

AN ARCHAEOLOGICAL INVESTIGATION AT HAZELRIGG, LANCASTER, 2011-12

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Abstract

An archaeological investigation undertaken by Oxford Archaeology North before the installation of a wind turbine at Hazelrigg, near Lancaster University, revealed limited evidence for prehistoric occupation, in the form of stone artefacts and charcoal in the fills of tree-throw holes. Radiocarbon dating of charcoal from these features indicated a likely Bronze Age date for most of this activity. In the later medieval period a complex and possibly extensive system of ditched agricultural enclosures, including stock enclosures, arable fields and trackways, was probably developed during the late twelfth or the thirteenth century.

Introduction

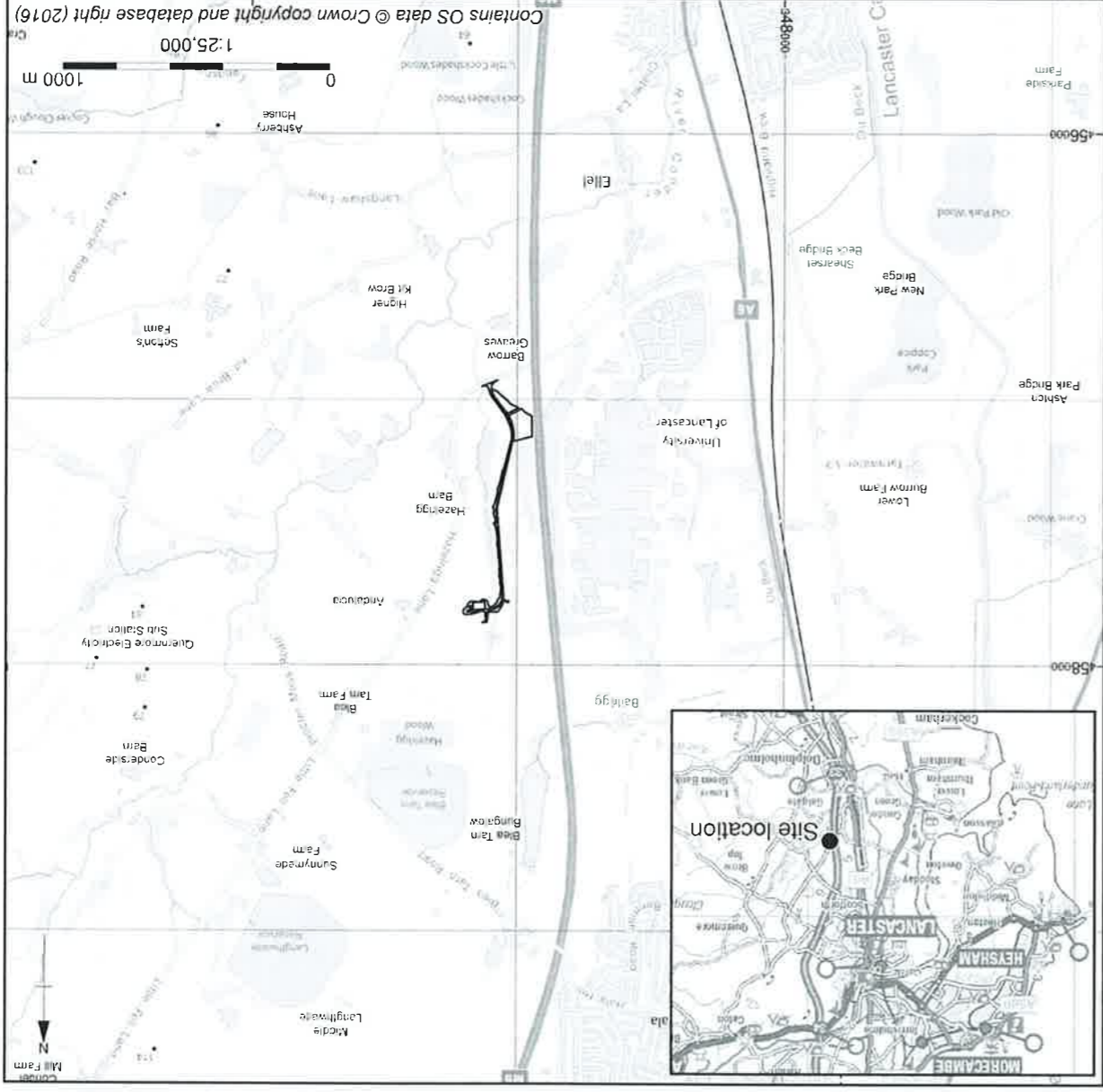
In 2010 Lancaster University was granted planning permission for the installation of a wind turbine generator together with an access road and other construction features on land at Hazelrigg (centred on SD 4904 5742; Figure 1). At the request of Lancashire County Archaeology Service, an archaeological investigation was undertaken by Oxford Archaeology North (OA North) on behalf of the University prior to the construction and after a geophysical survey (Stratascan 2010). The fieldwork, which was undertaken intermittently between December 2011 and June 2012, comprised the excavation of 28 evaluation trenches and subsequently the investigation of three larger areas where significant archaeological remains had been revealed. Two of these (Areas 11 and 20), on the line of the access track (Fig. 2), were quite small, with a combined area of about 134m². However, the third (Area 29) was very much larger, comprising approximately 4300m². This was in the northern part of the site, encompassing the wind turbine itself, a crane pad and the northern end of the access road.

Archaeological and historical background

The only previous direct archaeological evidence for prehistoric activity in the vicinity came from excavations undertaken in 2003 at Barker House Farm about 1.2km south-west of the site (OA North 2004). There, a flake of black chert, perhaps of late Neolithic (c. 3000–2400 BC) or early Bronze Age (c. 2400–1500 BC) date, was found in a Roman-period context, and three sherds of possibly Bronze-Age pottery were also recovered. An early Iron-Age radiocarbon determination was obtained from oak charcoal in a posthole, though this feature was seemingly associated with a roundhouse that was itself securely dated by radiocarbon assay to the Roman period (OA North 2004).

South of the study area, two Roman roads, one running north from the industrial site at Walton-le-Dale and the other leading north-west from the fort at Ribchester, are believed to have converged near Galgate (Margary 1973) from where a single road continued north to the fort and civilian settlement at Lancaster. In the vicinity of the University this road is believed

Figure 1 Site location



to the west of the modern A6, but little fieldwork has been carried out to verify its precise route. It has been recorded at Highland Brow, about 400m south-west of the site. It is visible as a cropmark on aerial photographs (Neil 1995, 16) and as an earthwork at the former Royal Albert Hospital about 3km to the north-west (LUAU 2000).

Burrow Heights, a low eminence situated close to the presumed line of the road and some 1.8km north-west of the site, has yielded important Romano-British finds, most notably a group of sculpted figures, thought to be from a temple or mausoleum (Iles and Shoter 2010, 103–4; Shoter and White 1990, 8–9), and two milestones (Shoter and White 1990, 62–3). The only other archaeological evidence for occupation near the site during the Roman period comes from the excavations at Barker House Farm. There, on the spur of a low promontory overlooking the Conder valley, two roundhouses, possibly set within a ditched enclosure,

have been home to an ethnically mixed population during this period (Ekwall 1922), including people of Norse descent (Penney 1981, 13; Newman 1996, 95). In the later medieval period (twelfth to sixteenth century), the study area lay within *Scotforth* township, which is mentioned in the Domesday Survey of 1086 as the manor of *Scotforde* (Faull and Stinson 1986). After the Norman Conquest, much of modern Lancashire, including *Scotforde*, was given to Roger de Poitou by William I, the lands passing to the de Lancaster family some time later (Baines 1891; Farrer and Brownbill 1914, 56–8).

Documentary sources indicate that 'Long Lands', the name given on the map of 1841 (LRO DRB 1/173) to several fields in and around the site, may have been derived from *Lamdlunds*, which were once owned by Cokersand Abbey. Bailrigg, a hamlet within Scotforth, also belonged in part at least to the Abbey (Farrer and Brownbill 1914, 99) and Burrow, Hallatrice and Hazelrigg are all mentioned in the Abbey's records and charters (Farrer and Brownbill 1914, 56–8). Ridge and furrow, indicative of medieval and early post-medieval arable agriculture, is still visible in the fields west of Hazelrigg Lane (OA North 2010), though none is apparent where the wind turbine and its associated features were built.

On the earliest detailed map of the area, Yates's map of 1786, the site was mostly situated within a large enclosure, though a small part lay outside this on the open moor. However, the Enclosure Award of 1809 (LRO AE/5/11), which was made following the Scotforth Moor and Bailrigg Moor Enclosure Act of 1806, shows the area as partially occupied by new fields, created on land enclosed following the award, and crossed by new, straight roads. The situation some years later is depicted on a map of Scotforth in the Lancaster Parish Corn Rent Award of 1824 (LRO AT/2), which shows both the ancient enclosures and the new fields. The development site itself appears to have lain outside the newly enclosed areas, though it had been enclosed by 1841 when the Tithing Map was produced (LRO DRB 1/173). Since the early nineteenth century, the principal communication route through the area has been the A6, the present line of which lies slightly to the east of the Garstang to Heiring turnpike, which itself followed the line of the medieval road (Ogilby 1675, plate 38).

Prehistory

Evidence for activity during the prehistoric period was restricted to the fills of several 'tree-throw' holes, formed by the root systems of long-vanished trees, some containing varying quantities of charcoal. Four likely tree-throws (2948, 3031, 3033, 3040; Fig. 3) were recorded on the southern edge of Area 29, a fifth (2905) was in the south-east corner of the same site, and another (3043) was further north. Most were sub-circular or sub-oval, ranging in size from c. 1m x 0.8m and 0.4m deep, to c. 2.65m x 1.3m and 0.9m deep, with irregular sides and uneven bases. They were filled with mixed deposits of sandy clay and earth; 2905, however, had an irregular, almost T-shaped plan. Several other amorphous features in Area 29 (e.g. 2928, 2929, 3060), may also have been tree-throws. Elsewhere, a single, roughly sub-rectangular feature (2015) was recorded in Area 20 (Fig. 4; Plate 1). It was over 4.8m long, 1.5m wide and up to 1.2m deep and cut by either another, sub-circular tree-throw or a small pit (2005).

yielded several radiocarbon determinations suggestive of occupation during the second or third-century AD (OA North 2004).

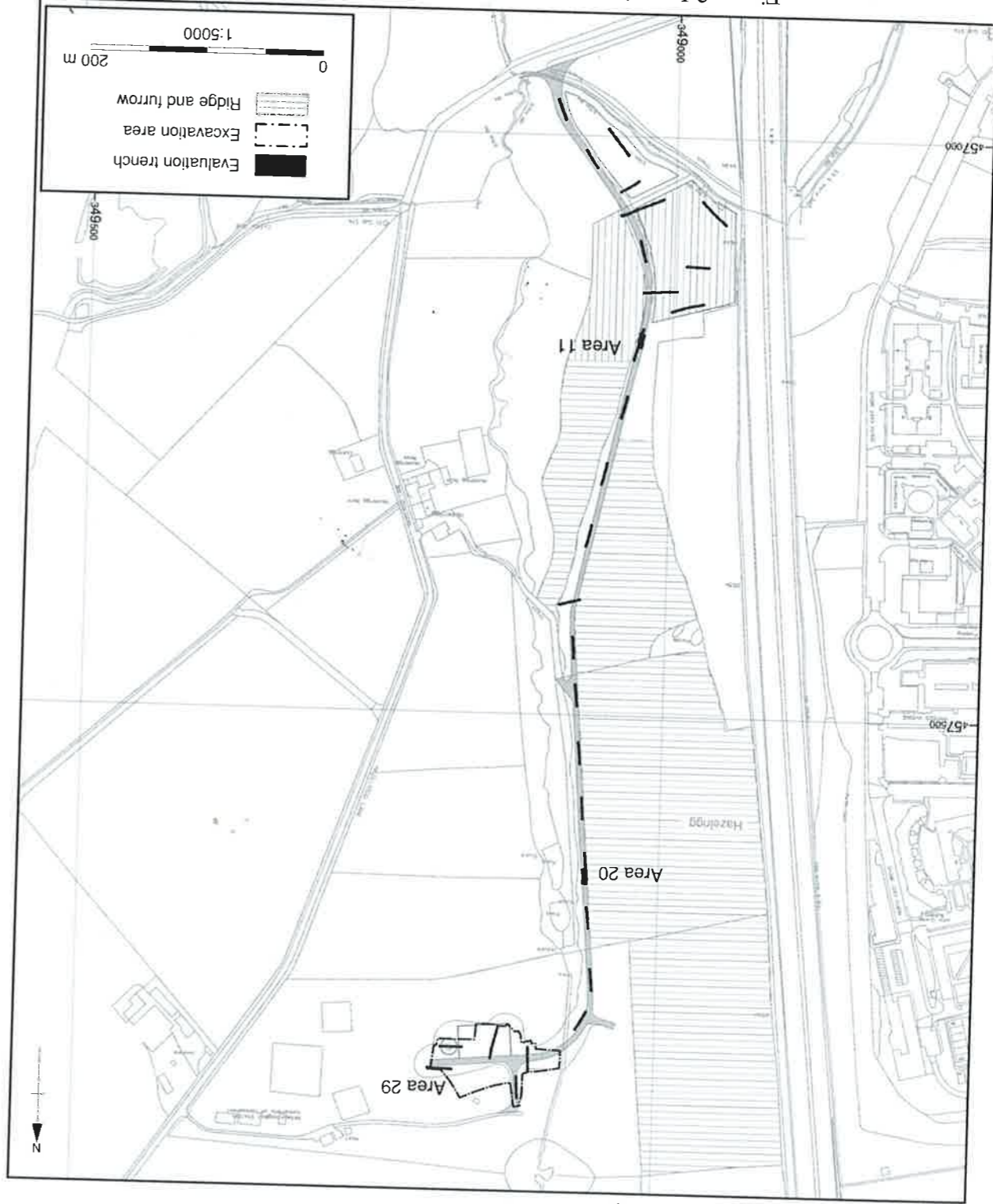


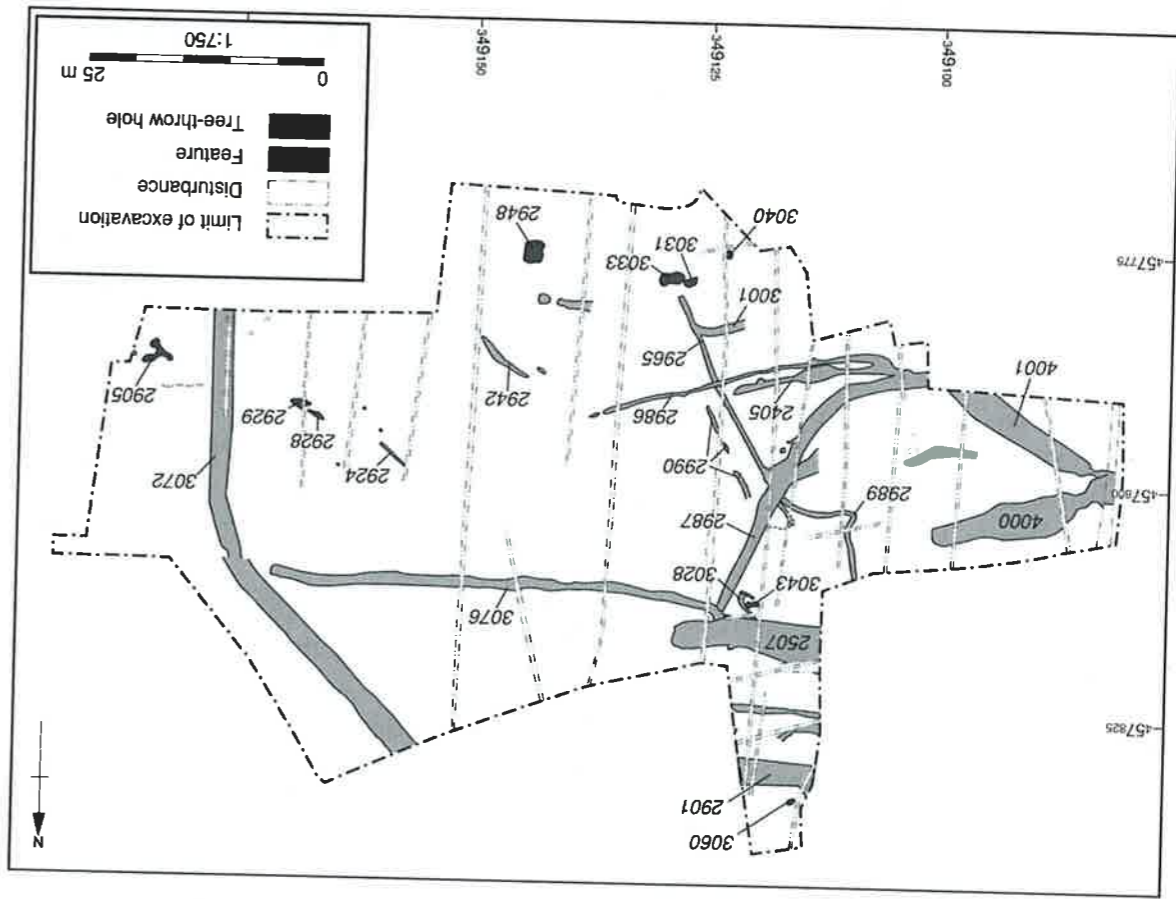
Figure 2 Location of archaeological investigations

With the exception of a single radiocarbon determination in the late eighth- to late ninth-century AD that was obtained from a seemingly isolated hearth at Barker House Farm (OA North 2004), there is currently no evidence for early medieval (fifth to eleventh century) activity in the vicinity of the site. However, place-name evidence suggests that the area may

Plate 1: Prehistoric pit/tree-throw 2005 (Area 20), looking north, showing charcoal-rich fill at the base



Figure 3 Plan of Area 29



Finds and dating evidence

The only artefacts recovered from the tree-throws were two refitting fragments of dark grey/black chert, with evidence of retouching or preparation, found in feature 2905. These cannot be exactly dated but may be of late neolithic (c. 3000-2400 BC) or early Bronze Age date (c. 2400-1500 BC). Oak charcoal from the same feature was radiocarbon dated at the Scottish Universities' Environmental Research Centre (SUERC). This yielded calibrated (cal) dates of 5926-5752 cal BC (6980±40 BP (Before Present, i.e. before 1950); reference SUERC-40178) and 5883-5736 cal BC (6930±30 BP; SUERC-40179). If taken at face value, this would place the feature in the late mesolithic period (c. 6000-4000 BC). However, the presence of the chert fragments suggests that the dated charcoal may have been residual. Elsewhere, oak charcoal from the base of tree-throw/pit 2005 in Area 20 (Plate 1) yielded two early Bronze Age determinations, one of 2489-2299 cal BC (3925±30 BP; SUERC-40173) and the other of 2347-2189 cal BC (3810±30 BP; SUERC-40174). There were dates of 1056-906 cal BC (2830±30 BP; SUERC-40171) and 1001-841 cal BC (2775±30 BP; SUERC-40172) from alder charcoal in 2948, which suggest a late Bronze Age (c. 1200-700 BC) origin for this feature located about 40m south-west of 2905 (Fig. 3). The other possible indication of prehistoric activity was provided by three fire-affected stones,

Figure 4 Plan of Area 20

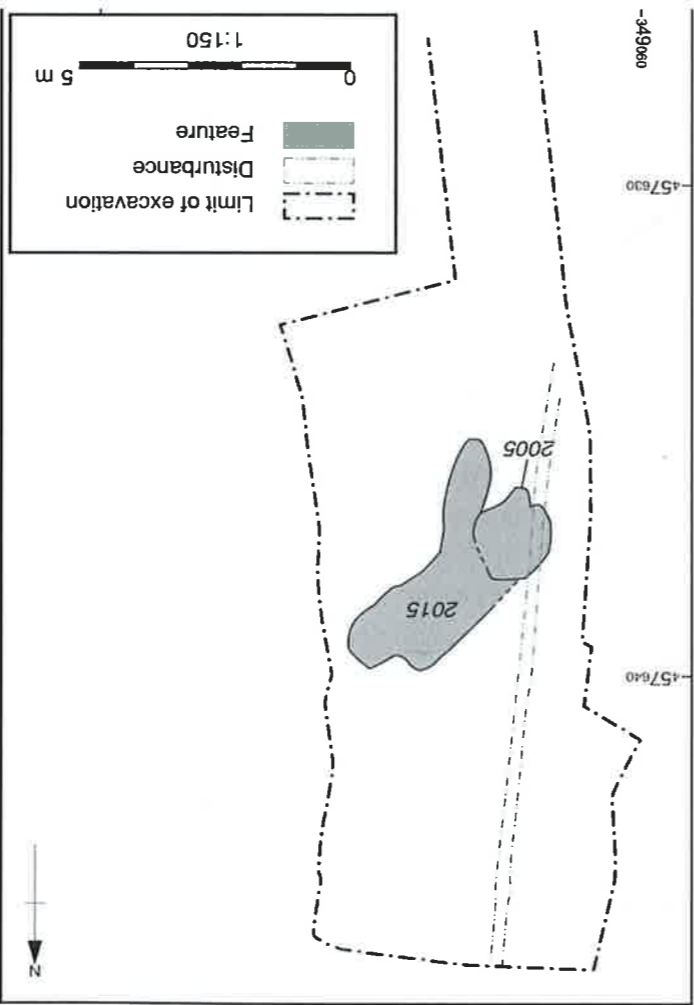
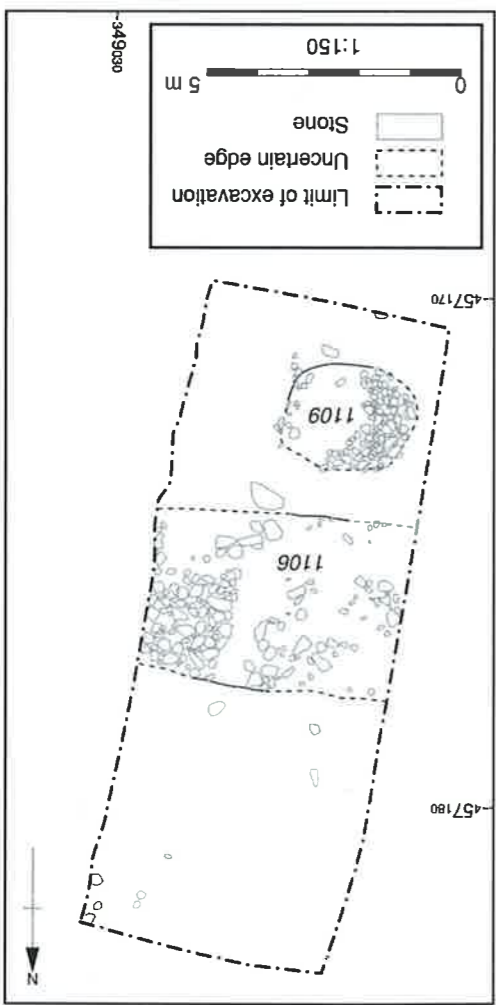


Figure 5 Plan of Area 11



set within a largely pastoral landscape, though the survival of ridge and furrow elsewhere within the study area indicates that arable agriculture was also practised.

The northern end of ditch 2987 was apparently cut by the western end of a similarly sized, east/west-aligned ditch (3076), though spatial evidence suggests the two may have been broadly contemporary. This ditch continued east for about 48m and, on the east, seemed to respect the position of 3072, the putative eastern boundary of the medieval enclosure system, since its eastern end terminated little more than 1m from the edge of that ditch. Other elements of the ditch system in Area 29 included a large 'double-ditch' (2901) in the extreme northern part of the site (Fig. 3; Plate 2) and a wide, relatively shallow ditch (2507), up to 5.2m wide and 0.5m deep, which seemingly cut the intersection of ditches 2987 and 3076. The precise purpose of these features, and of many other fragmentary and stratigraphically isolated ditches recorded in Area 29, could not be determined, nor did they yield any datable artefacts. In the absence of any evidence to the contrary, however, they are presumed to have been associated with medieval agricultural activity.



Plate 2: Section through probable medieval double-ditch 2901 (Area 29), looking west

Around Area 29 most of the evidence for medieval agriculture comprised fossilised ridge and furrow, indicative of arable rather than pastoral agriculture. This was visible in the modern fields along much of the new access road (Fig. 2), though none was present in the field with Area 29. At the southern end of the development site the ridge and furrow was shallow and aligned approximately north to south, but to the north it was aligned approximately east to west. This change in direction occurred in the vicinity of Trench 11, one of the 28 evaluation trenches excavated initially and consequently expanded. The resulting investigation area (Area 11; Fig. 2; Plate 3) was found to contain an east/west-aligned, stone-filled feature (1106), 3.4m wide (Fig. 5), which yielded a small amount of medieval pottery. Although only excavated in a limited area (less than 5m east to west) the feature was traced further eastwards by the geophysical survey (Stratascan 2010). South of this feature within Area 11

recovered from a post-medieval field drain in the centre of Area 29, which could conceivably have come from a disturbed prehistoric context; but this is far from certain.

The medieval period

Nothing was found to suggest that the areas investigated were occupied during the Iron Age (c. 700 BC–c. AD 70), the Roman period (late first century to early fifth century AD) or the early medieval period (fifth century to late eleventh century). However, a complex of ditches and gullies, recorded mainly in Area 29, provided evidence for quite intensive late medieval (twelfth to sixteenth century) agricultural activity, which appears to date mainly to the thirteenth century. The ditch system recorded in Area 29 (Fig. 3) proved difficult to interpret, though intercutting relationships indicate that not all the recorded features were directly contemporary. There seem to have been few, if any, features east of a substantial ditch (3072), up to 2.9m wide, on the eastern side of the site. This feature yielded no dating evidence but almost certainly formed part of the eastern boundary of a large enclosure shown on late eighteenth-century mapping (Yates 1786). Whilst this could be taken as evidence that 3072 was post-medieval, the fact that the excavated medieval features did not seem to extend east of it suggests that it might have originated in the medieval period, being maintained or redefined for some considerable time thereafter. It is possible that the seeming absence of features to the east was because relatively little of this area was available for investigation.

On the western part of the site, a stratigraphically early element of this agricultural landscape was a pair of parallel ditches aligned north-west to south-east (2990, 2965). Both were fairly insubstantial (no more than 0.5m wide) but may have defined the remains of a track or driveway, up to 2.3m wide within the flanking ditches, which was traced for approximately 27m. Possibly attached to the southern end of the westernmost ditch (2965) was the north-east corner of a putative rectangular enclosure defined by an L-shaped ditch (3001), though nothing else relating to this has survived. Towards the northern end of 2965, a similar ditch with a very sinuous alignment (2989) extending broadly north-west from the putative track, may also have been a contemporary feature. Elsewhere, nothing certainly associated with the track was recorded, though a few small fragments of similarly sized ditches sharing a broadly similar alignment (e.g. 2924, 2942, 3028) were recorded to the east and north.

Stratigraphically later than this track, there was a larger curving ditch (2987) (up to 1.5m-wide) which, together with other elements of the system (e.g. 2405 and 2986), appeared to form a V-shaped arrangement. The top of the 'V' was to the north-east, opening towards the higher ground in that direction and narrowing to the base on the south-west. The significance of this layout is not clear but it may have been the remains of a stock-funnel, intended to control the movement of livestock. What may have been another such arrangement was also evident further west, formed by two wide but very shallow ditches, 4001 (up to 3m wide and 0.4m deep) on the south and 4000 (up to 4.5m wide and 0.3m deep) on the north; the axis of the 'V' was east to west. These two ditches yielded 90 per cent of the medieval pottery recovered from the entire development area (138 sherds from 153), with the great bulk of this (124 sherds, 81 per cent of the total) coming from the fills of 4001. Ditch 4000 was also notable as the only excavated feature to yield a pollen assemblage (OA North 2013, 31–6), albeit a poorly preserved one. The evidence suggested that when the sediments were filling the ditch, the surrounding landscape was largely open with scattered trees and shrubs. This is consistent with the idea that the excavated ditches formed part of a series of stock enclosures

sherd in Fabric 4 is distinguishable from the contemporary Fabric 3 only by its colour and a pronounced rilling on the interior wall.

The only other artefact of note is a worn limestone cobble, roughly sub-rectangular in shape, about 0.17m in maximum dimension and found in Area 29. At one corner is a round, shallow depression, about 50mm in diameter, probably pecked, which suggests that the stone had once served as a pivot for a hart-hung door. A similar object with a depression of much the same size was recovered from Roman levels at Ribchester (Howard-Davis 2000, 300, fig 87.21). However, pivots of this type are relatively common finds, and probably continued in use over an extended period, perhaps from prehistory almost to the present day. In addition to the pivot socket, the stone exhibits pronounced dishing on one side, as though it had been used for grinding, perhaps as a mortar or a saddle quern. The presence of both this feature and the pivot suggests reuse, with the stone first being a mortar/quern and then a pivot stone. Like pivot stones, saddle querns and simple mortars are long-lived types and cannot be dated with any precision (Buckley and Major 1990). Given the paucity of evidence for earlier occupation on the site, it seems likely that this artefact is medieval.

The post-medieval period

Little archaeological evidence for post-medieval activity was recorded apart from the nineteenth-century field drains across Area 29 (Fig. 3), which were also recorded in many of the evaluation trenches. Generally, the modern topsoils yielded small quantities of post-medieval pottery, the earliest of late seventeenth or eighteenth-century date which, as with the medieval pottery from the topsoil, may have arrived on the site in material used to manure the fields. All ten of the clay tobacco-pipe fragments recovered are probably eighteenth-century and are consistent with the pottery in suggesting a lack of post-medieval activity much before about 1700. A few pipe fragments from the upper fills of the large medieval ditch 2507 indicate that the top of this feature remained open well into the post-medieval.

Discussion

Prehistory

The only evidence for prehistoric activity on the site came from the fills of several tree-throw holes, most of which were recorded within Area 29. Whilst such features are probably mostly naturally formed, either through the uprooting of a tree (for instance, during a storm) or the decay of its root bole, some may possibly have been created by humans, for example during woodland clearance. Certainly, the inclusion of charcoal in some fills is suggestive of a human presence on the site, though it is uncertain whether it was deposited as a deliberate act, such as the in situ burning of trees during woodland/clearance (Goldberg and Macphail 2006, 195) or incidentally, perhaps being washed in (or dumped) from adjacent occupation areas. Certainly, pollen evidence from the North West generally indicates repeated woodland and reduction episodes during prehistory and, in the uplands at least, the burning of woodland to encourage regeneration for browsing, which may have been an important element of land use (Mellars 1976; Middleton et al. 1995; Hodgson and Brennan 2006, 25). That said, the idea that trees may have been burnt in situ by human agency is untenable for all but the smallest specimens and shrubs, since large, native British trees cannot be burnt whilst standing (Rackham 1995, 71–2). The burning and/or grubbing-out of stumps of felled trees is perhaps more probable, though the former is likely to have generated a great deal of charcoal.

was an undated, sub-circular, stone-filled pit (1109), about 2.2m in diameter. Elsewhere, occasional sherds of medieval pottery were recovered from modern topsoils in several evaluation trenches and from the topsoil in Areas 11 and 29. Probably this was from a midden on a nearby farm or settlement used as manure (Jones 2005).



Plate 3: Stone-filled feature 1106 (Area 11), looking north, with pit 1109 in the foreground

Finds and dating evidence

Three radiocarbon determinations were obtained from medieval ditches in Area 29: two from 2405 and one from 4000. Both were elements of the two possible stock-funnels, represented by V-shaped arrangements of ditches, that were recorded in the western part of the site (Fig. 3). In the former, two samples of alder and hazel charcoal yielded dates of cal AD 1153–1270 (836±35 BP; SUERC-44793) and cal AD 1209–1287 (770±35 BP; SUERC-44794), whilst charcoal from ditch 4000 was dated to cal AD 1186–1284 (780±35 BP; SUERC-44795). The determinations are therefore consistent with a date between the mid/late twelfth century and the late thirteenth century for the filling of these features. The material in feature 4000 was deposited no earlier than the beginning of the thirteenth century.

A date in the thirteenth century for the medieval activity is supported by the assemblage of 153 sherds of medieval pottery (OA North 2013, 25–9). Although the collection can be divided into four distinct fabrics (Fabrics 1–4), it is overwhelmingly of Fabric 1, with 141 sherds accounting for approximately 92 per cent of the assemblage. This material can almost certainly be attributed to the nearby production site at Elliel, which was active in the thirteenth and early fourteenth centuries (White 1993), as can the nine sherds in Fabric 2, which is simply a finer version of Fabric 1. Fabric 3, of which only two sherds were found, most closely resembles the Partially Reduced Greyware tradition seen over much of Cumbria (McCarthy and Brooks 1992, 29). This has a date-range from the late twelfth to the fourteenth century, but was dominant in the thirteenth and fourteenth centuries. The single

The morphology of the remains recorded in Area 29, in particular the two possible stock funnels, suggests that this area was pastoral. This view is supported by both the pollen evidence from ditch 4000, which points to a largely open landscape (OA North 2013, 34–5), and the lack of visible ridge and furrow in this area. That the local agricultural regime was one of mixed farming (i.e. both pastoral and arable) is suggested by the extensive areas of surviving ridge and furrow further to the south and west (Fig. 2). Stock funnels similar to those attested at Hazelrigg have been identified elsewhere in the region, for example at Leyland, south of Preston (Atkin 1985, 175) where they often take the form of a steadily widening lane, debouching onto the common. A particularly good example is illustrated on Yates's map, on the eastern side of the enclosure at Longthwaite (Fig. 6).



Figure 6 Detail of the study area from William Yates' map (1786), showing the enclosures at Hazelrigg and Longthwaite

probably more than was present in any of the Hazelrigg examples. It is, of course, also possible for charcoal to be created without human agency, for example by naturally generated woodland fires, though even during drought conditions, British woodland is generally not flammable (Rackham 1995, 71–2). On balance, therefore, it seems likely that, in many cases, charcoal and other anthropogenic materials entered tree-throws as a result of human occupation nearby, as at Holbeck Park Avenue, Barrow-in-Furness, where several such features yielded a considerable assemblage of early neolithic pottery and flints (Evans et al. in preparation). On the Hazelrigg site, radiocarbon dating of charcoal in two of the excavated tree-throws (2005 and 2948) suggests activity during the Bronze Age, though the determinations were in excess of 1000 years apart, being in the early and late Bronze Age respectively. The Mesolithic dates obtained from oak charcoal in tree-throw 2905 might also point to some form of human activity in this remote period, though the charcoal could conceivably have been formed and deposited naturally.

The medieval agricultural landscape

The great majority of the excavated features were associated with a complex and possibly extensive system of probable agricultural enclosures, trackways and other features located mainly in the northern part of the site within Area 29. The associated dating evidence suggests that this system originated during a period of significant agricultural expansion in the Lancaster area, which occurred between about 1190 and 1290 (Shaw 1956). Such local developments mirrored the situation in England as a whole, including the wider North West, where rapid population increase between 1100 and 1300, stimulated by an ameliorating climate (Dyer 2002, 233), led to the establishment of new settlements set within field systems newly won from woodlands and 'waste' (Dyer 2002, 161, 235, fig. 2; Higham 2004, 72–3). In Lancashire, court cases dealing with assarting – the converting of woodland into cultivated land – are frequently attested during this period (Higham 2004, 75) and it is possible, though there can be no proof, that the enclosures at Hazelrigg were established as part of a similar process. The earliest map of the area (Yates 1786; Fig. 6) and also the map of Scotforth in the Lancaster Parish Corn Rent Award of 1824 (LRO AT/2) depict a large, roughly rectangular enclosure, aligned approximately north to south and seemingly delimited by a wall or other boundary feature. On its eastern edge is an unnamed building or building complex that from its position must presumably be Hazelrigg Farm. Near the farm, the eastern boundary of the enclosure corresponds approximately to the modern line of Hazelrigg Lane (though the lane itself is later and does not appear on the map), whilst to the north it turns slightly westwards to pass through the eastern part of Area 29. There it coincides almost exactly with the line of ditch 3072, which is unlikely to be fortuitous. Presumably, therefore, 3072 was either post-medieval or represents a medieval precursor to the boundary shown on the map. The feature itself has not been independently dated, but the fact that the medieval activity recorded in Area 29 did not seem to have extended east of it suggests that this boundary may indeed be medieval in origin. If this is correct, it may be that the enclosure depicted by Yates is also medieval and perhaps originated as an assart, although it mostly lacks the sinuous boundaries that are characteristic of assarting (Newman 2006, 117–18). These are evident, for example, in a large, irregular enclosure at Longthwaite (now known as Langthwaite) to the north of Hazelrigg, which is also shown on Yates's map (Fig. 6).

2001, he has established a reputation as a leading expert on the Roman period in northern England, and has developed a strong track record of post-excavation analysis and publication. John's principal research interests lie in the Roman army and urbanism in Britain. He has authored a wide range of archaeological reports, including substantial monographs presenting the results of the large-scale urban excavations he directed at Winchester and Carlisle.

Jeremy Bradley BA, MA has been a Project Officer with Oxford Archaeology North since 2005. Jeremy has directed a wide range of archaeological projects, including three fieldwork campaigns at Furness Abbey, at Clitheroe Castle and on two medieval sites in Penrith. His particular research interest is the study of medieval pottery in the North West, and he has published analyses of a number of significant assemblages from the region, including those recovered from urban contexts at Carlisle and Penrith, and from excavations at Samlesbury, Lancashire.

Christine Howard-Davis BA, MCIFA began working in the North West in 1980, and has remained deeply involved in the archaeology of the region. She is currently employed by Oxford Archaeology North as Finds Manager. Working mainly as a finds specialist, with particular interest in Roman and medieval finds, she has been responsible for bringing several site analyses to publication, including excavations on the Roman forts at Ribchester and Kirkham, and the Augustinian abbey at Norton Priory near Warrington.

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The excavated remains were presumably associated with a nearby settlement or farmstead, which the assemblage of medieval pottery suggests lay reasonably near Area 29, though there is no direct evidence for this. One possibility is that the enclosures, together with the ridge and furrow, were associated with a medieval precursor to Hazelrigg Farm, situated around 400m south of Area 29 (Fig. 2). This was probably in existence by the late eighteenth century, if the building shown on Yates's map is this farm (Fig. 6). Hazelrigg, the 'hazel ridge' (Ekwall 1922, 173–4), is also recorded in far earlier documentary sources. About 1450, for example, William Cave gave Lambert Stodagh four acres in Hazelrigg, in the vill of Scottorth (Farrer and Brownbill 1914, 56–8, fn 18), and Leicester Abbey also owned land there (Farrer and Brownbill 1914, 96–101, fn 25).

In addition to the discovery of hitherto unrecorded elements of the medieval agricultural landscape, the Hazelrigg site is also noteworthy for its medieval pottery. This is modest compared to the assemblages from some of the region's urban centres, particularly Carlisle (McCarthy and Taylor 1990; Bradley and Miller 2009; Miller 2011) but also Cocker mouth (Miller 2012), Penrith (Bradley 2015) and Lancaster (Miller and White in preparation). Yet it represents one of the few ceramic groups recovered from a medieval rural site in Lancashire (Newman and Newman 2007, 98). Most came from one feature (ditch 4001) and this group itself consists almost entirely of a single fabric type derived from the nearby kiln site at Elliel (White 1993), which appears to have been operating during the late twelfth to thirteenth centuries (White 1977, 121; White 1993). Elliel, like the contemporary site at Docker Moor (Edwards 1967), seems to have been producing pottery primarily for local consumption, principally for the Lancaster market and the Lune Valley. It has been found at Galgate (Howard-Davis 1996), and at several sites in Lancaster (Howard-Davis et al. in preparation; Bates et al. 2012). It seems likely that the vessels from Hazelrigg reflect domestic activity rather than anything more specialised, for instance dairying, since the range of vessels is restricted almost entirely to jars. Many show evidence of external sooting, suggesting their use for cooking over an open fire. Furthermore, it appears that only a few individual vessels are represented within the assemblage, so this material might represent a single disposal event, with the pottery perhaps being incorporated into a dump of refuse from a nearby farm.

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Author profiles

John Zant BA, MCIFA is currently a post-excavation Project Manager. John is a highly experienced fieldwork director and post-excavation researcher who spent much of his early career working in historic urban environments. Since joining Oxford Archaeology North in

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