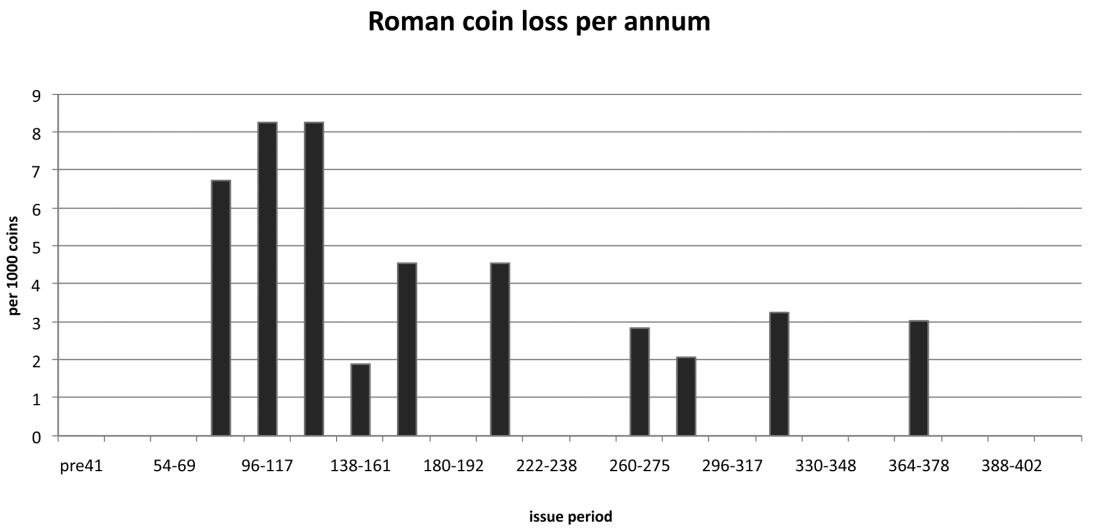


Fig. 7 The distribution of Roman military objects (black squares), Iron Age and Roman harness equipment (black lozenges), and Roman objects with possible religious significance (black circles) relative to other Roman objects (smaller black circles).
Map made using OS/EDINA cartographic data, © Crown Copyright.

to AD 364–78. The group of eight nummi reported previously (Collins 2008) are not treated here in terms of coin-loss analyses, in keeping with standard practice as the coins are treated as a hoard rather than lost individually.

Analysis of coin assemblages (i.e. coin loss), enables the archaeologist to compare one site with another to determine if the site is 'normal' or somehow different. Coin-loss analysis of the material from Great Whittington was completed following the methods pioneered by Reece (1991) and Casey (1994), notably using Reece's issue periods and Casey's formula for calculating coin loss:

$$\frac{\text{no. of coins per issue period}}{\text{no. of years per issue period}} \times \frac{\text{1,000 (a notional multiplier)}}{\text{total number of coins}}$$



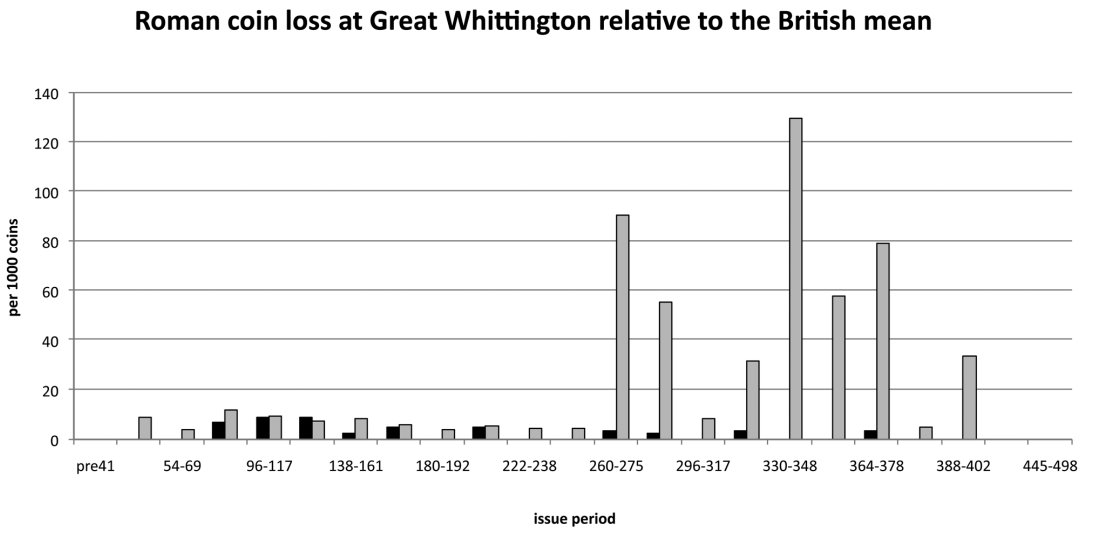


Fig. 8 Roman coin loss at Great Whittington (in black), based on 22 coins that can be assigned to an issue period, and showing the average number of coins lost per annum per 1,000 coins compared to the national British mean (in grey).

This method creates a percentage for coins of each issue period, normalizing the different lengths of the latter so as to provide better comparisons. Once completed, a figure is provided that estimates the number of coins lost (per 1,000) per annum. Generally speaking, the higher the coin loss, then the more coins that were in circulation of a given period, so this can serve as a crude measure of the vitality of cash exchange of a settlement or location. PAS data has been subjected to a national analysis, and this has provided a more nuanced picture of coin loss across the province(s) of *Britannia* that can be used as a baseline (Walton 2012).

Of the 27 coins, only 22 could be used for calculating mean annual coin loss (fig. 8), as the issue of Marc Antony is too early in date to be included, and the sestertius, two dupondii or aes and a radiate were too worn to identify to the chronological resolution necessary for the method.

Figure 8 indicates an irregular pattern of coin loss, relative to most sites in Roman Britain. The peak of Trajanic (AD 96–117) and Hadrianic (AD 117–38) coins, preceded by high levels of loss of Flavian (AD 69–96) coins, suggests the area was probably a focus of activity in the late first and early second centuries. Given the length of time that each coin remained in circulation, it is feasible that the Flavian and Trajanic coins were lost contemporaneously with the Hadrianic ones, and that this peak of activity could be related to the construction of Hadrian's Wall. However, a cursory examination of the wear of the coins does not bear out this possibility, as the coins of Trajan are less worn than those of Hadrian, suggesting a shorter circulation period. What is perhaps more telling is the decrease in levels of loss associated with Antonine (AD 138–61) coinage, and a recovery of levels associated with coins of the later second and early third centuries. This probably relates to the move of the army north and the construction of the Antonine Wall and the subsequent return to Hadrian's Wall. This, at the very least, links economic activity at the site to Hadrian's Wall.

The most irregular aspect of the Roman coin assemblage from Great Whittington is the very low number of late Roman denominations, particularly radiates and nummi. These are usually the most prolific denominations to be found, but only four are included in this analysis. This suggests considerably less late Roman cash exchange in the vicinity, if not activity in general, and fits with the general pattern that late Roman coinage is rarely found north of Hadrian's Wall. However, the coin group previously reported (Collins 2008) exclusively contained nummi of the fourth and early fifth centuries. It is also notable that the early Roman coins are dominated by silver denarii rather than by lower denomination copper-alloy coins. Nationally, early Roman silver coins (denarii) are more common single finds than late Roman silver coins (siliquae), and it may be that low denomination coins of copper-alloy were of limited use around Great Whittington in the early and later Roman period. This in turn suggests that cash exchanges were related to the purchase of more expensive objects or payments.

Whilst coin loss indicates a vibrant period of cash exchange (perhaps focused on silver) in the late first and second centuries, the decreased levels of late Roman coinage are not necessarily indicative of a corresponding decrease in activity and may simply have been due to a move away from a monetary economy. The future discovery of any late Roman gold or silver coins will further prove if there was a move away from a cash economy or if cash exchange was limited to higher, precious-metal denominations.

EARLY MEDIEVAL

Objects dating to the Early Medieval period are limited, but are present. A wrought-iron knife (NCL-9F6B12) has a form broadly dating to the fifth-eleventh centuries, whilst a copper-alloy annular brooch of Anglo-Saxon type (NCL-33F414) is the only evidence of early Anglian activity of the later fifth and sixth centuries. A copper-alloy strapend (NCL-69DB06) and copper-alloy buckle (NCL-341171) both date broadly to the tenth-eleventh century, and provide some reasonable evidence for late Saxon-early Norman activity. The strapend is a Thomas class A type 1, with a mousehead terminal and a central panel depicting a Trewhiddle style beast; this form is commonly found throughout the North of England (Thomas 2003). The buckle, too, is zoomorphic.

The spatial distribution of the Early Medieval objects is clustered in comparison with objects of other periods. All four objects are found to the west and northwest of the village (fig. 2). As a single early Anglo-Saxon find, the annular brooch may represent an accidental loss, or may signal the presence of a furnished burial to the west of the village. Similarly, while found some distance apart in two different fields, the buckle and strap end are contemporary and could feasibly have come from the same belt. Whilst the evidence can only be treated in the most tentative fashion, there may be a dispersed Early Medieval cemetery to the west of the modern village, perhaps using the putative Bronze Age cairns as a focus for this activity, a pattern seen in numerous locations throughout England (Semple in press).

MEDIEVAL

The medieval assemblage from the fields around Great Whittington is fairly typical of such assemblages across northern England, consisting of a mix of domestic objects and dress

Fig. 9 medieval objects from Great Whittington: 1. NCL-622714, buckle; 2. NCL-5F9BA3, harness pendant; and 3. NCL-482242, seal matrix.

accessories. The most numerous type of object is the spindle whorl, eight of which have been recorded. These have been found to the east, north, and west of the village and consist of simple undecorated conical forms and the more standard biconical forms. The copper-alloy locking key (NCL-205ED7) dating to 1300–1500, and a copper-alloy casket mount (NCL-6608C7) dating to 1200–1500, attest to household furniture and security (Egan 1998, 69–81, 113–15), whilst the copper-alloy strapend (NCL-175127) and copper-alloy buckle (fig. 9.1) are both standard forms of the period 1200–1400 (Egan and Pritchard 2002, 74, 132–7).

A relatively rare object from Northumberland is the copper-alloy harness pendant (fig. 9.2) of thirteenth-century date. This pendant is square in form, with a square central boss and a field retaining traces of blue enamel. The outer edge of the pendant is notched, creating a wavy, beaded effect. There is no heraldic device to associate it with a particular family, but it would have adorned a horse of a noble house and this makes it the highest status object of the medieval assemblage (Griffiths 2004, 61–3).

Another interesting object is a copper-alloy seal matrix in pointed oval form (fig. 9.3) dating to the thirteenth or fourteenth century. The field depicts a pelican sitting on the edge of a nest on the branch of a tree, plucking its breast in piety to feed its chicks with blood; this is a relatively common image, comparing the pelican to Christ in its willingness to sacrifice itself for its children (I. Szymanski, pers. comm.). The incomplete inscription reads PILLICAN DIEO_ PROPVS XVS EN_D_ MIChI__OR, with XVS abbreviating Christus and suggesting that the matrix belonged to an individual named MIChI[..], probably Michael.

Medieval coins

A total of 29 medieval coins have been recorded, with the earliest certain issue a cut-farthing (literally one-quarter of a cut penny) of John or Henry III dating to 1204–17 and the latest issue a penny of Edward IV dating to 1465–70. These coins can be assessed by assigning each coin to one of Rigold's (1977) issue periods, and calculating coin loss following the same formula as used above for Roman coins. This calculation of coin loss has the benefit of normalizing the varying lengths of issue periods to create comparable figures, notably contrasting with the basic percentage of the assemblage that each issue period contributes. Thus, whilst coins of Edward I–Edward III account for 37.9% of the total medieval coin assemblage, when calculated at how many coins per 1000 were lost per annum, this number is 5.2, contrasting with the higher coin loss figure of 9.4 for coins of Henry III that only contributed 31.0% of the medieval coin assemblage.

Figure 10 demonstrates a significant trend through the calculated coin loss per annum at Great Whittington. There is a distinct bias toward earlier coinage of Rigold's Phase B (issue periods 1180–1247 and 1247–79) rather than the more profilic issues of Phase C (issue periods 1279–1351, 1351–1412, 1412–64, and 1465–1544). There is generally very little continued circulation of coins from Phase B into Phase C, due to considerable changes in the design of the coinage (Kelleher 2011, 1493–4). Thus, this early peak in coin loss suggests a greater circulation of coinage in the vicinity of Great Whittington in the later thirteenth century. Notably, this Phase B circulation included literal fractions of pennies, cut into quarters and halves and worth a farthing or a halfpenny, respectively. The two issue periods of Phase B included a cut-farthing and four cut-halfpennies, respectively. Phase C saw the introduction of purpose-minted fractional denominations of the penny called the farthing and halfpenny, but only two of these newer issue halfpennies have been found.

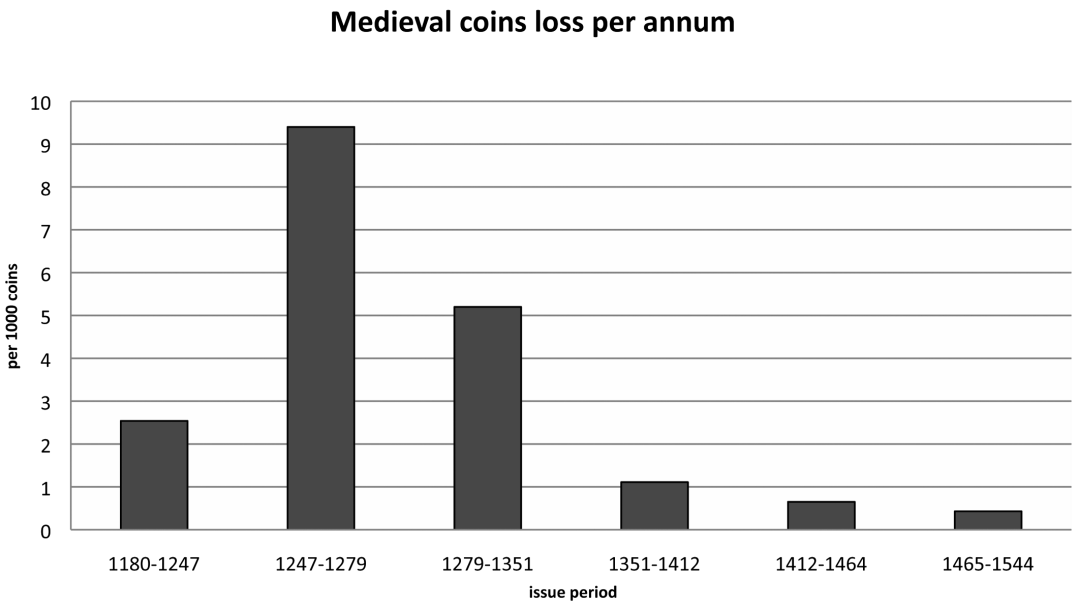


Fig. 10 Medieval coin loss, based on 29 coins that can be assigned to an issue period, and showing the average number of coins lost per annum per 1,000 coins. No national British mean has been published, so there is no wider context for the coin loss at Great Whittington.

The coinage of Edward I–Edward III may also be related to this peak of coinage under Henry III, extending the longevity of peak circulation into the mid-fourteenth century, but Edwardian coins could have very long lives in circulation, indicated by evidence from hoards. More important than the number of coins from the issue periods of Phase C, however, are the denominations of coins uncovered. As indicated, there was only one halfpenny, but a gold quarter noble of Edward III has been found. Gold coins are generally rare finds, so the inclusion of one in this assemblage is significant. That said, it is telling that there is not a greater mix of denominations, particularly given the much greater number of denominations that were available from the reign of Edward I. For example, there are no groats or halfgroats, which might be expected, although these issues are physically larger and probably less likely to be lost or unrecovered relative to a penny. (Though note the loss of two groats, a threepence, and two sixpences of the Tudor period, all of which are considerably larger than pennies.)

This begs the question as to whether this coin loss is relative to the politics and economy of the period, or the manner in which the coin assemblage formed. Phase B coinage (1180–1279) may be more prolific because Northumberland enjoyed a period or relative stability, which was undermined by Edward I's political interventions and wars in Scotland. This precedent was followed by subsequent English kings, and the Phase B peak and decline of Phase C coins (1279–1544) could be interpreted as indicative of the troubled politics of the late thirteenth to sixteenth centuries. More work needs to be conducted on medieval coin assemblages across northern England and southern Scotland to confirm such an interpretation.

The spatial distribution of coins mirrors that of medieval finds in general (fig. 2), and probably indicates the practice of manuring arable fields with domestic waste. This suggests that the greater percentage of smaller coins of Phase B which are more easily lost accounts for the Phase B peak. West of the village, coins are more clearly clustered, with coins of Phase B (1180–1279) separating distinct clusters of Edwardian (1279–1377) and later medieval issues (1412–1544). Distribution to the north and east of the village is more spread out and less clustered, and the apparent lack of Phase B coinage to the east of the village may be due to the low numbers of medieval coinage found in that area generally.

POST-MEDIEVAL

The objects of post-medieval date that were found are mostly dress accessories or from a domestic context, suggesting that most of them were also lost during agricultural activities. The objects are not particularly significant, and they do not make much of a contribution to any interpretation of activity around the village. Perhaps the one item of interest is a copper-alloy seal matrix (NCL-1F5797) depicting a bird flying right with an olive branch in its beak. The style of the bird and the matrix itself suggests it dates to the sixteenth or seventeenth century. Unfortunately, there is no inscription so the seal cannot be associated positively with any particular individual or family.

Post-medieval coins

Post-medieval coins are dominated by issues of the Tudor monarchs, including a penny of Edward VI (NCL-692AD2) dating to 1550–3, two groats of Mary (NCL-794C57 and NCL-5A4736) dating to 1553–4, a threepence of Elizabeth I (NCL-06C995) dating to 1571, two sixpences of Elizabeth I (NCL-1362E8 and NCL-209367) dating to1575 and 1582–3 respectively, and a penny of Elizabeth I (NCL-801292) of 1594–6. A Scottish penny of James VI (NCL-35CDB1) dating to 1614–25 and a penny of Charles II (NCL-3625E2) dating to 1674 have also been recorded. Further coins of more recent date, for example Georgian and Victorian issues, have also been found. Given the longevity of Elizabeth I's reign, the frequency with which her coinage has been found is not surprising, but the penny of Edward VI and two groats of Mary are more statistically significant due to the brevity of their reigns. The lack of coinage for Charles I and single penny of Charles II are also notable, as their coins would be expected in slightly higher numbers.

GEOPHYSICAL SURVEY

The known artefact distributions recorded by the PAS as of June 2011 were from a large area in excess of 300 ha. Following a field reconnaissance, the decision was taken to choose two fields to survey within the time and budget constraints of the project (shown on fig. 2). Field 6 was selected because a number of interesting finds had been recorded from the field and it was in regular use for arable crops, further enabling the survey to test the potential survival of archaeological features under modern arable regimes. Field 34 was selected because of its long-term use as pasture, which has preserved the ridge-and-furrow of an earlier ploughing regime and in principle may preserve subsurface features that have been destroyed in fields under modern cultivation. The Carboniferous geology of the region (Johnson 1995), and the impact this has on geophysical techniques was also taken into account.

The geophysical survey was conducted in November 2011, with three primary aims:

- To map subsurface anomalies which might indicate the presence of features of archaeological significance, particularly those relating to Roman and medieval settlement;
- To map any associated historic features, such as field boundaries and systems, roads, agricultural regimes (e.g. ridge and furrow) and cemeteries; and
- Provide supportive evidence to data obtained by the PAS from metal-detectorists for Roman and medieval activity in the selected area.

GEOPHYSICAL SURVEY TECHNIQUES AND PARAMETERS

The distribution strategy and emplacement of the survey grids across Fields 34 and 6 followed accepted protocols (David *et al*. 2006). Survey grids were established in relation to permanent features (field walls) in both fields with control points located to survey-grade accuracy ± 100 mm and tied into known Ordnance Survey points with a total station theodolite (Leica 403L). Survey areas were subdivided into 30 m survey grids using a Total Station, which was also used to provide cartographic information. The digital mapping of the site is georeferenced and superimposed upon an Ordnance Survey digital map. Magnetic anomalies

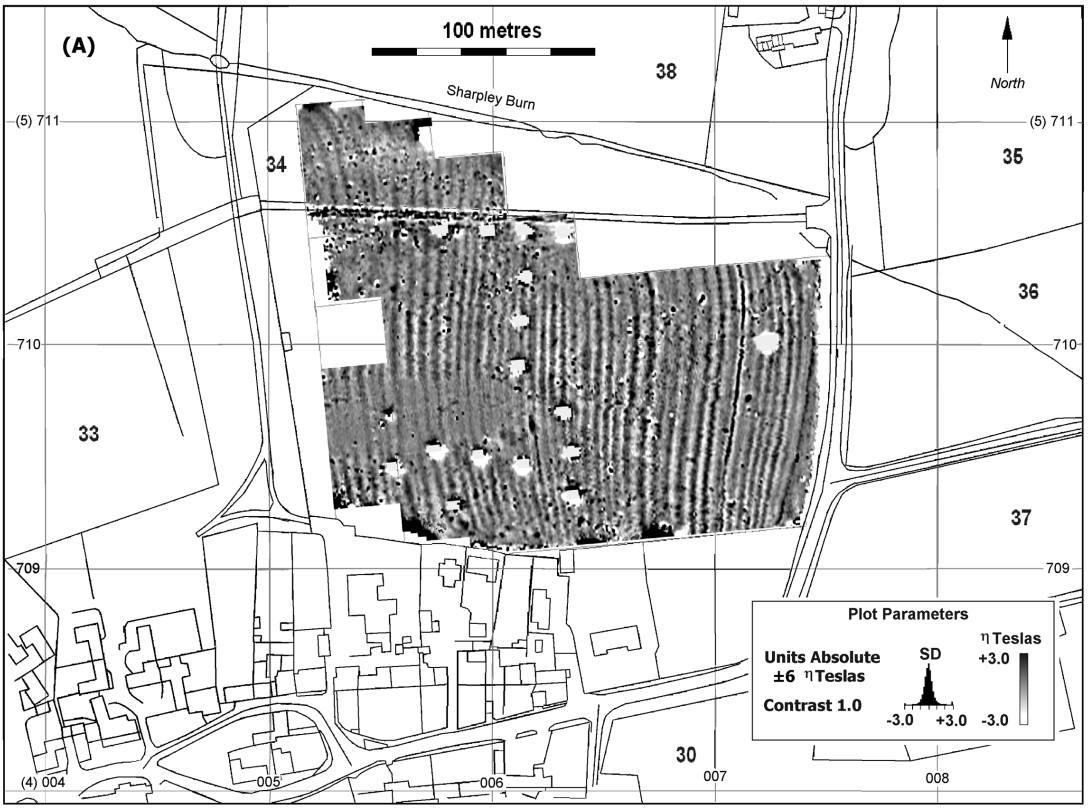


Fig. 11A The magnetic survey of Field 34. Map made using OS/EDINA cartographic data, © Crown Copyright.

are prefixed by (m) in the text and on schematic plans whilst those identified by resistance survey have (r) appended.

A single Geoscan FM256 fluxgate gradiometer was used to carry out a magnetometry survey employing 1 m parallel traverses with 0.25 m sample intervals. The total area of the site surveyed was approximately 10 ha (25 acres), comprising irregular areas within individual fields. A Geoscan Research RM15 Resistance Meter was used to complete the resistivity survey. The instrument was used in twin electrode probe formation with a 1 m separation between mobile probes, with 1m traverses and 1 m sample intervals.

FIELD 34: THE MAGNETOMETER AND RESISTANCE SURVEY RESULTS

Field 34 occupies a north-facing slope, with the highest ground in its south-west corner, gradually falling to the north and east. The alignment of the ridge-and-furrow is almost north-south, following the direction of the steepest slope, but tends to disappear as it approaches the Sharpley Burn that runs east along the northern field boundary. This effect was particularly evident north and east of a track that runs across the field east-west. Only the northeast corner (the flood plain) and some of the western edge of the field was left unsurveyed. The survey traverse direction was west to east.

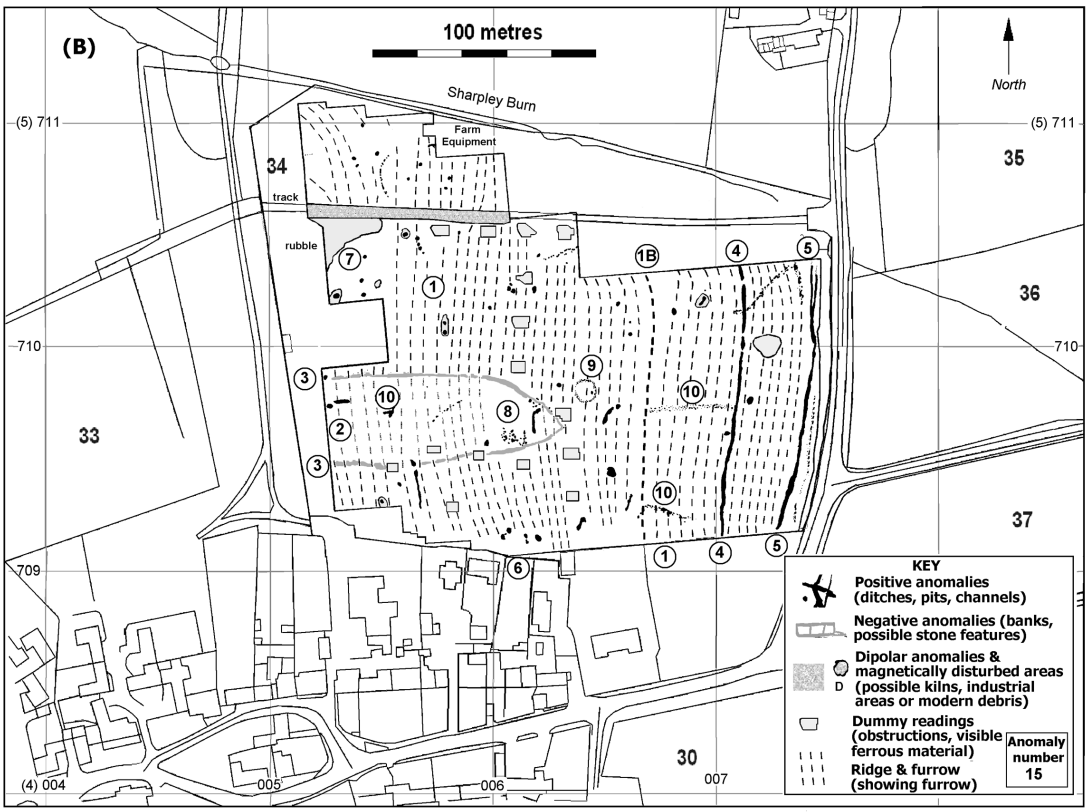


Fig. 11B Annotated anomaly plan for magnetic survey of Field 34. Map made using OS/EDINA cartographic data, © Crown Copyright.

An overview of the schematic representation of anomalies identified through magnetic survey was superimposed upon the map of the survey area of 3.5 ha (figs. 11A and B). To assist in identification the magnetic anomalies are prefixed by (m) in the text whilst logically those identified by resistance survey have (r) appended.

The most obvious feature evident across the field was the response produced by medieval ridge-and-furrow which produced a typical reversed S-shape. The width between furrows varied from 3.5–6.5 m, with some indication of elements of earlier relict ridge-and-furrow. Some evidence of a physical division, perhaps denoting land ownership or demarcation, can be seen where an extra-wide ridge has been emplaced (m1B). At the highest part of the field the response was much more muted (m2), probably related to improved drainage of the soil rather than erosion. This entire low-response area formed an elliptical area, some 100 m by 35 m which was quite strongly defined by a slightly negative feature (m3). Two features (m4 & m5) superficially resembling ridge-and-furrow, were seen towards the eastern sector of the field. The first feature (m4) can be seen on the ground as a substantial raised ridge. Although the feature follows the general track of the ridge-and-furrow, it is probably later in date, and may indicate some form of drainage channel. Whether or not this is a waterlogged stone

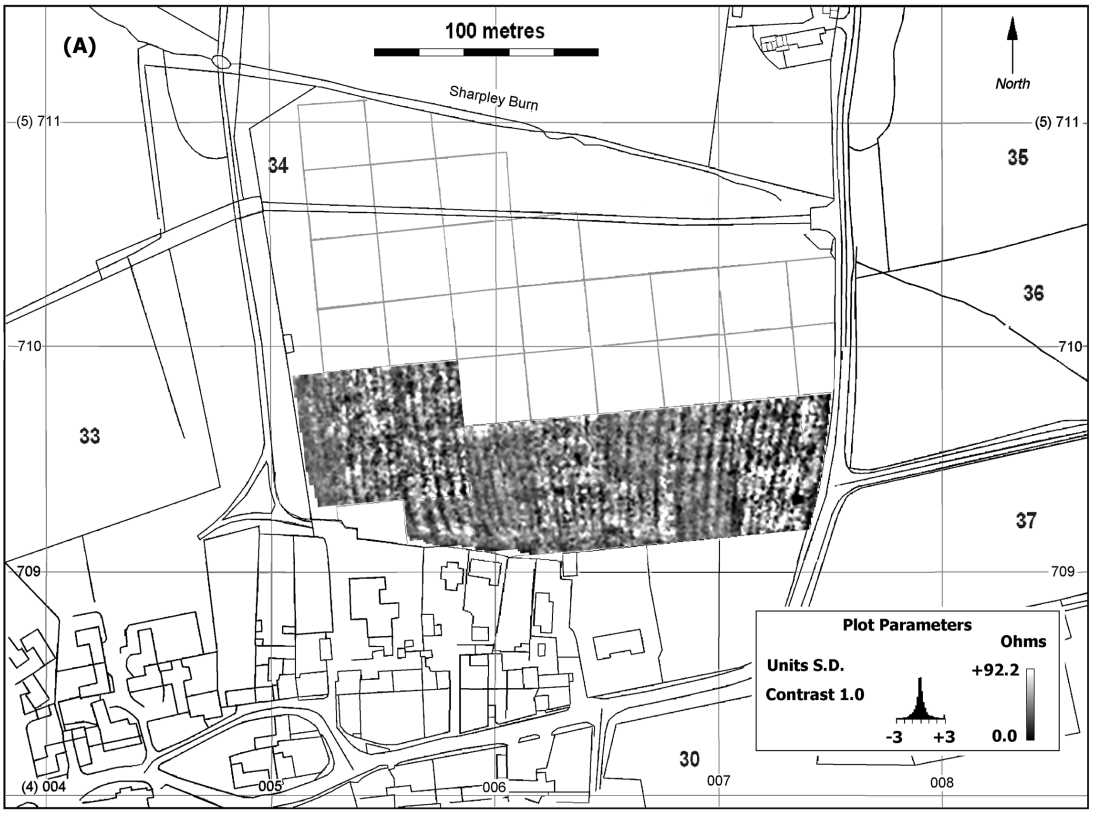


Fig. 12A The resistivity survey of Field 34. Map made using OS/EDINA cartographic data, © Crown Copyright.

channel or a ceramic pipe is not clear, but it does appear to be directed toward the Sharpley Burn, and may indicate the route of a drainage or sewage system. It may not now be functional as it is cut by a relatively recent track. The second of these features (m5) is a broad ridge (*c.* 4–5 m wide).

Traces of a ferrous pipe follow a section of the southern field boundary (m6), although the largest sources of ferrous interference were the steel tree guards. Despite inserting dummy readings around these structures, a significant overlap was observed creating a field of interference some 10–12 m in diameter. Towards the western edge of the field, south of the farm track, an area of ground had been covered with building rubble and a large mechanical digger (m7) which negated any possible survey. The periphery of this area exhibits a number of strongly dipolar anomalies, possibly errant rubble.

The high ground of the field is bounded by a slight, but indistinct, band of anomalies (m3). A number of faint linear positive anomalies (m8) can be seen to be associated with possible pits. Further east a slight positive circular anomaly was detected (m9), which shows some, but not all, of the characteristics of an Iron Age hut circle. A number of linear positive anomalies (possible ditches) were detected perhaps indicating the presence of degraded

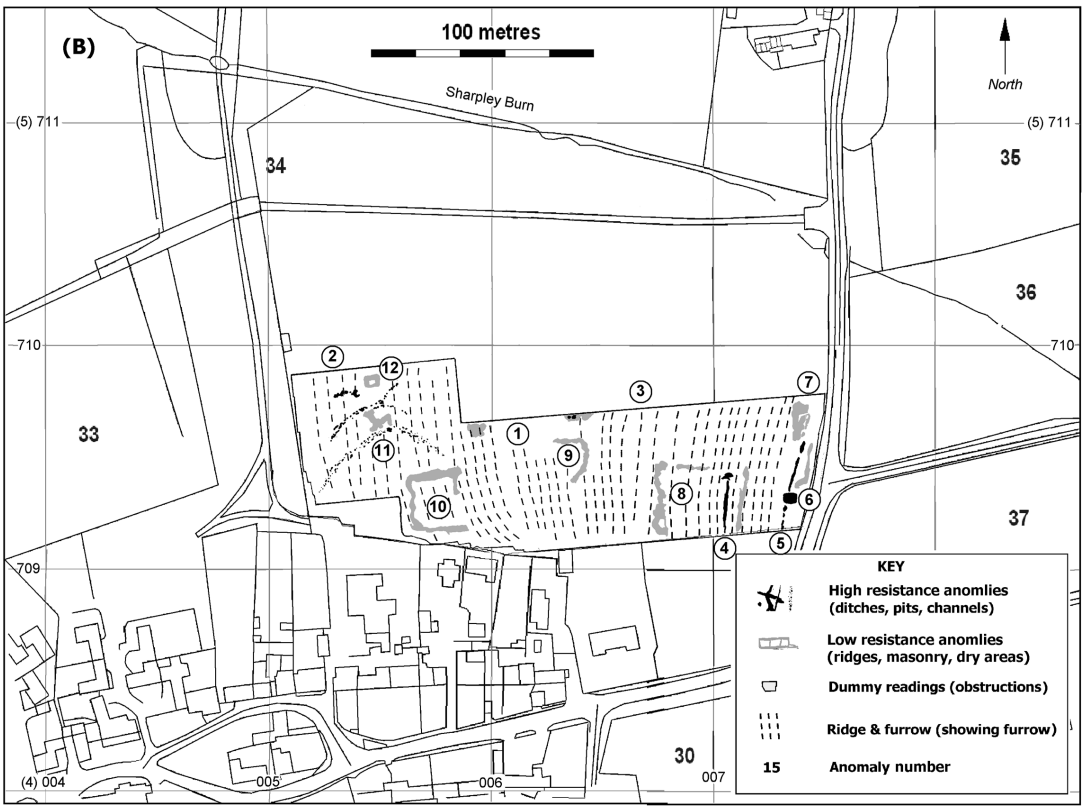


Fig. 12B Annotated anomaly plan for resistivity survey of Field 34. Map made using OS/EDINA cartographic data, © Crown Copyright.

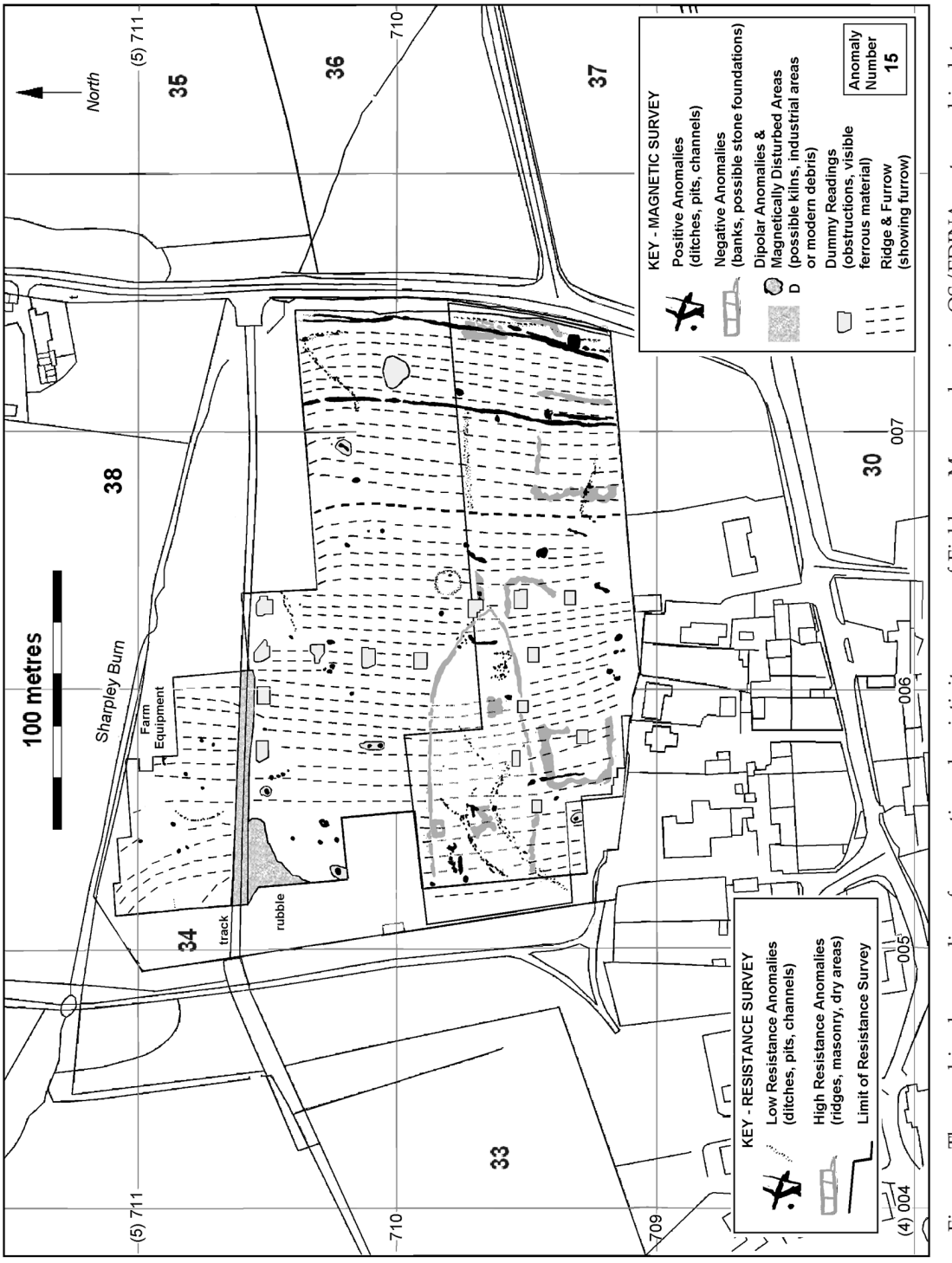


Fig. 13 The combined anomalies of magnetic and resistivity survey of Field 34. Map made using OS/EDINA cartographic data, © Crown Copyright.

prehistoric field boundaries (m10). Many other small anomalies are present on site such as faint linear anomalies which may indicate small drainage ditches or channels and small pits, but are too numerous to identify individually.

A derivative anomaly plan was produced from the resistivity survey data (figs. 12A and B). The two data sets showing magnetic and resistance grey scale and anomaly overviews are shown superimposed for comparative purposes, discussed below (fig. 13).

The earth resistance survey was conducted over a smaller area encompassing the southern sector of the magnetic survey, an area of some 1.5 ha. The anomalies in this instance are prefixed by (r) in the text. The ridge-and-furrow was recognised by the resistance survey (r1), but notably in the area of the high ground (r2) where the magnetic survey (m3) suggested a loss of responsiveness. The prominent broad sub-division between two agricultural regimes was also detected as a wider than average span between ridges (r3).

The non-arable channels detected with magnetic survey (m4 and m5), were also represented on the resistance survey respectively (r4 and r5). The suspected drainage channel (r4) is clearly not part of the ridge and furrow system with a low resistance response (up to -120 ohms). Little evidence of a substantial stone or brick conduit was detected (as a high resistance response). The second suspected aquatic feature, next to the road (m5) was detected as a substantial low resistance linear feature (r5). Towards the southern end of this linear channel, upon higher ground, was a rectilinear area (5 m × 4 m) which appeared to be some sort of storage or holding tank. It is probable that this channel is the superseded remains of a sewerage system, feeding into the Sharpley Burn. The survey of 1299 indicated the presence of two water mills (Craster 1914, 391, 394). It is unlikely that this is one of those referred to but it should be noted that water mills do not need a constant supply of water. Locally, the undershot mill at East Shaftoe Grange, with its very steep mill race, used water from a modest holding pond, and even then only when there had been plentiful rain. This is a point worth bearing in mind, although any trace of the mill (if that is what it was), presumably near the Sharpley Burn, may be long gone. A high resistance area (r7) was detected towards the north-east sector of the survey, which was not morphologically indicative and may only indicate the conflation of a couple of ridges (i.e. dry ground).

Moving further west, a high resistance sub-rectangular anomaly (r8), apparently some 40 m square was noted. This however, on two sides, follows the route of the ridge-and-furrow. Two other high resistance sub-rectangular anomalies (r9 and r10) may also indicate particularly dry areas of a ridge. More promising anomalies are found on the highest part of the site where two low resistance sub-rectilinear features (r11) do not conform to the alignment of ridge-and-furrow. These may indicate ditches of a relict, perhaps prehistoric field system, or even the ditches of an Iron Age settlement. The evidence is not compelling, but past research by this author has indicated that lowland 'Jobey-type' enclosed Iron Age settlements, almost without exception, tend to be built on locally higher ground. This can vary from a prominent spur, or even a raised knoll. The final feature of note is a small high resistance rectangular anomaly (r12), some 5 m by 4 m in size, perhaps indicating the foundations of a small building.

The combined magnetic and resistance responses plan (fig. 13) shows a high degree of activity on the higher ground. Whether all this taken together can indicate activity prior to medieval field cultivation — possibly Iron Age field boundary ditches and perhaps some form of settlement — is not clear. At the eastern edge of the site, the elevated channel with a feeder tank would benefit from further investigation.

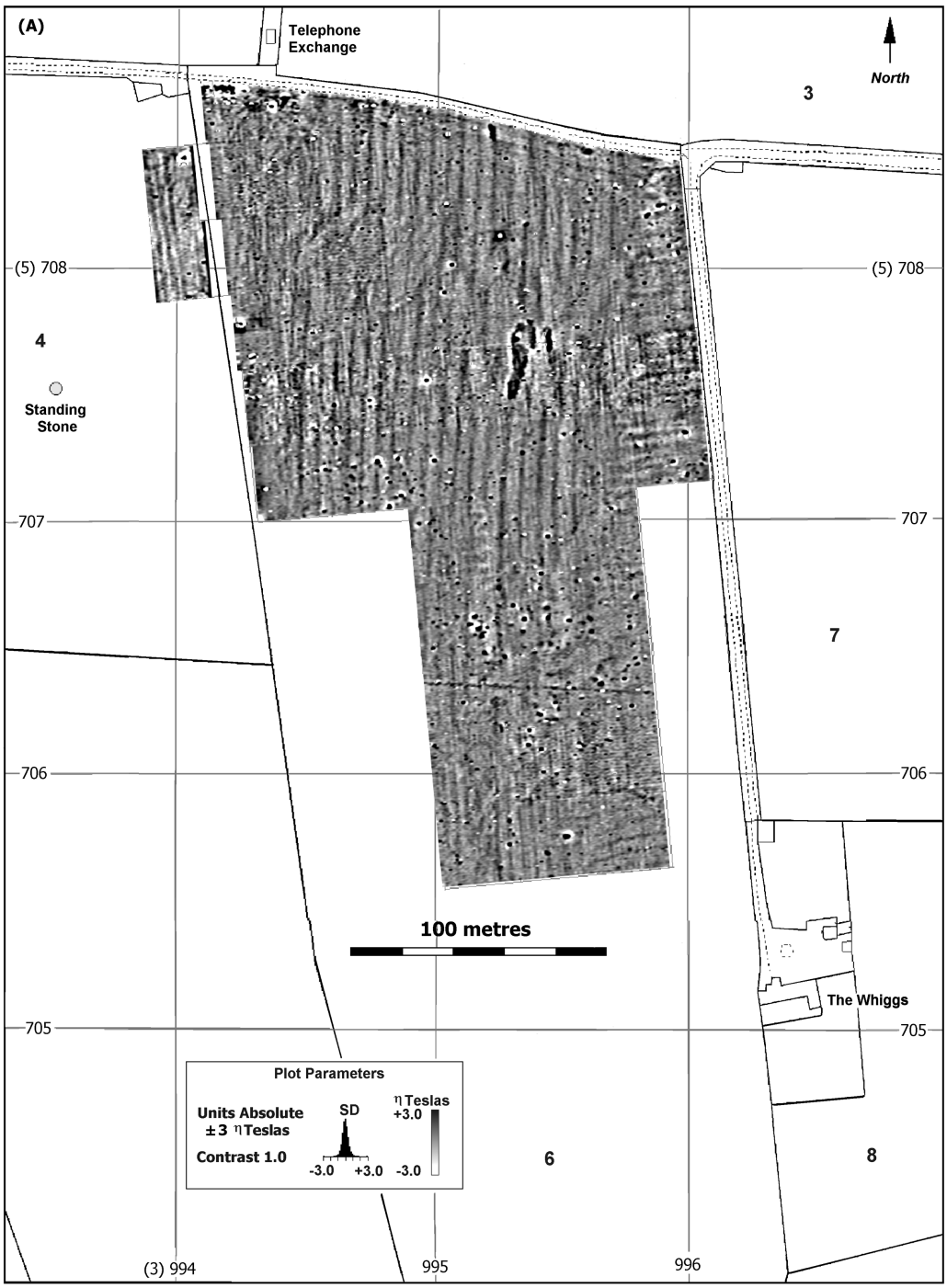


Fig. 14A The magnetic survey of Field 6. Map made using OS/EDINA cartographic data, © Crown Copyright.

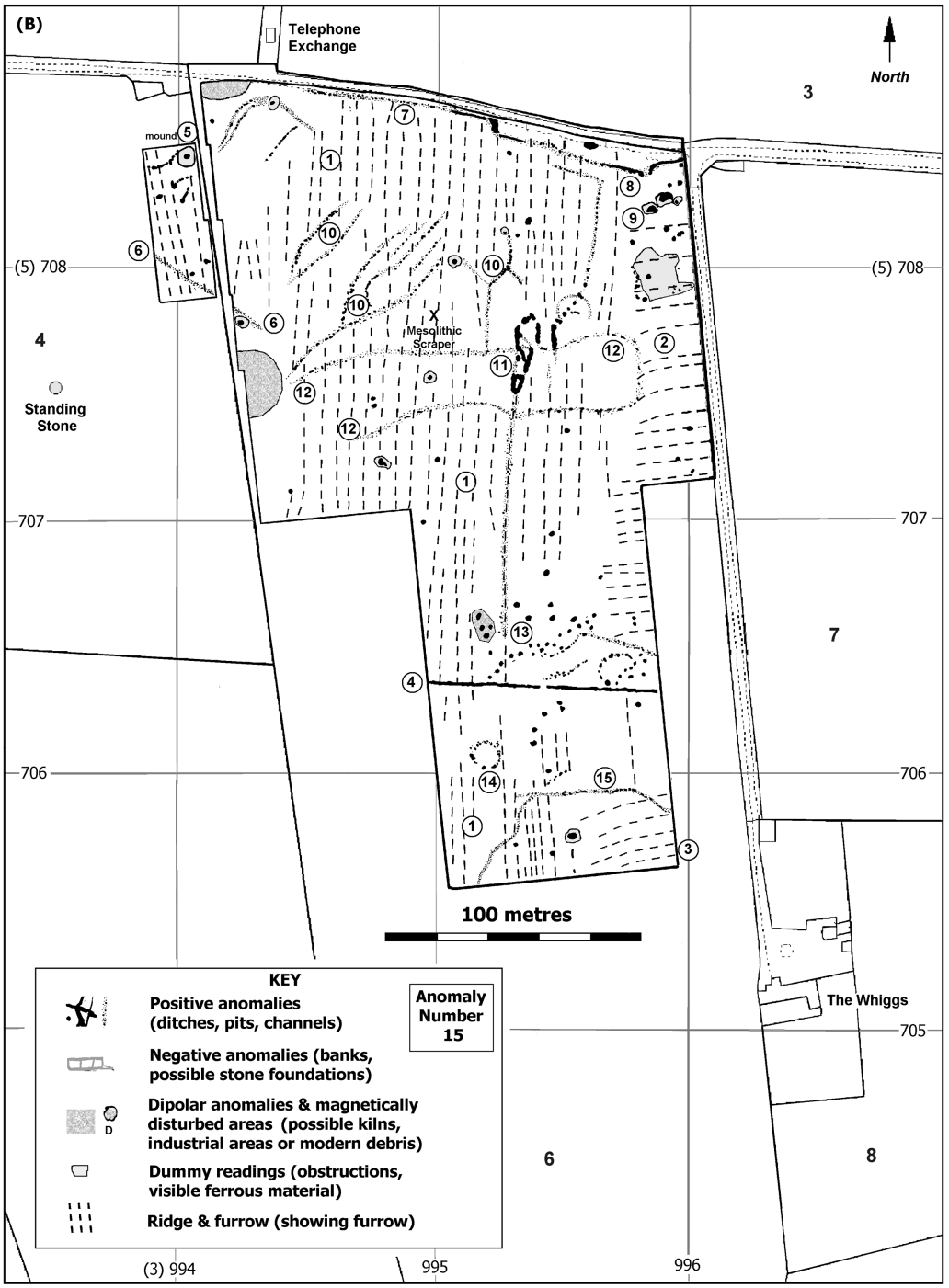


Fig. 14B Annotated anomaly plan for magnetic survey of Field 6. Map made using OS/EDINA cartographic data, © Crown Copyright.

FIELD 6: THE MAGNETOMETER SURVEY RESULTS

Thirty m survey grids were established and the survey georeferenced. Two contiguous grids were established in Field 4, immediately to the west of Field 6, to encompass a small mound.

The highest ground in the field was seen to be towards its north-west corner (194 m), with a gradual fall towards the south-east, although this fall tended to change towards the south and become more easterly. The fall at the northern boundary west-east was 194 m to 189 m, with a slope down to the midpoint in the field at The Whiggs, to 182 m. The field was under pasture, cropped for hay or silage, but not regularly grazed by cattle or sheep. Thus, it is assumed a regular regenerative ploughing regime has been adopted. Field 4 appears to be permanent pasture.

The methodology for the magnetic survey was the same in this field as was used in Field 34, except that earth resistance survey was not conducted, and the traverse direction was from south to north. An overview of the magnetic survey was superimposed upon the map of the survey area of 4.6 ha; after analysis of the data, a derivative anomaly was produced (figs. 14A and B).

Little remains of the surface manifestation of ridge and furrow, but sufficient evidence remains to show that most of the field (approximately 75%) extending towards the west comprised at least two phases of ridge-and-furrow cultivation (m1, m2). The more recent episode of ridge-and-furrow (m1) runs north-south with a variable distance of 4–6 m between furrows and lacks the characteristic reversed-S shape common to medieval ridge-and-furrow. Furthermore, this phase extended some distance for some 315 m and appears to cross the now removed field boundary ditch (m4) that is visible on the OS 1860 map. Thus, this ridge-and-furrow system is of nineteenth-century date, consistent with evidence from elsewhere in the North East. For example, modern use of ridge-and-furrow is known to have persisted in County Durham into at least the early nineteenth century (Bailey 1810). By contrast, the eastern edge of the field certainly does have an earlier phase of ridge-and-furrow (m2), aligned east-west. Further south there is evidence of the reversed S-shape (m3), but the remains are truncated. A linear positive anomaly (m6), possibly a ditch, crosses the modern field boundary (and bank) west into Field 4, suggesting an earlier origin. The ridge-and-furrow appears to be better preserved in this latter field which is kept under permanent pasture.

Close to the modern road from Great Whittington to Roses Bower farm (fig. 2), on the northern edge of Field 6 is a linear positive anomaly (m7) which bifurcates further east, becoming a more substantial dual feature (m8). This may merely indicate where ground has been compressed by agricultural machinery, but the road executes a 90-degree turn to the north within Field 4, and a track, now designated 'unmarked path' continued directly west from this point (NY991708: beyond the western edge of fig. 14), and may have connected directly with Dere Street. This track is visible as an earthwork, some 0.3 m in height, about 3 m wide and with flanking ditches, and, given its proximity to two Roman roads, could be of similar date.

A magnetically active dipolar group of anomalies (m9) may indicate ferrous material, although responses like this tend to indicate agricultural debris (horseshoes, ploughshares etc.). A number of indefinite sinuous positive anomalies (m10), which cross the north-south ploughing probably relate to natural drainage channels, rather than ancient field boundary ditches. A very strong group of linear positive anomalies (m11) may indicate a waterlogged area, although there is a not very convincing suggestion of a small ring ditch associated with

it. The former linear feature (m11) appears to continue as a furrow, albeit more prominent than most. Close to these anomalies was a band of near-surface rock, probably limestone, evident by surface scatters (m12). This extrusive geological feature stretched almost across the field and was some 30–35 m in width; this produced a noticeable surface manifestation and was magnetically active, creating some magnetic interference evident in the results.

Towards the southern sector of the field, near the relict field boundary ditch (m4), a group of 'pits', diffuse, sinuous, linear, and moderately dipolar anomalies were detected (m13). This group did not show any morphological characteristics, other than that of geological and/or farming detritus. The very faint trace of a circular anomaly was detected (m14), some 13 m in diameter, although any resemblance to a prehistoric hut circle may be fortuitous. The final anomaly (m15) was a sinuous, wide (2–3 m) positive feature, which was found on one of the series of east-west ridges which crossed the site; its aetiology is unknown.

As always, the field produced many non-specific small positive anomalies. As a rule, fields subjected to ploughing (rather than permanent pasture) have many more of these non-specific types of anomaly, and in this instance many have been omitted for the sake of clarity.

DISCUSSION OF THE GEOPHYSICAL SURVEY

The results derived from using multiple methodologies in Field 34 show how invaluable an integrated approach can be (cf. Biggins and Taylor 2004). The two methods proved to be complementary with the resistance survey recognizing a possible tank for storage (r6) which was not detected by magnetic survey. .

The survey did not provide incontrovertible evidence of significant archaeological features that could explain the presence of so many Roman artefacts. Geophysical survey is often a serendipitous process, and we may simply have been looking in the wrong place. Unimproved permanent pasture often provides the better survey results, rather than those subjected to constant ploughing. Some of the more subtle features have been highlighted in this report. There are tentative suggestions of a pre-medieval field system in Field 34, as well as water management. Field 6 provided evidence for a road or track extending west at its north end. The geophysical survey has shown the greater potential for detection of subsurface features in unimproved pasture compared to fields under an arable regime. Whilst further work is required to prove the survival of subsurface archaeological features in pasture, this has important implications on any future archaeological investigation of the site; as the majority of artefacts found through metal-detecting have originated in ploughed fields, excavation may need to focus on pasture for any surviving archaeological features.

CONCLUSIONS

In the light of objects recorded by the PAS, a limited programme of geophysical survey was conducted. There were few unambiguous indications of archaeological features recorded through the geophysical survey, though there is tentative evidence for a pre-medieval field system in Field 34, north of the village, and at the north end of Field 6, a road or track flanked by ditches extends west from the village in a relatively straight line toward Beukley, where the junction between Dere Street and the Devil's Causeway is believed to have been. This road or track cannot be dated without excavation, but the possibility remains that it is Roman in date. These results may seem insignificant, but the extensive distribution of the objects over

hundreds of hectares of land, and the high proportion of this land being in regular arable regimes places a number of physical constraints on the survival and detection of archaeological features through geophysical prospection

Artefacts recovered by the PAS, on the other hand, provide a very important dataset for the assessment and understanding of the activities that took place around the modern village of Great Whittington. Objects of Roman and medieval date are the most numerous, and the calculation of coin loss suggests two peaks of activity: in the late first-early second century and in the late thirteenth-early fourteenth century. Other objects of the Roman and medieval periods that can be dated typologically seem to reinforce this conclusion, though these objects cannot be as closely dated as the coins themselves.

The method by which these artefacts were discovered, through use of a metal detector, and their position in the plough soil, diminishes their value because they lack an exact archaeological context; however, the large number of artefacts, the diversity of object-types discovered, and their distribution all point to the fact that an important archaeological site — where there was Iron Age, Roman, and Early Medieval activity — exists in the vicinity of the present village. When considered in the context of the Roman archaeology, this activity is even more intriguing. The site is close to the Devil's Causeway, Dere Street, the Wall fort of Halton Chesters, and the town of Corbridge. There is no known Roman fort or town in the immediate vicinity of Great Whittington, and the assemblage is atypical for a rural Romano-British settlement in lowland and highland locations (eg Pegswood Moor: Proctor 2009; Kennel Hall Knowe: Jobey 1978). Thus, the evidence from metal-detecting has been paramount in the discovery of this new and potentially significant cluster in the Wall corridor.

The artefacts and coins of the Roman period, in particular, are significant. The number of objects and coins, the diversity of object types, and their extensive distribution suggests a new and very significant site, or perhaps a handful of smaller sites in proximity to each other. A small number of intriguing finds, including the miniature socketed axe, a gold fragment, and the *paterae* may indicate the presence of a shrine or temple to the west-southwest of the village, somewhere in proximity to the southern end of Field 6. The number of objects of possible significance is comparatively low, though those that have been found are anomalous enough to warrant the suggestion (cf. Wilson 2011, and Wilson and Wilson 2011). For the other locations of Roman finds it is difficult to ascertain what type of site(s) they originated from. Certainly, the evidence from the coins suggests activity in the Trajanic and Hadrianic periods, pre- and post-dating the construction of the Wall. It can be speculated on the basis of wear to Hadrianic coinage that the site was not abandoned in the early second century, despite its proximity to the newly built Wall. This is in contrast with the recent suggestion of the abandonment or collapse of settlement in the northern hinterland of the Wall (Hodgson 2013). Whilst coin evidence for occupation or activity decreases from the late second to the fifth century, objects of military association suggest later second- or third-century activity. When considered with the evidence for late Iron Age and early post-Roman activity, it can be suggested that the precursor settlement to the medieval manor and village of Great Whittington may have been a site of some significance over many centuries.

A further possible explanation for the relatively high incidence of artefacts is that the settlement(s) at Whittington acted as trade depots or markets; such an idea might be supported by the frequency of precious metal Roman coinage relative to base-metal coins. The proximity to the Devil's Causeway, so close to the fort of Halton Chesters and easily accessible from Corbridge, would make this plausible.

Further geophysical survey, and actual excavation, is required to determine if any archaeological deposits survive that can further elucidate our understanding of the locality and — given the evidence for activity from every major archaeological period — whether they can contribute to our understanding of the long-term settlement history of Northumberland.

ACKNOWLEDGEMENTS

Richard Kelleher kindly advised on methods of coin loss analysis for medieval coinage. A grant supporting geophysical survey was generously provided by the Society of Antiquaries of Newcastle upon Tyne. Geophysical survey was completed under the direction of Dr J. Alan Biggins of TimeScape Surveys through the generous time provided by archaeology students of Newcastle University, namely: Alison Devine; Frances McIntosh; Aidan Pratt; Lauren Proctor; James Rees; Harriet Riley; Tom Sutcliffe. Last, but certainly not least, thanks are extended to the landowner Mr T. J. Oliver, East Farm, Great Whittington, for permitting access to his fields, and to the metal-detecting club at Blaydon for regularly and rigorously recording the artefacts that initially enabled the cluster to be identified. Maps were made using Ordnance Survey/EDINA cartographic data, © Crown Copyright/database right 2013.

APPENDIX

The objects that have been recorded by the PAS from Great Whittington are listed below, separated by period, with coins from the Roman, medieval, and post-medieval periods further distinguished. All objects can be viewed on the PAS database (finds.org.uk/database), including illustrations, detailed descriptions, dimensions, and production information. Thus there is no need to replicate the information here. Entries are listed by the PAS Find ID number and object type. Those objects that are illustrated in the text are indicated by an asterisk*.

MESOLITHIC

NCL-C9D243	flint microburin
NCL-C9E3E3	flint microlith
NCL-A345C1	flint scraper

NEOLITHIC

NCL-1F34B5	groundstone axe
NCL-478B11	groundstone axe
NCL-632FC1	flint blade
NCL-C99124	flint thumbnail scraper
NCL-C9A146	flint scraper
NCL-C9B7F4	flint leaf-shaped arrowhead
NCL-7AD6E8	flint core
NCL-7AEA70	flint debitage
NCL-7AFFD5	flint arrowhead

BRONZE AGE

NCL-BCC384	copper-alloy dirk fragment

IRON AGE

*NCL-BC1EE6	copper-alloy Nauheim brooch, 50 BC–AD 43
*NCL-2AB2C5	copper-alloy strap fitting (harness), 100 BC–AD 43
*NCL-34A996	copper-alloy terret, 100 BC–AD 200
*NCL-34C417	copper-alloy strap fitting (harness), 100 BC–AD 120
*NCL-346DE5	copper-alloy miniature socketed axe, 100 BC–AD 250

ROMAN OBJECTS

Dress accessories

NCL-B5B047	gold loop of jewellery, 43–410
*NCL-2B2544	copper-alloy dragonesque brooch, 50–175
*NCL-34AD01	copper-alloy trefoil-cup brooch, 50–200
*NCL-1B2CB5	copper-alloy bow brooch with enamel, 50–200
NCL-7FB222	copper-alloy headstud brooch, 75–175
NCL-802ED7	copper-alloy trumpet brooch, 75–200

*NCL-7FD5A4 copper-alloy trumpet-variant brooch, 75–200
NCL-1B5052 copper-alloy knee brooch, 150–275
*NCL-BBB6E2 copper-alloy penannular brooch (Fowler A3), 100–300
NCL-C88983 copper alloy finger ring (Guiraud type 1a), 50 BC–AD 100
NCL-34C688 copper-alloy pinhead, 43–410
NCL-44F4E7 copper-alloy pestle, 100–300

Military equipment

*NCL-1CABE7 copper-alloy sword guard, 50–150
*NCL-9F54E2 copper-alloy buckle, 150–275
*NCL-BCDEC6 copper-alloy prick/mount from a spur or helmet, 200–410
*NCL-21E084 copper-alloy sword scabbard chape, 100–300

Harness equipment

NCL-34B047 copper-alloy button-and-loop fastener (Wild class VIb), 100–200

Objects of possible religious/ritual significance

NCL-BD0923 copper-alloy figurine, 43–410
NCL-335745 copper-alloy patera, 70–150
NCL-33CC76 copper-alloy patera, found with above, 70–150 (see also Allason-Jones 2010)

Mounts and fittings

NCL-35F013 copper-alloy mount depicting a helmeted/capped head, 43–410
NCL-35ACC4 copper-alloy mount, 43–410
NCL-2D80F6 copper-alloy stud, 43–410

Uncertain function

NCL-34DBF3 lead collar/socket/fitting, 43–410
NCL-74AEB2 copper-alloy mount/fitting, 43–410

ROMAN COINS

NCL-62F2B6 Republican denarius of Marc Antony, 32–31 BC
NCL-77AF96 dupondius or as of Vespasian, 69–79
NCL-1B36C3 denarius of Vespasian, 69–79
NCL-345E45 denarius of Titus as Caesar under Vespasian, 77–8
NCL-73C1D8 denarius of Titus, 80
NCL-343B44 denarius of Trajan, 101–2
NCL-342263 denarius of Trajan, 103–11
NCL-32B146 copy of Lycian drachm of Trajan, 100–17
NCL-7FEFE0 denaurius of Trajan, 112–14
NCL-6DCD34 denarius of Hadrian, 117–38
NCL-BBF694 sestertius of Hadrian, 117–38
NCL-2C3B62 dupondius or as of Hadrian, 117–38
NCL-349364 denarius of Hadrian, 134–8
NCL-AA43C5 denarius of Antoninus Pius, 151–2
NCL-9EB605 sestertius of Lucius Verus, 161
NCL-347562 denarius of Faustina II, 161–75
NCL-2F8FE1 plated denarius of Septimius Severus, 193–5
NCL-34A794 denarius of Septimius Severus, 194–5
NCL-7E1AB1 denarius of Septimius Severus, 200–201
NCL-6E2887 unidentified sestertius of the early Roman period, 43–200
NCL-2C6823 dupondius or as of the early Roman period, 43–200
NCL-2C55E6 dupondius or as of the early Roman period, 43–200
NCL-3485B3 clipped radiate of uncertain issue, 230–86
NCL-2F5F44 radiate of Claudius II, 268–70
NCL-663DD7 radiate of Carausius, 286–93
NCL-2F7D05 nummus of Constantine II, 318–24
NCL-349E75 nummus of the House of Valentinian, 364–78

5th-century coin group (Collins 2008)

NCL-EE2655; NCL-EE7100; NCL-EEBF58; NCL-EEEB36; NCL-EF0D13; NCL-EF35F5; NCL-EF6DD1; NCL-EF8E21.

EARLY MEDIEVAL

NCL-9F6B12 wrought iron knife, 410–1066
NCL-33F414 copper-alloy annular brooch, 500–600
NCL-69DB06 copper-alloy strapend, 900–1000
NCL-341171 copper-alloy buckle, 900–1200

MEDIEVAL OBJECTS

*NCL-482282 copper-alloy seal matrix, 1200–1400
NCL-2CA7C5 copper-alloy annular brooch, 1200–1400

NCL-205ED7 copper-alloy locking key, 1300–1500
NCL-65DEC7 copper-alloy cosmetic article, 1200–1500
NCL-6608C7 copper-alloy casket mount, 1200–1500
NCL-173570 copper-alloy pendant, 1200–1500
NCL-175127 copper-alloy strapend, 1200–1500
NCL-062BD1 copper-alloy buckle, 1350–1500
*NCL-5F9BA3 copper-alloy harness pendant, 1200–1300
*NCL-622714 copper-alloy buckle, 1350–1400
NCL-2F7102 copper-alloy strap fitting, 1200–1500
NCL-BC6103 lead weight, 1100–1500
NCL-34B3B3 lead spindle whorl, 1100–1500
NCL-5AC158 lead spindle whorl, 1100–1500
NCL-1A9D32 lead spindle whorl, 1100–1500
NCL-21F7A2 lead spindle whorl, 1100–1500
NCL-220467 lead spindle whorl, 1100–1500
NCL-162BE5 lead spindle whorl, 1100–1500
NCL-7AB876 lead spindle whorl, 1200–1500
NCL-BFD013 lead spindle whorl, 1200–1500
NCL-2D6794 lead spindle whorl, 1200–1500

MEDIEVAL COINS

NCL-359713 cut-farthing (shortcross) not further identifiable, 1180–1247
NCL-350AD7 cut-farthing of John I or Henry III, 1204–17
NCL-34EF38 Scottish penny of Alexander II, 1205–30
NCL-34B6C8 penny of Henry III,1209–17
NCL-2FA695 penny of Henry III, 1216–18
NCL-C1CCE8 penny of Henry III, 1247–50
NCL-667166 penny of Henry III, 1248–50
NCL-78D1A4 cut-halfpenny of Henry III, 1248–50
NCL-293CD1 cut-halfpenny of Henry III, 1248–50
NCL-620556 cut-halfpenny of Henry III, 1248–50
NCL-361288 penny of Henry III, 1251–72
NCL-7FEDF7 penny of Henry III, 1251–72 Note: the coin is almost cut into two pieces (as if to make a half penny) but the cut stops about halfway through the coin.
NCL-790293 cut-halfpenny of Henry III, 1251–72
NCL-34B3C1 cut halfpenny of Henry III, 1256–72
NCL-C1DE85 penny of Edward I, 1280–1
NCL-784C44 penny of Edward I, 1282–9
NCL-78A8E2 penny of Edward I, 1282–9
NCL-1A2E14 penny of Edward I, 1283–6
NCL-C93CA4 penny of Edward I, 1289–91
NCL-654763 penny of Edward I, 1299–1301
NCL-622CA7 penny of Edward I, 1301–10
NCL-786972 penny of Edward II, 1310–14
NCL-1AD978 Scottish penny of David II, 1333–56
NCL-7E0E18 half penny of Edward III, 1335–43
NCL-2FAA34 penny of Edward III, 1356–61
NCL-7C2DB8 gold quarter noble of Edward III, 1363–9
NCL-34C9F5 damaged halfpenny of uncertain issue, 1279–1377
NCL-C96213 clipped penny of Henry VI, 1430–34
NCL-792B67 penny of Edward IV, 1465–70

POST-MEDIEVAL

NCL-1F5797 copper-alloy seal matrix, 1500–1650
NCL-A9C4F4 lead-alloy button, 1500–1650
NCL-DD2D47 copper-alloy strap fitting, 1500–1700
NCL-066848 copper-alloy chain, 1500–1800 (though this could be earlier in date)
NCL-662395 pewter spoon, 1600–1800
NCL-7A7FC4 copper-alloy buckle, 1660–1800
NCL-35C0E6 lead-alloy seal, 1700–1800
NCL-7AA712 lead weight, 1700–1900
NCL7A9551 stone pencil/stylus, 1700–1900

POST-MEDIEVAL COINS

NCL-692AD2 penny of Edward VI, 1550–3
NCL-794C57 groat of Mary, 1553–4
NCL-5A4736 groat of Mary, 1553–4
NCL-35AE05 threepence of Elizabeth I, 1561–82
NCL-06C995 threepence of Elizabeth I, 1571
NCL-1362E8 sixpence of Elizabeth I, 1575
NCL-209367 sixpence of Elizabeth I, 1582–3
NCL-801292 penny of Elizabeth I, 1594–6
NCL-35CDB1 Scottish penny of James VI, 1614–25
NCL-2D47C8 sixpence of Charles I, 1646–9
NCL-3625E2 penny of Charles II, 1674

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Rob Collins, Great North Museum: Hancock, Barras Bridge, Newcastle upon Tyne, NE2 4PT.

robert.collins@newcastle.ac.uk

J. Alan Biggins, Northumbria, Main Road, Dinnington, Newcastle upon Tyne, NE13 7JW.

jalanbiggins@tiscali.co.uk