

ART. III – *A Bronze Age enclosure and cremation cemetery at Leacet Hill, Brougham*

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IN August and September 1997, Archaeology South-East (a division of the University College London Field Archaeology Unit) were commissioned by HMA Architects to undertake an archaeological evaluation of land at Leacet Hill, to the east of Brougham, Cumbria (NGR NY 566 267 – Figure 1). The archaeological work was conducted following the submission of a planning application for a new leisure development associated with the existing Lakeland Forest Holiday Village. The fieldwork formed a Stage 1 evaluation, with scope for a more detailed programme of excavation as appropriate. In the event, the proposed development was abandoned after the evaluation work was completed, negating the need for further fieldwork on the site. The results obtained, therefore, were partial and interim in nature, but of sufficient interest to merit publication.

Geographical background

The site occupies a dry valley situated between the north slope of Leacet Hill (201 m OD) and the south slope of an adjacent unnamed hill just to the north, the two forming an isolated and prominent landmark in the otherwise low rolling landscape of the central Eden valley. The site is almost completely surrounded by coniferous woodland, apart from a gap at the extreme south-eastern corner. The valley has a north-western aspect, with a direct view of Penrith Beacon in the near distance, and the high ground of Inglewood Forest behind. The higher parts of the site afford views of the Cumbrian massif to the west, the Pennines to the east and the Howgill Fells to the south. The land-use regime at the time the work was carried out was pasture. The site boundaries were drystone walls.

According to the British Geological Survey, the site lies within a band of Permian sandstone (Taylor *et. al.*, 1971). A geoarchaeological survey carried out during the evaluation (Bates, 1997) indicated that, while the upper sides of the valley consisted of topsoil overlying shattered bedrock, the valley floor contained three major soil units. The lowest deposit was interpreted as a till or outwash sediment laid down either during the Devensian glaciation (*c.*18000 BP) or during its retreat phase (*c.*18000-15000 BP), with its upper surface forming a palaeo-land surface. This was overlain by later Holocene colluvial sediments, possibly resulting from deforestation activity on the surrounding high ground. The upper 300 mm of this sediment has been reworked, probably during recent history, to form a ploughsoil (a dark brown silty sand containing few inclusions).

Archaeological and historical background

The site lies within the valley of the River Eden, an area of relatively rich agricultural land surrounded by uplands. The environs of Penrith and Brougham, occupying the

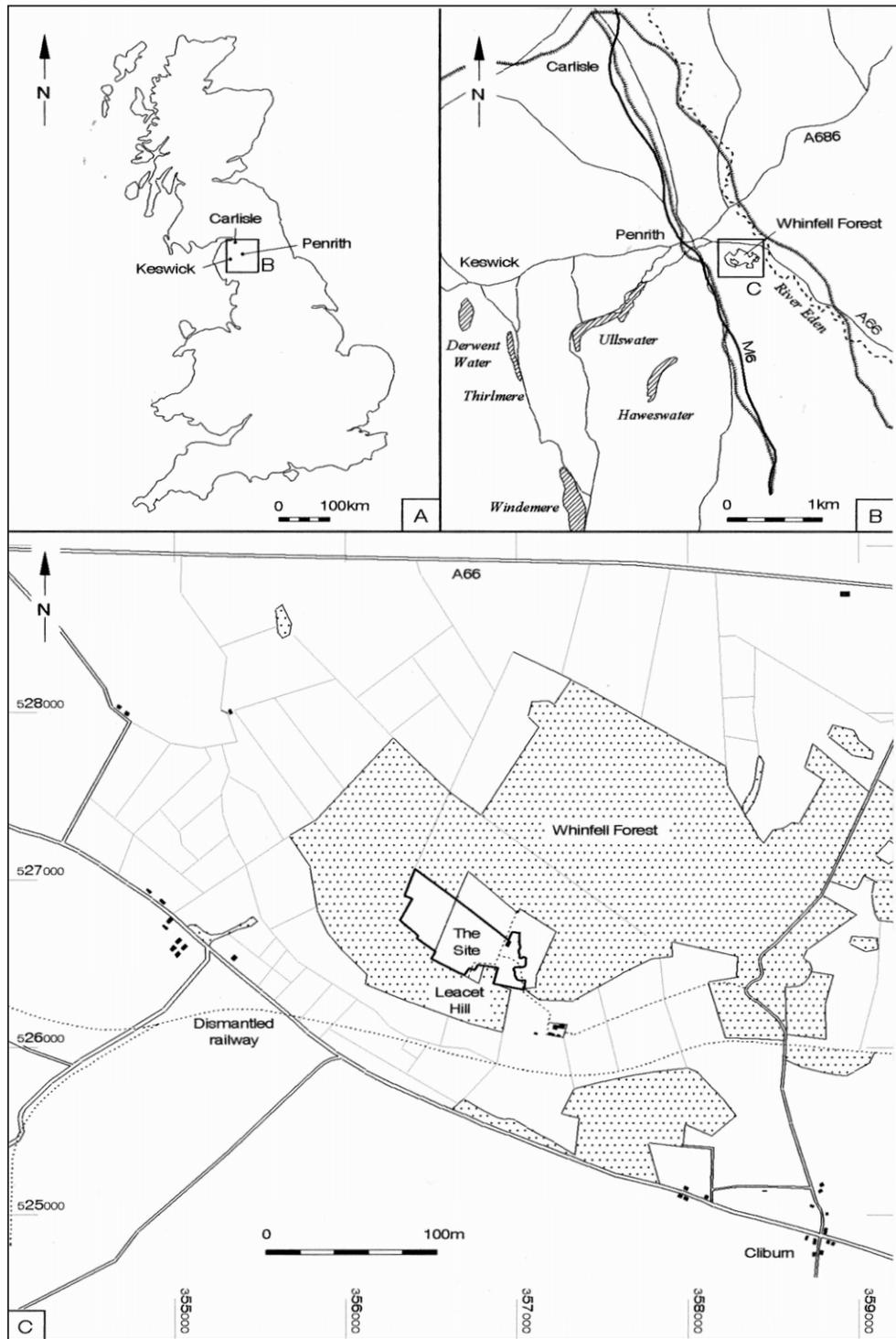


FIG. 1. Location of Site.

fertile confluence of the Eden and the Eamont, have been a favoured focus of human activity since at least the Early Bronze Age, lying at the centre of an important trans-Pennine route linking the Cumbrian massif and the lowlands around the Solway with the coastal plain of the north-east. The area is well known for its “ritual” sites, particularly the henges at Eamont Bridge and the stone circle of Long Meg and her Daughters. Prehistoric settlement evidence is far less visible, with most of the known sites dating from the Iron Age (McCarthy, 2002, 40). The strategic qualities of the area were recognized by the Romans, who built a fort at Brougham overlooking the confluence, and in later years when an impressive castle was erected on the fort site.

Leacet Hill, although topographically striking, has produced remarkably little of archaeological significance. A Neolithic axe-hammer (Cumbria SMR, Site No. 2857) found on the eastern slopes, and a Bronze Age stone circle enclosing a cairn from the south-western flank of the hill (Cumbria SMR, Site No. 2872) are the only secure prehistoric sites known. Two structures, represented by post-hole clusters, found in an archaeological evaluation on the north-western side of the hill (Cumbria SMR, Site No. 15273) produced no dating evidence, and may well be later in date. Later finds are restricted to a medieval brooch (Cumbria SMR, Site No. 2862), perhaps lost by a hunting party. During the medieval period, the hill formed part of Whinfall Park – a hunting preserve attached to the manor of Brougham. Edward Baliol, King of Scots, was recorded as hunting there in 1333/4, and records also refer to a court leet, part of the manorial administrative machinery (Nicolson & Burn, 1777, 398-99). The hill has experienced some stone quarrying in the post-medieval period, and has probably been under an unimproved pastoral regime for much of this time. The present forestry plantations are largely modern in date.

The evaluation

Aerial photographs of the site revealed a number of linear and curvilinear cropmarks in the north-eastern corner of the site. These appeared to comprise a double ditched circular feature and a rectangular feature. Given the evidence for later prehistoric settlements and Roman military installations in the area, a sampling strategy was devised to investigate these cropmarks. The brief issued by Cumbria County Council required a 5% sample of the area covered by the cropmarks, together with 5% of the rest of the development area (21 ha.). This equated to 158 trenches, ranging in length from 30 m (the majority) up to 120 m, each 1.8 m wide. In addition, ten open areas (each measuring 10 m by 5 m) were positioned to investigate archaeological deposits of interest (Figure 2, Areas A-C).

The overburden was mechanically removed down to the surface of the natural subsoil, or archaeological deposits, whereupon the surfaces were cleaned by hand to identify archaeological features, which were then excavated and fully recorded. All the discrete features were half-sectioned, with representative sections being excavated through the linear features. Full excavation was not required at this evaluation stage.

Results

The cropmarks were found to be the result of natural processes. However, three areas of archaeology were identified elsewhere on the site. These are referred to as Area A (a length of linear boundary), Area B (a possible small cremation cemetery) and Area C (possible pit alignment) (Fig. 2). These areas will be described in turn.

Area A – linear boundary feature (Fig. 3-5)

Area A consisted of three trenches (77, 78 and 88) and a number of open areas between. A dark grey curvilinear feature (Context 28: dark grey silty sand) was seen in all three trenches, roughly following the 175 m contour. It extended for at least 115 m, averaging 1.5 m in width, with both arms appearing to continue to the east. The southern arm was picked up at the extreme southern end of Trench 78, where it skirted the edge of the forest. The northern arm was observed heading eastwards out of Trench 88, but could not be picked up in any of the trenches to the east. An accurate prediction of the projected line of the feature on the ground was rendered difficult by the large gap between Trench 88 and the trenches to the east of it, together with an intervening slope-crest.

A break was observed in the feature towards its southern end, clearly an entrance, formed by two butt-ended terminals, 1.8 m apart (Fig. 4). This was located at the lowest point of the slope as enclosed by 28. A linear feature containing large amounts of stone (Context 95) ran through the gap, nearer to the southern terminal, disappearing beneath the baulks to east and west.

A spread of lighter brown sand (Context 98) was observed along the whole inner (eastern) edge of 28. Sections (Fig. 5, Sections 1 and 2) revealed that 28 was the upper fill of a fairly shallow ditch with a bowl-shaped profile (Cut 27), which had been cut into the upper fills (represented by 98) of an earlier, deeper ditch feature (Cut 97). In addition, a further section (Fig. 5, Section 3) revealed that 97 ran straight across the entrance, being clearly cut by feature 95. The evidence indicates two phases of activity, with an early deep continuous ditch 97 replaced by a later, shallower ditch 27 along the same line, incorporating an entrance drained by a stone-filled drain 95.

The profile of the Phase 1 ditch (Fig. 5, Sections 1, 2 & 3) was of a concave-sided cut (97), becoming almost vertical near the base, with a depth of 700 mm. The bottom of the cut was practically flat, forming a channel 250 to 500 mm wide. This channel was filled by a series of laminated silt and clay layers (Contexts 103 and 114) representing the initial rapid silting processes associated with the stabilisation of the sides. This was followed by a series of more homogenous silting and slumping episodes as the ditch gradually filled up (98, 102, 104, 128, 129). The uppermost layers (Contexts 130-132) were only visible in the section cut through the entranceway (Fig. 5, Section 3), having been truncated by the Phase 2 ditch elsewhere. Most of the slumping took place from the inner, upslope (i.e. eastern) side of the ditch, and, although the normal processes of hillwash played a large part, the degree of slumping present suggests that a further stimulus may have been provided by a bank on the inner side of the ditch. A possible remnant of such a bank survived as a 100 mm thick layer of yellowish-brown clayey sand containing stones (115) observed in Section 1, and subsequently in plan, within the baulk immediately

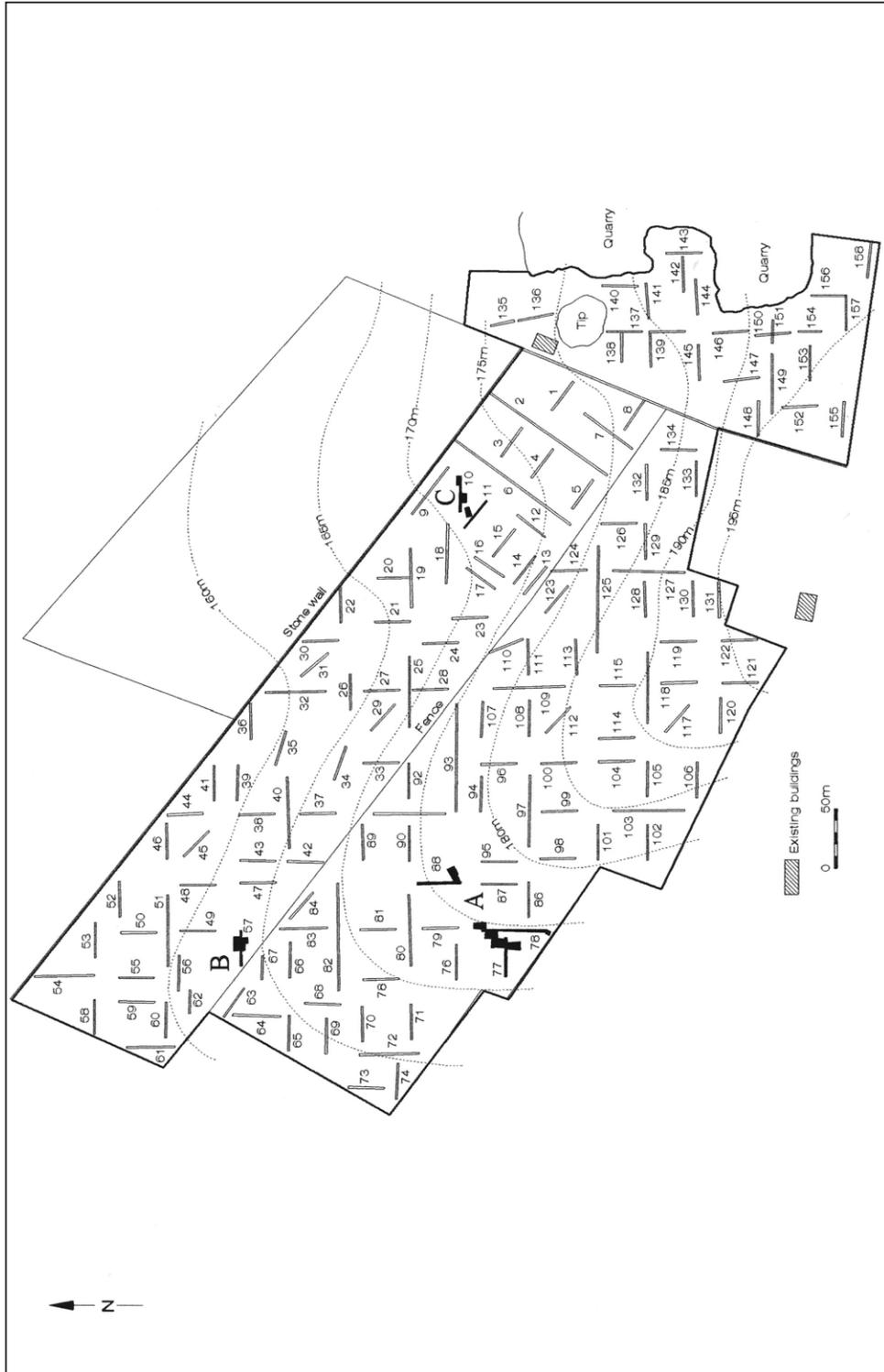


FIG. 2. Plan of Trenches.

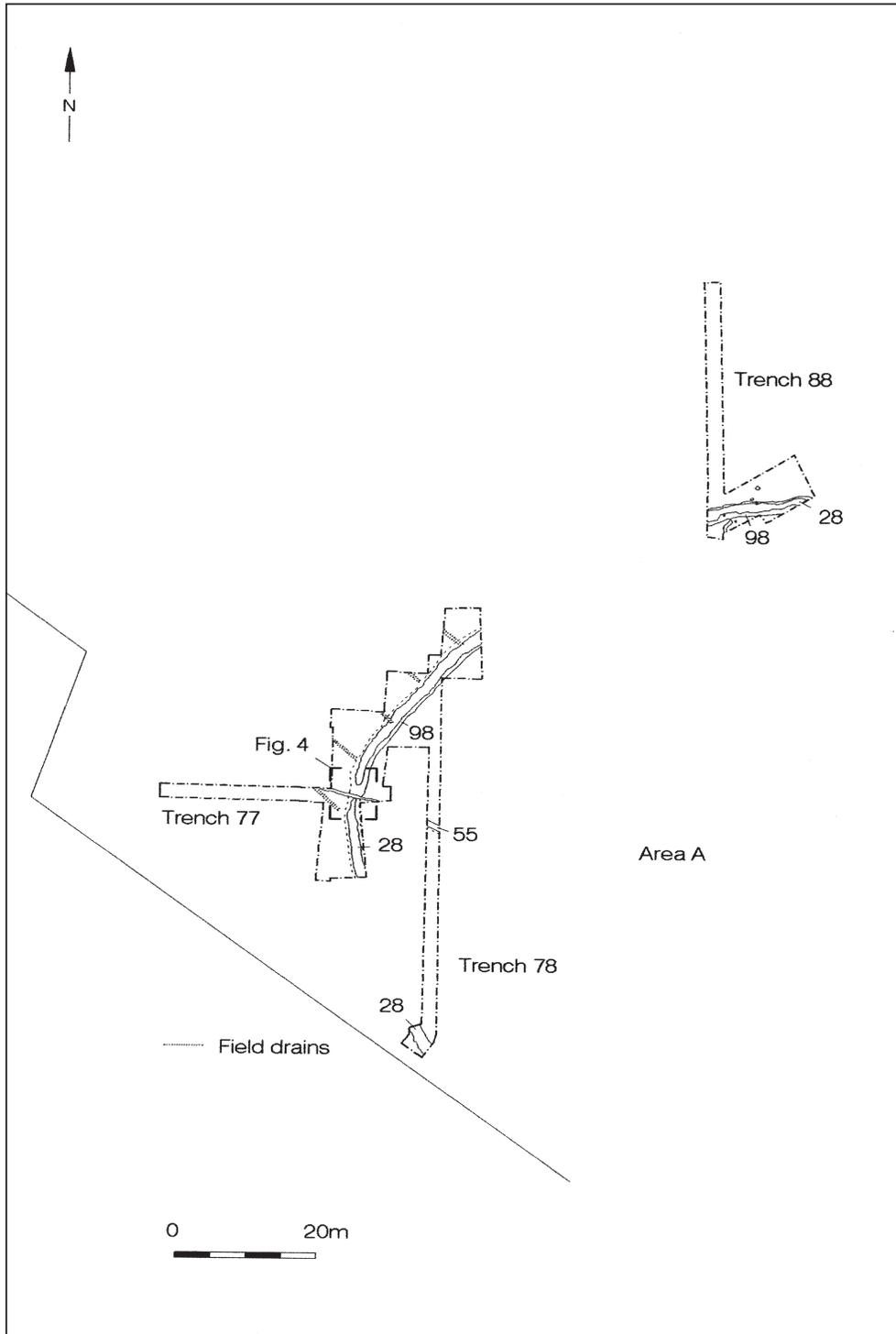


FIG. 3. Plan of Area A.

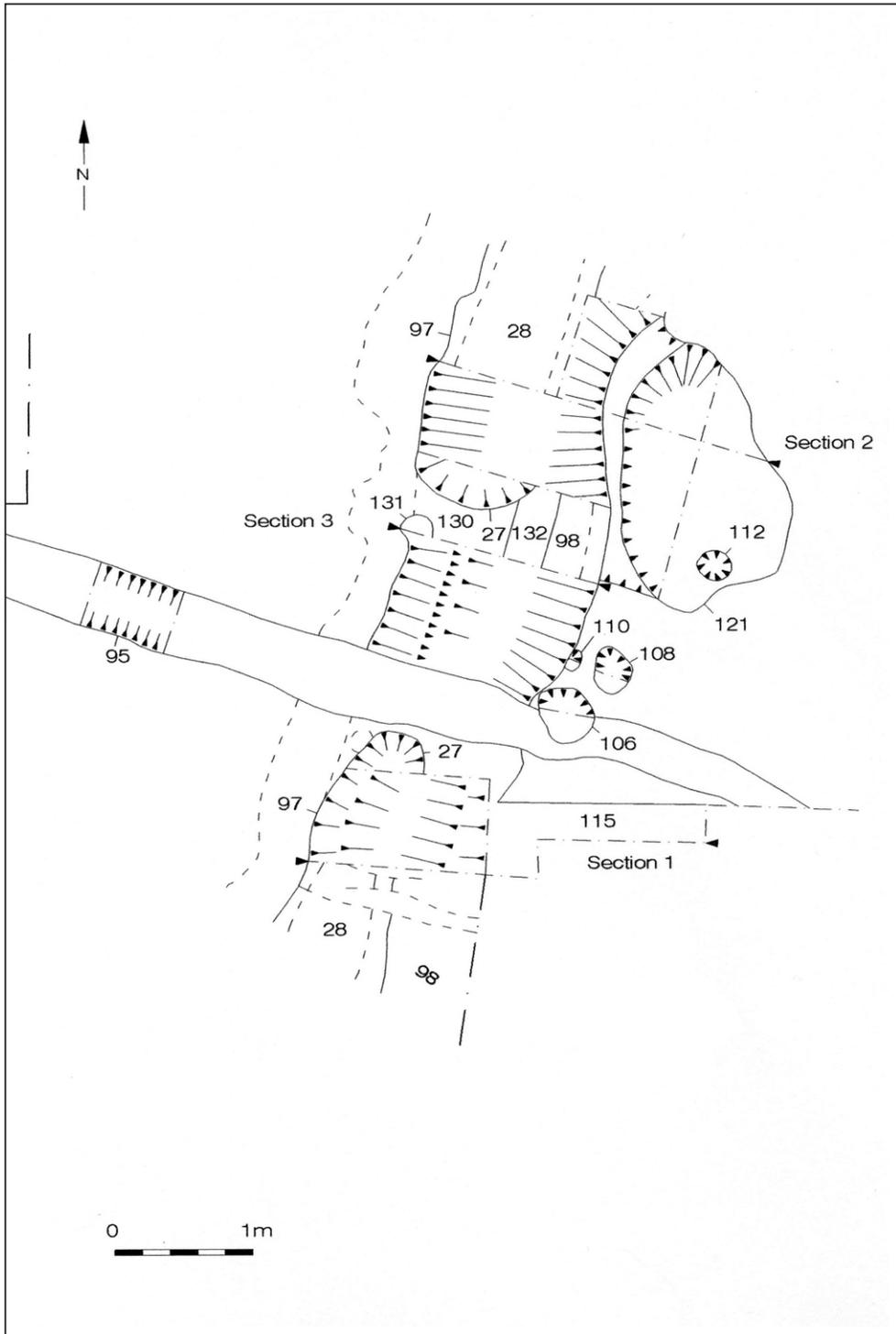


FIG. 4. Detail of enclosure entrance.

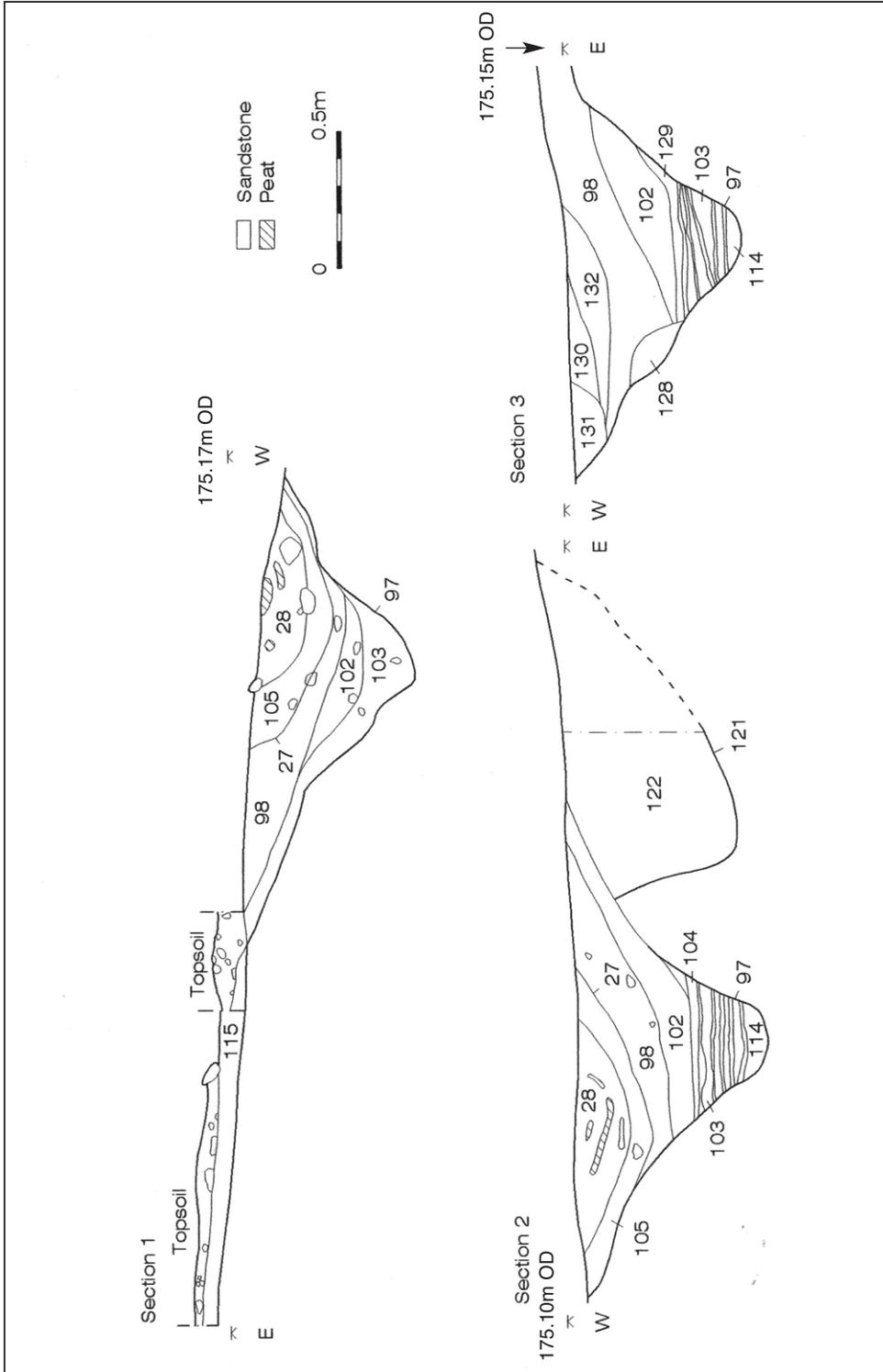


Fig. 5. Sections.

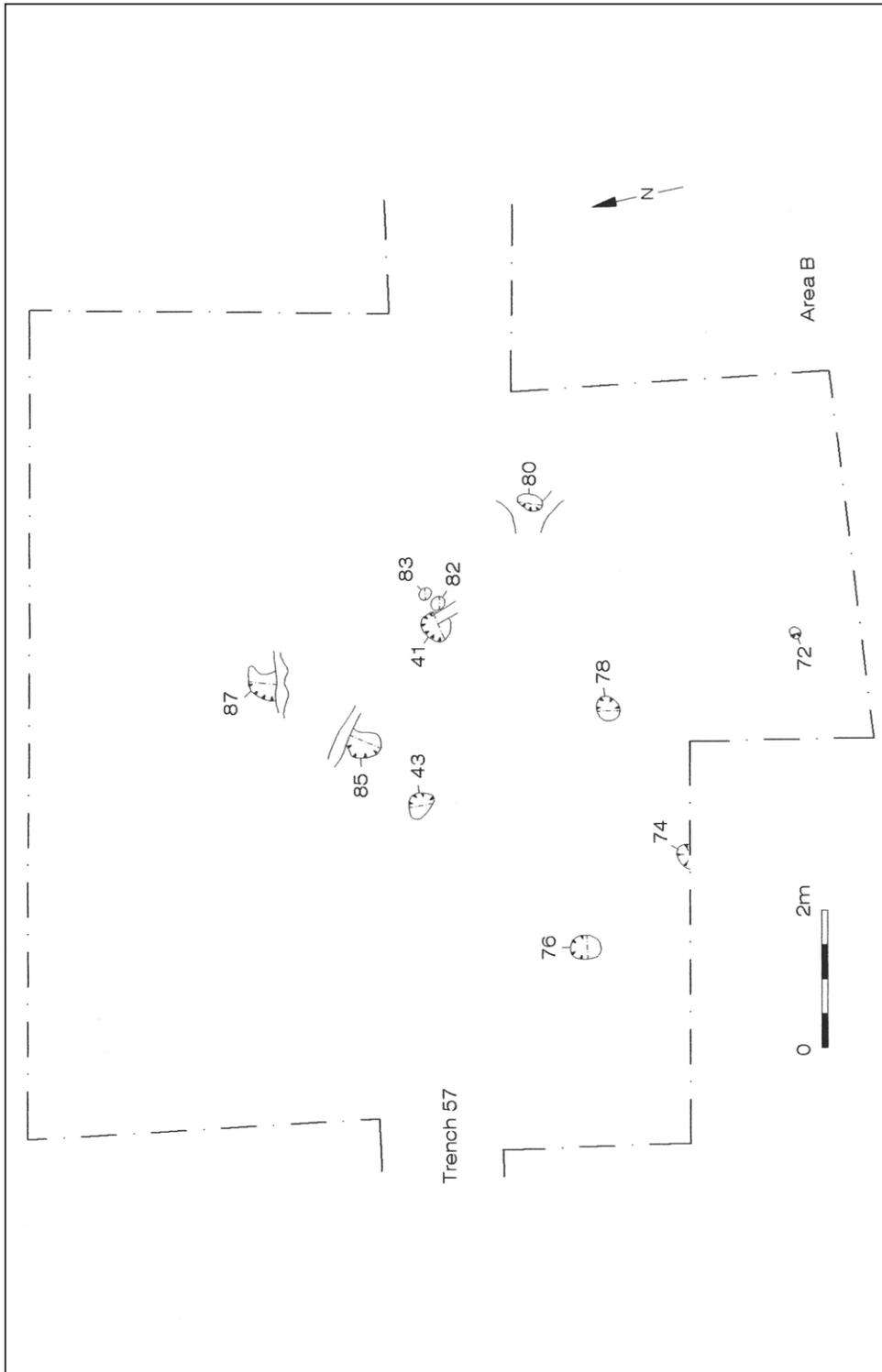


FIG. 6. Plan of Area B.

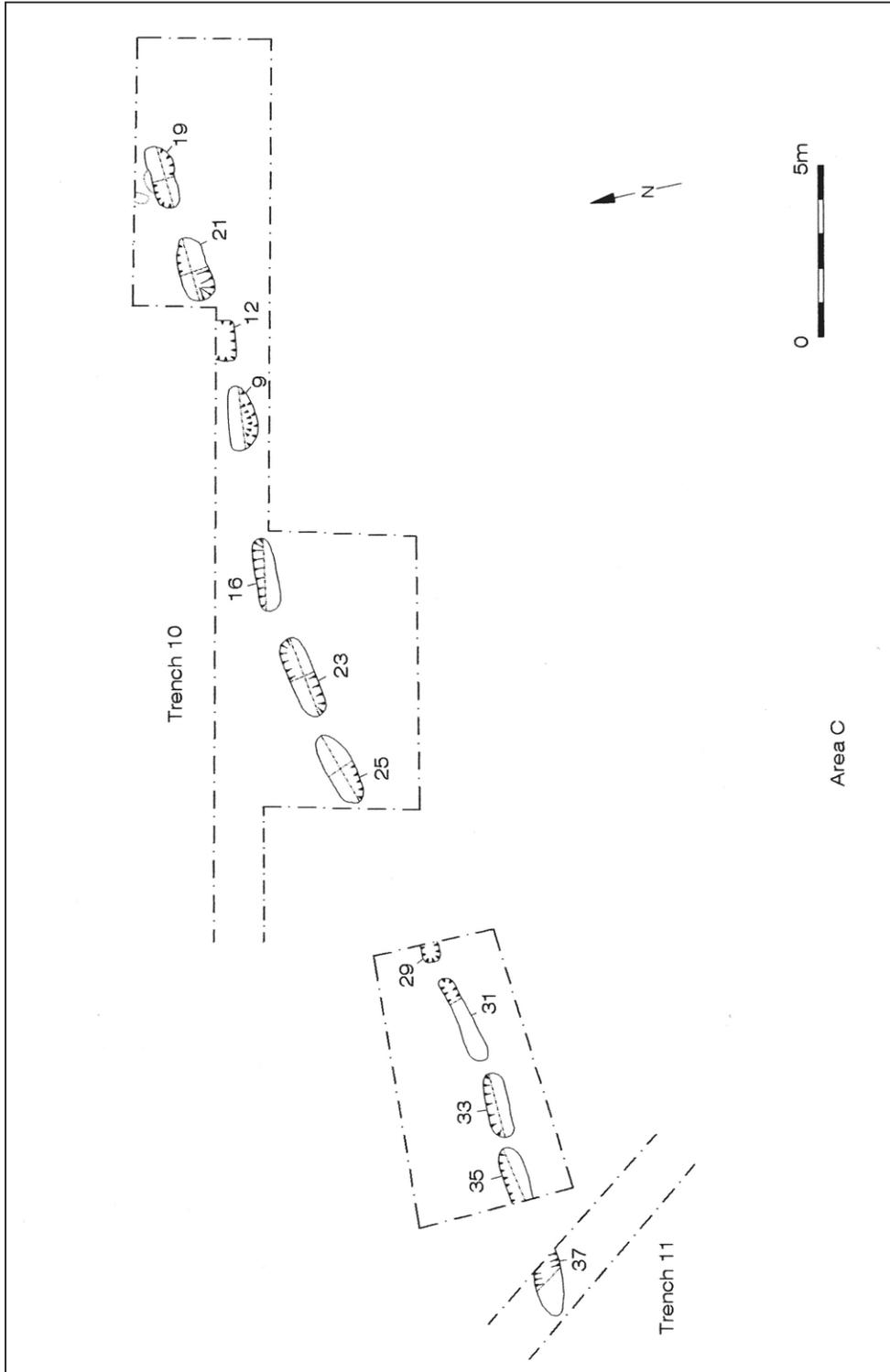


FIG. 7. Plan of Area C.

adjacent to the southern terminal of the Phase 2 ditch. The degradation of a bank in that position would explain both the noticeably one-sided silting of the Phase 1 ditch, and the off-centre positioning of the Phase 2 recut.

The fills of the Phase 2 recut were noticeably different from those into which it was cut. The upper fill (28) was a dark grey silty sand containing laminated peat deposits, while 105 was a tough reddish-brown silty sand containing some clay.

A large, irregular oval pit, 600 mm deep, lay adjacent to the entrance (121), separated from the Phase 1 ditch by a narrow baulk of subsoil (Fig. 5, Section 2). The section clearly showed the ditch truncating the upper levels of the pit, indicating that the pit predated the ditch by some time. The absence of any bank material above the pit suggests the existence of a gap in the bank at this point, which was later utilised as a convenient location for the entrance in Phase 2, positioned south of the pit to avoid what was probably a large soft spot.

Four shallow oval features were located behind the entrance (106, 108, 110, 112). No obvious pattern could be elucidated.

Area B – the cremations (Fig. 6)

Area B comprised the eastern half of Trench 57 together with two flanking open areas. Scattered in an irregular triangle within the centre of the area were ten small, shallow circular features, ranging in diameter from 140 mm to 500 mm, containing charcoal and calcined bone within a dark grey silty matrix (Contexts 41, 43, 72, 74, 76, 78, 80, 83, 85 and 87). None were deeper than 200 mm, with most under 100 mm. A further isolated dump of material resembling calcined bone (82) was found, with no charcoal or fill evident, within an animal burrow. No pottery was associated with these cremation deposits.

Area C – possible pit alignment (Fig. 7)

Area C comprised Trenches 10 and 11, with some additional extensions between. A linear arrangement of twelve oval features (Contexts 9, 12, 16, 19, 21, 23, 25, 29, 31, 33, 35 and 37) crossed the area on an east-west alignment. They measured 2-3 m in length, 1 m wide and up to 200 mm in depth. The fills were largely similar, comprising grey-brown sandy silt. Most of the fills had flecks of charcoal in them, together with occasional small sandstone pieces. No artefacts were recovered.

Interpretation of results

Area A

The results from Area A indicate the presence of an enclosure or linear boundary of some sort, encompassing at least part of the ridge. The existence of two phases to the feature suggests a degree of longevity of use. Although no pottery was recovered from either of the phases, a radiocarbon sample from the primary silts of the Phase 1 ditch (Context 103) produced a date range of cal. BC 1880-1730 (1 sigma: Beta-113763), falling well within the early Bronze Age. The excavated evidence would suggest a deep, wide barrier, possibly with an earthen bank set behind it constructed from the upcast of the ditch. The earliest phase of the ditch had partially truncated

an undated large pit, which may originally have been a pond for watering stock.

At a later period, after the original ditch had substantially silted up, a shallower recut was established along the same alignment. The original ditch is likely still to have been visible as a landscape feature (the presence of several modern land drains cut into the ditch indicates that it survived as an obvious damp area into modern times). A major modification took place with the incorporation of an entranceway, with a stone-lined drainage gully routed through the gap. Further upslope, a wide stony feature (55) continued the line of the drain, and may be its truncated upper reach. Alternatively, it may be the remains of a crude metal track funnelling movement through the entrance. Associated with the entrance, and probably contemporary with Phase 2, were a series of oval features. They may represent post-holes for a mechanism used to block the entrance, probably a hurdle of some sort, as the arrangement does not seem regular enough for a formal gate.

The absence of features within the interior of the putative enclosure does not aid interpretation. Settlement evidence may survive in the large areas left between trenches. Another possibility is that ephemeral evidence has been completely truncated. Two possible interpretations of the investigated site can be put forward. It was either a simple stock enclosure or a linear boundary similar to a cross-ridge dyke. However, two small, isolated features downslope of the enclosure produced a total of eight sherds of Early to Middle Bronze Age pottery, and suggest the presence of further Bronze Age material on the lower slopes of the hill.

Area B

The features located in Area B are the possible truncated remains of cremations, perhaps forming a small cemetery. No pottery or other artefacts were recovered, suggesting that the remains were buried in an organic container of some description, such as a leather or cloth bag. Unaccompanied cremations are certainly not unknown in the region (Higham, 1986, 114), and are often thought to imply small communities lacking the resources to bury their dead in a lavish style. No other features were observed in the area surrounding the cremations, although the probable northern, western and eastern limits of the possible cemetery were found. The southern extent remains unknown. The question of whether or not the possible cemetery was enclosed remains unresolved. A radiocarbon sample was obtained from Context 86, producing a date range of cal. BC 1920-1755 (1 sigma: Beta-113761), roughly contemporary with the enclosure.

Area C

The line of oval pits is difficult to interpret. The alignment is restricted in extent and undated. Work on similar pit systems elsewhere, e.g. East Yorkshire, have indicated that such features can be of any date from Neolithic to Early Medieval, and take a variety of physical forms (Powlesland, 1988, 103). In the absence of further work on the site, the alignment is suggested as a possible pit alignment of prehistoric date.

The Finds

The Pottery by Sue Hamilton (UCL Institute of Archaeology) and Luke Barber (ASE)

Trench 65 (Context 68): 5 sherds of Early to Middle Bronze Age pottery (47 g).

Trench 81 (Context 70): 3 sherds of Early to Middle Bronze Age pottery (20 g).

These sherds were from fairly thick-walled vessels, possibly from Collared Urns. Some criss-cross decoration was evident on one sherd. They were similar to pottery found on a cremation cemetery in western Cumbria (Ewanrigg, Maryport), comprising cremations within collared urns dated to 2460-1520 B.C. (calibrated) (Bewley *et al.*, 1992). This poses a problem of interpretation, as the pottery at Leacet Hill was found at least 87 m from the known cremations. The evidence so far collected is insufficient to resolve this issue.

Trench 94: 1 sherd from a jug, 13th-14th century.

Trench 125: 1 black glazed sherd, 17th-18th century.

Both of these sherds were unstratified, and probably derive from later agricultural activity, being brought up to the field during manuring episodes.

The Flintwork by Dr Tony Pollard (ASE)

Trench 57: Primary flake, grey flint. Diffuse bulb (soft hammer technique), with invasive retouch across ventral surface along one edge. Retouch extends from distal end along 75% of flake edge. Chronologically undiagnostic – possibly Mesolithic/Neolithic. ?Knife. (Length 52.1 mm, width 12.2-21.1 mm).

Trench 116: Core of black/grey flint. Heavily worked, multi-faceted. Platform preparation on one edge. Removals at this stage would have been very small, squat flakes. Worked to ultimate extent before discard – scarcity of resource? Mesolithic/Neolithic. (20.8 x 16.8 x 16.2 mm).

Trench 125: Grey/black flint, similar material to previous. Proximal end of snapped flake/blade. Vestigial notch present on right side of lateral snap. Fine semi-denticulate retouch along right-hand edge. Some retouch toward proximal end of left-hand edge. Probably Mesolithic/early Neolithic. (25.4 x 17.4 mm).

None of the flintwork was retrieved from undisturbed contexts. However, it does point to activity taking place on the hill in Early Prehistory.

The Cremated Bone by Jacqueline McKinley (Wessex Archaeology)

Material from six features in Area B was received for analysis, all believed to derive from cremation burials of Early Bronze Age date.

Methods

Osteological analysis followed the writer's standard procedure for the examination of cremated bone (McKinley, 1994a).

Results

There had apparently been some level of truncation as a result of ploughing and some contexts had been subject to disturbance by animal activity. The features were all shallow, ranging in depth from 0.05 m to 0.14 m.

Most of the bone was slightly-moderately worn, with a chalky surface appearance, a condition indicative of an acidic burial environment. The single exception was the bone from context 44 that was only very slightly worn. The acidic effects of the sandy soils should have been slightly counteracted by the charcoal contained within each of the fills.

TABLE 1: Summary of bone finds.

Context	Depth	Weight	Age
42	0.10m	26.5g	subadult/adult
44	0.05m	37.2g	adult
79	0.14m	3.5g	adult
81	0.14m	31.2g	subadult/adult
84	0.06m	4.9g	subadult/adult
86	0.14m	44.9g	1) subadult/adult ?2) infant

The very small quantities of bone recovered from each context placed severe limits on ageing and it was not possible to assess the sex of any of the individuals. All the remains, with the exception of the possible infant in context 79, were probably of adults. No pathological lesions were observed. The material from context 82 did not represent cremated bone and is most likely to be fragments of tufa (high carbonate content).

Very small quantities of cremated bone were recovered from each of the contexts, representing a maximum of only 0.3% of the expected weight of bone from an adult cremation in context 79, to *c.*4% in context 86 (McKinley, 1993). It is not unlikely, given the severe levels of truncation indicated by the depth of the deposits, that bone will have been lost from some, if not all, the contexts. In addition, bone preservation was not good, and trabecular bone particularly is likely to have suffered complete degradation in the acidic soil conditions (McKinley, 1997a, 245).

The bone was all well oxidised, as indicated by the buff/white colour. The majority of fragments were relatively small (<10 mm), though unurned burial, disturbance and the condition of the bone are likely to be in the major factors in fragment size rather than any cultural significance (McKinley, 1994b).

The interpretation of some of the deposits as cremation burials may be debatable, including the surface deposit 86. The large quantities of fuel ash apparently recovered from most features and the mixing of the archaeological components within the deposits, may indicate that some represent deposits of pyre debris rather than burials (McKinley, 1997b) – although cremation graves, in addition to the “burial” may also include some debris from the pyre. However, the level of truncation and animal disturbance may make conclusive interpretation difficult.

Discussion

The Early Bronze Age in Cumbria is typified by field monuments, often highly visible and dramatic, of a largely “ritual” nature. Settlement and economic evidence, which is vital to provide a rounded view of the period, is more rare. In the past this has resulted from the absence of any extensive tradition of (non-Roman) excavation in the region (McCarthy, 2000, 131), and, in the present, fewer opportunities for the kind of large-scale “random” fieldwork, usually commercial in nature, which has provided such a rich haul of prehistoric material in more economically favoured parts of the country.

Adding to the problems caused by a limited dataset is the shortage of datable material, particularly pottery, to the point where large parts of Cumbrian prehistory are effectively aceramic (McCarthy, 2002, 48). Both of these factors make the interpretation of the Leacet Hill site difficult.

None of the excavated archaeological features produced any artefactual material. The linear boundary and the possible cremation cemetery are dated by single C₁₄ dates to the early 2nd Millennium B.C. (Early Bronze Age). The closeness of the two dates, however, together with the discovery of several sherds of contemporary, or near-contemporary, pottery from small features elsewhere on the site, reduces the likelihood of the C₁₄ dates being anomalous. The pit alignment was not dated by this method at the evaluation stage as it was expected that further fieldwork would take place on the site. This proved not to be the case.

One possible interpretation of the linear boundary is that it forms part of an enclosure. The excavated evidence indicates at least two phases of use on the site, with an early deep continuous ditch, possibly flanked by an internal bank and a deep pit, replaced at a later date by a shallower ditch on the same alignment but incorporating an entranceway. A defensive use for the feature seems unlikely, as a circuit higher up the slope would provide a more suitable position. The site is more likely to represent a stock enclosure. This would accord with Higham’s view of the central importance of pastoralism in the region at this date (Higham, 1986, 95). No evidence was found to suggest any internal features suggestive of habitation. This absence may be significant as, although some truncation of archaeological features might be expected from ploughing and colluvial processes, the status of Leacet Hill as a former hunting park might have offered some protection against the worst ravages of later agriculture (Higham, 1978, 122).

One problem with the suggested interpretation as an enclosure is the limited extent of ditch found. The failure of the evaluation to pick up any trace of the ditches elsewhere on the hillside, particularly given the dense nature of the trench pattern adopted, may merely be a severe case of bad luck, reflecting an integral “fatal flaw” of the trial-trench based evaluation process. An alternative suggestion, however, may be that the ditch may have been a relatively short feature cutting across the end of the ridge, in the manner of the cross-ridge dykes of Wessex, and separating two blocks of land or two different types of activity. A similar situation has recently been reported from Ewanrigg, in the west of the county, where a ditch was observed cutting across the end of a ridge, in close proximity to an unenclosed cremation cemetery. Unfortunately, this feature remains undated (Clare, 2002, 21). This suggestion may link the linear boundary and the putative pit alignment, both of

which lie broadly on the same axis and perhaps perpetuate a long-standing territorial boundary. It has been suggested elsewhere that pit alignments were later replaced by more substantial bank and ditch features (Powlesland, 2003, 280), perhaps representing a “firming-up” of Bronze Age estate structures. A similar case could exist on Leacet Hill, with an earlier pit alignment defining a more symbolic boundary, and later replaced by the linear ditch(es) as the boundary becomes a more substantial part of the landscape. This creates the problem, however, of why the linear feature did not extend as far as the pits. Unfortunately, without further fieldwork this suggestion remains wholly speculative.

Conclusion

The discoveries at Leacet Hill provide an interesting glimpse of a multi-faceted prehistoric landscape incorporating elements relating to questions of economy, territoriality and belief. Unfortunately, the limited scope of investigation provided by the evaluation process has not provided enough material, particularly artefactual, to enable these threads to be pursued in any detail. However, it is clear that the hill has the potential to hold further archaeological deposits of significance in those areas not affected by forestry or leisure developments. Future work on the hill may provide answers to the problems posed by the evaluation work.

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