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The Lands of Ancient Lothian

Interpreting the Archaeology of the A1

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Chapter 6

Emerging communities: Excavations at Howmuir, Eweford Cottages, Biel Water, South Belton and Thistly Cross, with features from Pencraig Hill and Eweford West (1910 BC–AD 340)

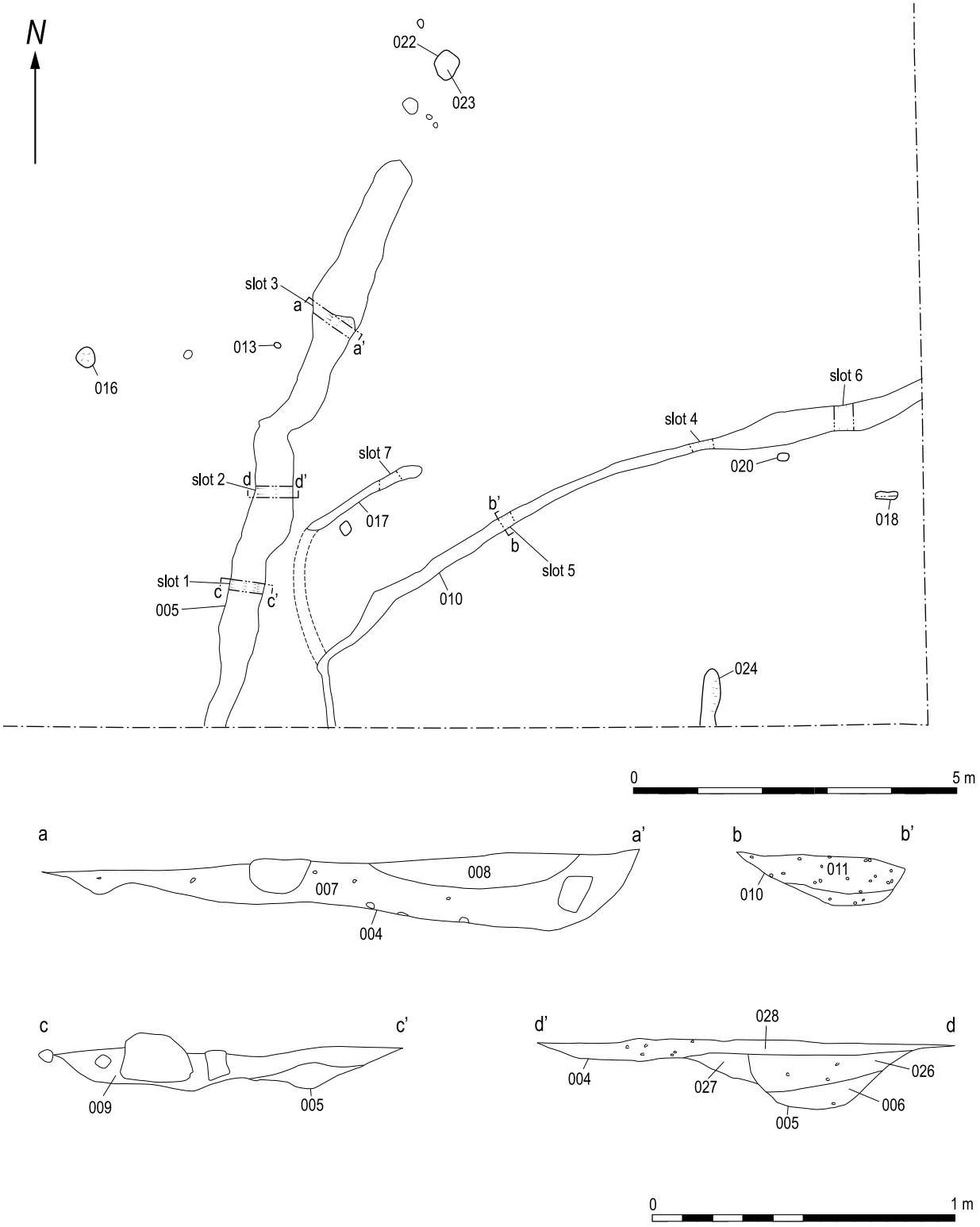
LORNA INNES
with a contribution from Kirsteen McLellan

Introduction

The excavations along the route of the A1 investigated several sites which together provide evidence for human settlement in the Lothians from the mid second millennium BC to the early first millennium AD: ditches at the margins of a probable settlement at Howmuir; midden-filled scoops at South Belton; the remains of a small homestead at Biel Water; the stone footings of a structure at Thistly Cross, and part of a large, enclosed (and later unenclosed) settlement at Eweford Cottages (Figure 6.1). During the same period that some of these existed, two discrete acts involving the burial of human remains were carried out at the Neolithic mortuary sites at Eweford West and Pencraig Hill.

The combined evidence from these sites illuminates the nature of settlement in mid second millennium BC to early first millennium AD East Lothian, as well as the production and uses of material culture, the processes of enclosure and the demise of enclosure as a useful concept. The evidence also throws further light on the nature of the environs and the settlement pattern during the period of Roman military activity in the vicinity.

6.1 Map showing the locations of Howmuir, South Belton, Biel Water, Eweford Cottages, Eweford West and Pencraig Hill.



6.2 Plan of Howmuir, with sections through the ditches (below).

Howmuir Farm

Kirsteen McLellan

In the mid to late second millennium BC, a community living at what is now Howmuir Farm dug a group of shallow ditches and pits (Figure 6.2). Straight, modern field drains ran across the trench at intervals of 4m, and the archaeological features were heavily truncated. They probably originally formed part of a larger enclosure or field system which extended beyond the edges of the A1 corridor.

In the earliest event at the site, someone dug a small pit (013). It may have held a post which later burnt (012), or it was eventually filled with charcoal from a hearth where mainly oak was burnt, as well as hazel and cherry type woods (Miller and Ramsay, see Chapter 12 and Archive). The hazel (*Corylus*) charcoal produced a radiocarbon date of 1910–1690 BC (SUERC-7532).

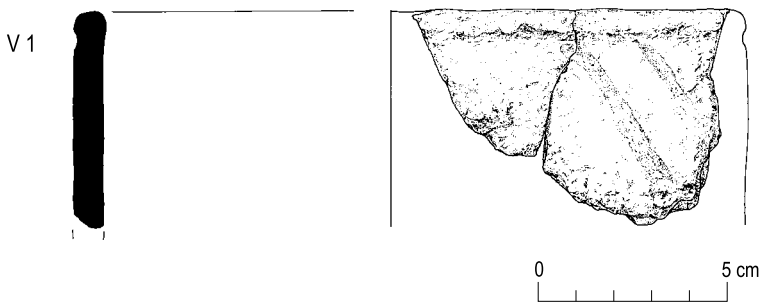
The site's occupants also dug a linear ditch (004/005) running down slope from south to north; it extended into the excavation trench for 10m (Figure 6.2). They seem to have varied its width or dug it in segments, as the ditch expanded and contracted along its length. The ditch was up to 0.85m wide and, in its truncated state, it survived up to 0.25m in depth. Samples from its fill produced a calibrated range of dates that only just overlapped with the hazel from the putative post (see below), but the ditch had lain open for some time before it filled up, so it may have been dug while the post was standing.

While the ditch lay open, sediments washed in from the surrounding area. The portion of it excavated in slot 2 (Figure 6.2, d-d') provided evidence for natural silting and a re-cut. The fill (027) of the original cut (004) was an orange silty sand; the secondary cut (005) was filled with greyish-orange sandy silt (006) and light pink-orange silty sand (026). It appears that, although the ditch was allowed to silt up naturally, it was cleaned out at least once, creating the re-cut. The separate fills (006, 026) of the secondary cut suggest that it silted up over distinct phases, perhaps related to discrete episodes of cultivation further up slope. By the time the final silt (028) accumulated over both the original and secondary cut, the ditch had gone out of use.

Micromorphological analysis found tiny fragments of bone and pottery in the silts, which probably washed in as a result of cultivation of the surrounding land. Variability in the sorting of the silts indicates episodes of different energy in the soil movement, pointing to discrete periods of ploughing and perhaps to times when the land lay fallow (Simpson, see Chapter 12 and Archive).

As the ditch silted, charcoal (predominantly oak, but also hazel, birch and cherry type; (Miller and Ramsay, see Chapter 12 and Archive) washed in, perhaps from nearby domestic occupation or from middening of the agricultural fields. Cherry type (*Prunoideae*) charcoal from the silt (009) in slot 2 produced a radiocarbon date of 1680–1490 BC (SUERC-7534), while hazel (*Corylus*) from the same silt produced a date of 1610–1410 BC (SUERC-7533). If the ditch had been dug around the same time as the felling of the oak that filled the pit (013), it may have been kept open for several generations before it fell into neglect. Alternatively, and perhaps more likely, the ditch may relate to settlement several generations later than that contemporary with the pit.

After the ditch had partly silted up, hearth waste was put in the northern segment, appearing during the excavation as a dark brown-grey silt (008) that stood out against the paler, cleaner silts. It contained quantities of oak charcoal, along with some derived from willow (Miller and Ramsay, see Chapter 12 and Archive). Willow (*Salix*) charcoal from the dumped material was dated to 1690–1510 BC (SUERC-7531), while hazel (*Corylus*) charcoal from the same deposit produced a date of 1680–1490 BC (SUERC-7529).



6.3 The decorated vessel (1) from Howmuir.

It (008) also contained 17 sherds from a single pottery vessel, two of them conjoining rimsherds (Figure 6.3). The vessel is typical of the Middle Bronze Age domestic pottery found on unenclosed platform settlements in southern Scotland and northern England (MacSween, see Chapter 12 and Archive). It was decorated with incised horizontal and diagonal lines. Black organic encrustation on its surface shows that it was probably used for cooking. Again, this suggests that those who made the ditch were living nearby and, on at least one occasion, used it to hold their domestic rubbish.

To the west of the ditch, the occupants dug two smaller ditches (Figures 6.2 and 6.4). The longer ditch (010) ran into the trench from the south and turned to snake north-eastward; a much shorter ditch segment (014) ran parallel to this, between it and the main ditch (008). The shorter ditch (014) was more ephemeral, and no stratigraphic relationships survived between the features to demonstrate their relative chronology. Both of these smaller ditches were filled with clean, silty sediment: the longer ditch (010) with pale yellow-grey silty sand (011) (Figure 6.2, b-b'), and the short parallel segment (014) with light brown-orange silty sand (015). These also seem to have been left open, perhaps to drain water from the surrounding fields and keep the arable areas dry.

The results of micromorphological analysis of the ditch fills indicate that crops were being cultivated close by, and that this nearby cultivation was intensive enough to destabilise the soils and cause the ditches to silt up (Simpson, see Chapter 12 and Archive). The relative absence of wood charcoal in the sediment suggests that the area had long been cleared of woodland; if trees were being cleared and burnt while the ditches lay open, more charcoal would have washed into the fills.

6.4 The Howmuir ditches under excavation.

A further phase of activity at Howmuir is suggested by an outlying pit (016), from which a sample of willow (*Salix*) charcoal (017) produced a radiocarbon date of 900–780 BC (SUERC-7530). Palaeobotanical analysis of the fill found oak (*Quercus*) charcoal predominant, with smaller quantities of willow (*Salix*) (Miller and Ramsay, see Chapter 12 and Archive). Several other small, scattered features (018, 020, 024) were not dated.

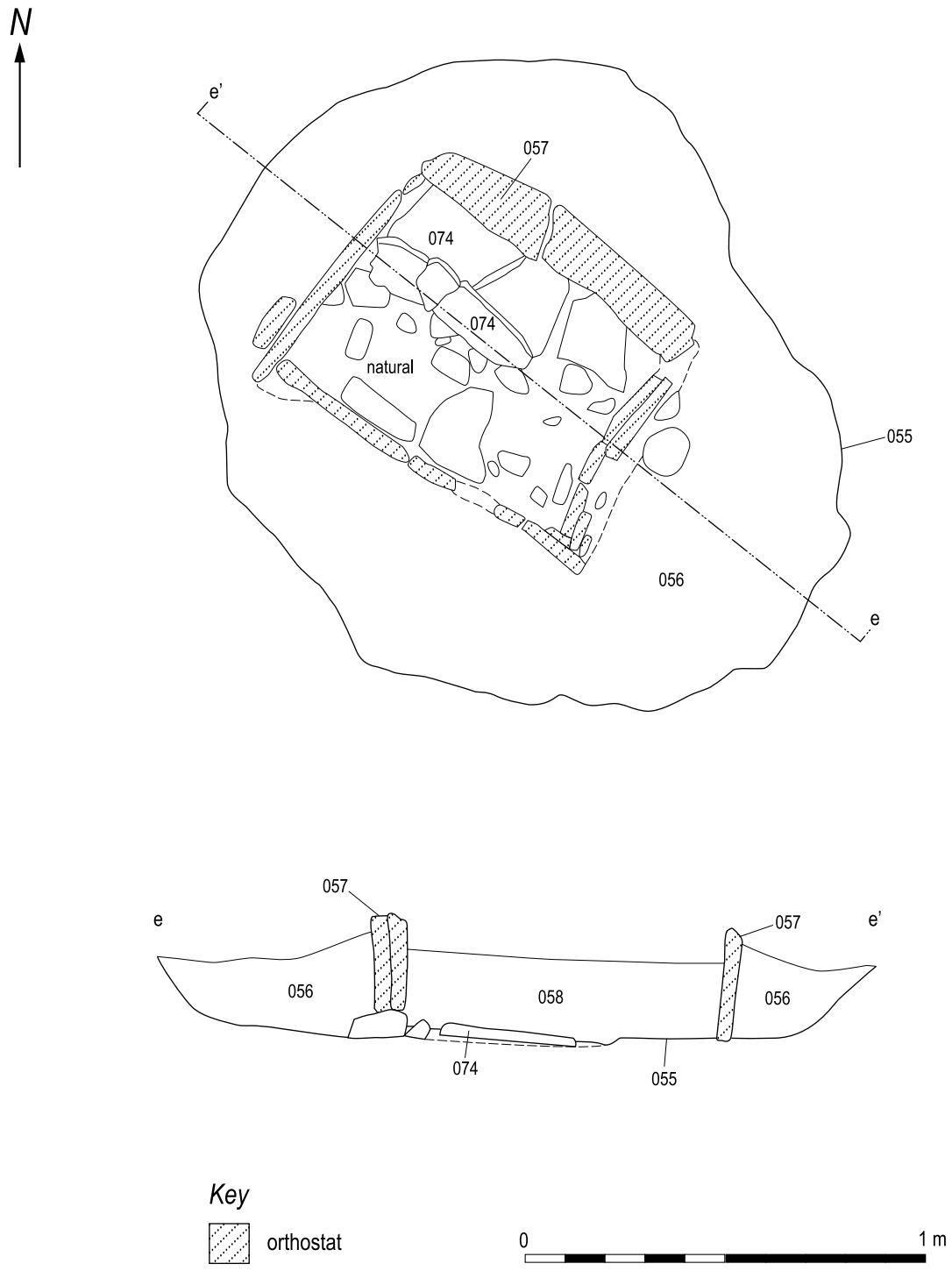
Eweford West and Pencraig Hill Cists (760–390 BC and 170 BC–AD 30)

In the mid first millennium BC, people gathered at an ancient place at Eweford West (Figure 6.1). The monument had been a focus for ceremony for millennia, but this more recent event was the first to leave archaeological traces in over 500 years. The group met beside an earthen mound (see Chapter 2), still a prominent feature in the landscape despite its having been eroded and scalped in the 3,000 years since it was built (see Chapter 4).

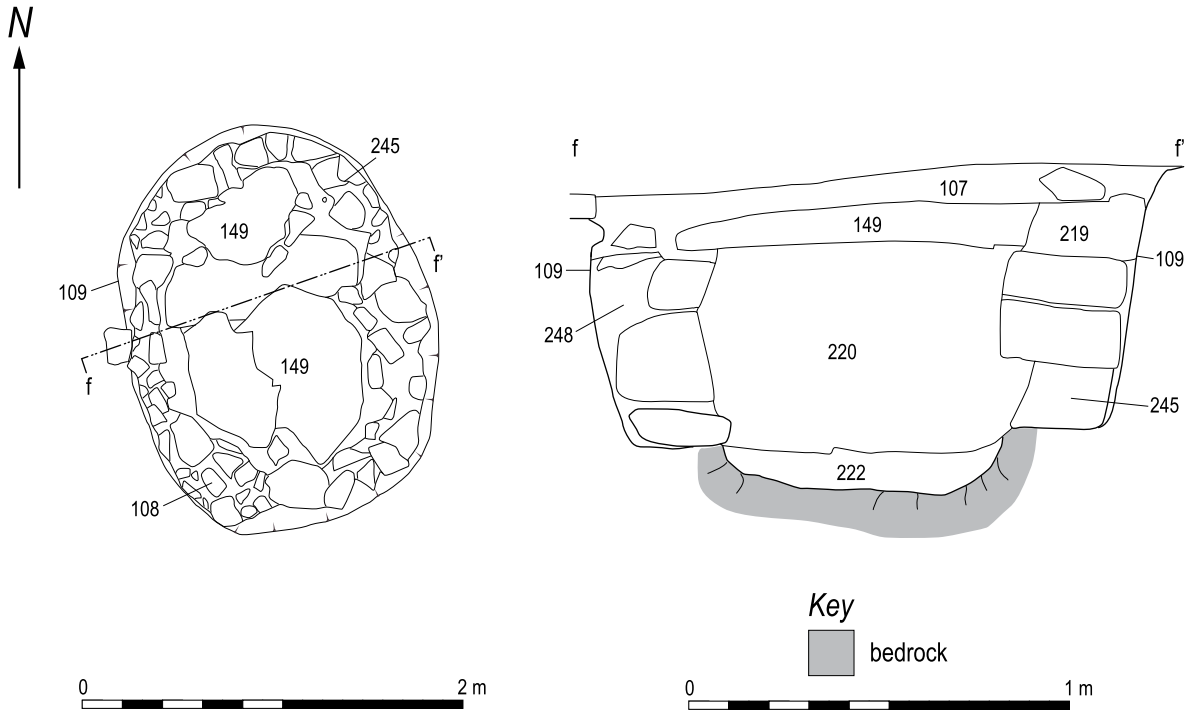
They came to the mound to set a cist into its surface, or possibly to re-use one that had been dug earlier. They must have determined exactly where to place it in relation to the mound and its former monumental features, which they seem to have known about in detail. The stone box they created was too small for a crouched inhumation, but big enough to hold remains from a funeral pyre.

They first dug a sub-rectangular hole (055) into the earth (217) that formed the natural bank on which the mound had been built (Figure 6.5). They set substantial slabs of white/grey stone along the north-eastern side of the cut, lining the rest of it with red slabs (057). Then they backfilled (056) some of the excavated material to fix the slabs in place. They scattered a little burnt human bone across the base of the cist and then set paving (074) over the northern half of the base. Finally, they filled the cist with material (058) gathered from the remains of a pyre: charcoal from oak and other local trees (Miller and Ramsay, see Chapter 12 and Archive), along with the weathered, cremated fragments of an adult's skeleton and a child's – mainly fragments of the craniums and long bones (Duffy, see Chapter 12 and Archive). A fragment from the adult's femur showed that he or she had died between 760–390 BC (SUERC-5287). Mixed among these remains were nine pieces of chert or flint, including a scalene triangle (see Chapter 2), and two sherds of abraded Beaker pottery (see Chapter 3).

At Pencraig Hill, several centuries later, a similar act took place when a group gathered at an ancient mortuary site to dig a pit and build a cist (Figure 6.6). As at Eweford West (Figure 6.7), they chose the location for the cist



6.5 The cist at Eweford West in plan and section.



6.6 The cist at Pencraig Hill in plan and section.

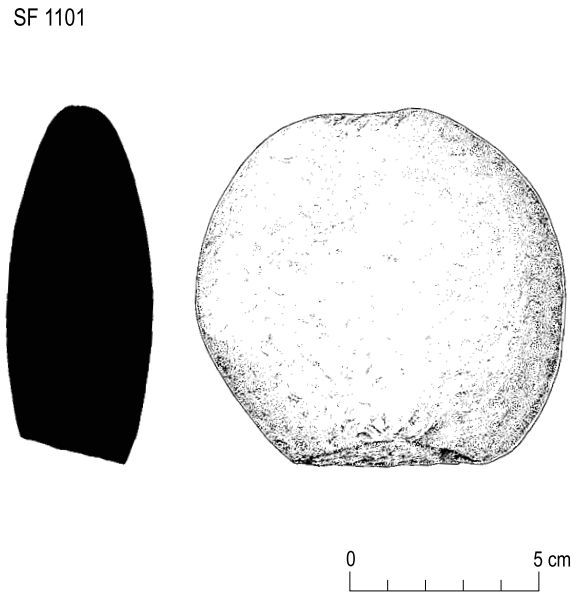
quite precisely in relation to the earlier monument. The latter had stood for millennia (see Chapter 2), and they must have known it well. The group began by digging a sub-oval cut (109) with a roughly U-shaped base; they expended a great deal of effort in this, levelling the bedrock at the base of the pit. Then they set three courses of stone blocks (245) around the edges to line it. Although no bones were preserved on the cist floor, they had probably placed a human body inside it, or least human bones, on the grey brown silty clay (222) that formed the floor. Analysis of phosphate content in samples taken on a grid across the fill showed levels consistent with its having held bone.

The cist floor was covered with soil (220) that included charcoal and burnt cereal from a fire, and fragments of burnt and unburnt human bone. Analysis of the bone has demonstrated that the burnt bone (19g in total) is predominantly long bone (14.7g) from one individual at least 15 years of age; 10.9g of the unburnt bone (21g in total) is identifiable as deriving from the fibula and tibia of a person over 15 years old (Marquez-Grant, see Chapter 12 and Archive). One surviving fragment of bone produced a radiocarbon date showing the person had died between 170 BC and AD 30 (SUERC-7665). Also among the soil were two possible hammer-stones (SF 31 (not illustrated) and SF 1101; Figure 6.8), which could have been used to dress the stone blocks for the cist lining, and a small cylindrical piece of ironstone which may have been an amulet (Sheridan, see Chapter 12 and Archive). Finally, they sealed the cist, setting four slabs (149) over the burial soil and rounded stones (108) to fill up the hole. After it was sealed, mid-brown silty clay (219) formed around the capstones and in the upper part of the cist.

Other activity may have taken place at Pencraig Hill, involving the working or discarding of cannel coal. A

6.7 The Eweford West cist during excavation.

triangular fragment of possible cannel coal, which had been perforated, was discovered in the uppermost fill of the cist (107). Another worked piece of cannel coal (SF 21) would also appear to be intrusive to the fill of the early Neolithic palisade trench (118) that defined the mortuary enclosure (see Chapter 2). This piece is heavily tool-marked (see Figure 10.8, text box 10.1), and has affinities with Iron Age working debris from the manufacture of rings (Hunter, see Chapter 12 and Archive).



6.8 A hammerstone (SF 1101) from the Pencraig Hill cist.

South Belton

At South Belton (Figure 6.1), two large, irregularly shaped scoops were dug, about 20m apart, and eventually filled with midden material. A radiocarbon date indicates that this took place in the mid first millennium BC, perhaps about the same time that the enclosed settlement at Eweford Cottages originated, and several generations before the homestead at Biel Water was occupied.

One of the scoops (A) (009) measured 5.4m wide by 3.4m, and about 0.6m deep (Figure 6.9). Those using it laid pebbles in its base to form a compact floor (006); they also dug a small, shallow pit (011) in its base (not illustrated).

Then they began dumping rubbish (005) into the centre of the scoop, sealing the pit and the pebble floor, and followed this with another layer of midden (004) that filled the entire scoop. The contents of the midden indicate something of the daily lives of the people who dumped it. They were burning alder, blackthorn, oak, willow and elm (Miller and Ramsay, see Chapter 12 and Archive). They were eating cattle, pigs, sheep/goats and other mammals (Smith, see Chapter 12 and Archive), as testified by burnt and unburnt fragments of bones; one of the bones (SF 30) bore butchery marks. They tossed (or lost) a broken rectangular whetstone (Figure 6.10: SF 6) into it as well (McLaren and Hunter, see Chapter 12 and Archive). Lithics, including knapping waste, scrapers and microliths, also found their way in, but at least some of this material is left over from Mesolithic activity in the area (Pannett, see Chapter 12 and Archive), and probably was incorporated incidentally.

Blackthorn type (*Prunus spinosa*) charcoal from the lower midden layer (005) produced a radiocarbon date of 760–400 BC (SUERC-8199), a date range broadly consistent with the whetstone (MacLaren and Hunter, see Chapter 12 and Archive) and animal bone assemblage (Smith, see Chapter 12 and Archive; text box 6.1). Hazel (*Corylus*) charcoal from the upper midden deposit (004) gave a more anomalous date of 5210–4840 BC (SUERC-8198), further suggesting that people had been active here in early prehistory and that the remains of their activities became incorporated in the midden (see Chapter 2). The upper fill of the midden (004) also contained large stones, which could have derived from a collapsed stone structure in the vicinity, of which no other trace survives.

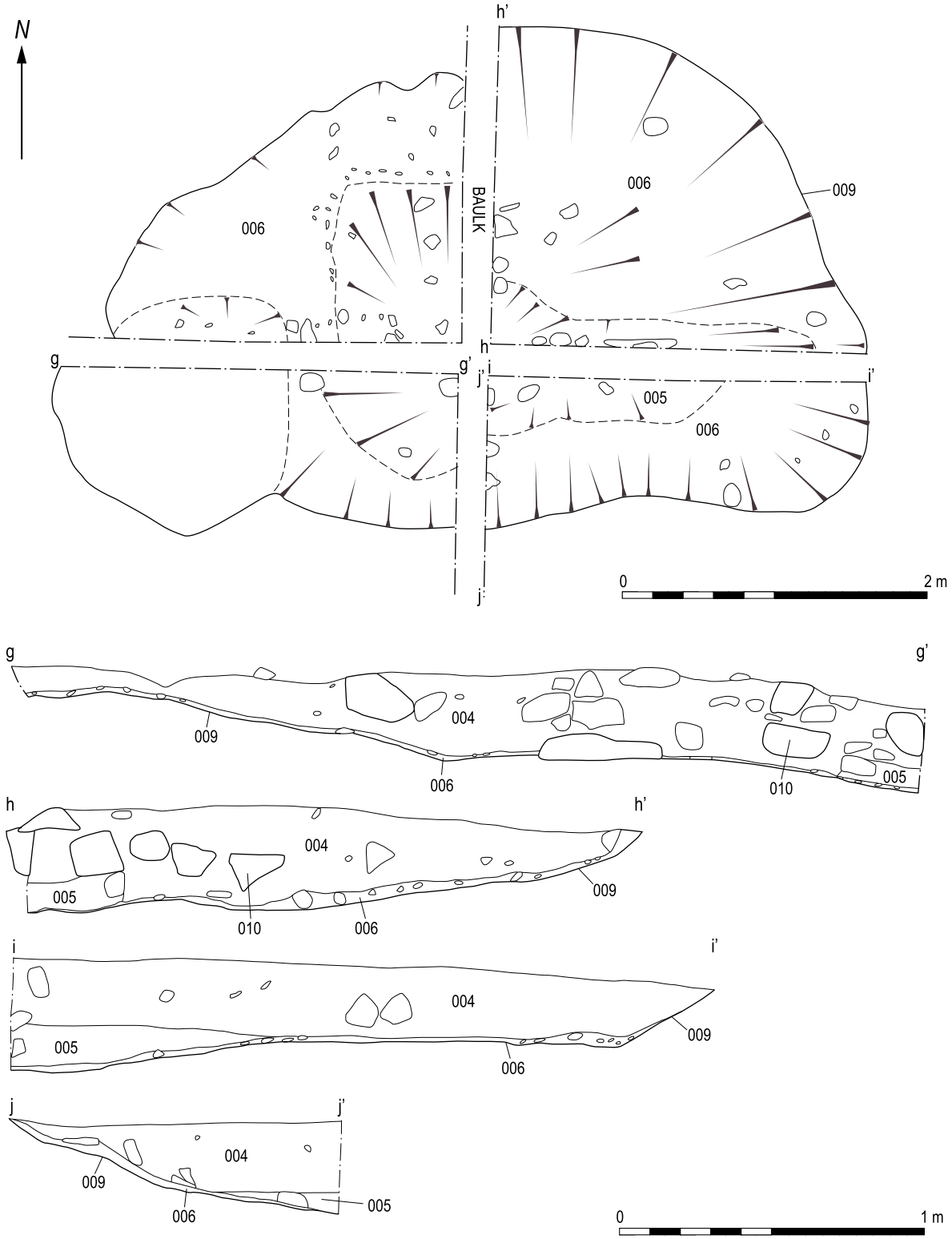
The second scoop (B) (007) was slightly smaller and much shallower (Figure 6.11). Whoever occupied the area in the mid first millennium BC also filled this with their rubbish (003), over cobbles (008) that seemed to have tumbled or been tossed rather than been laid in the scoop. Like the other scoop (A), it contained charcoal from hearths and a little burnt cereal.

There was modern glass in scoop B, and unburnt seeds throughout the fills of both scoops. This indicated some degree of modern disturbance, probably through ploughing.

Biel Water

The site excavated at Biel Water may have been a small homestead, perhaps inhabited by one family that worked the land around it (see Figure 6.1 for location). It consisted of a probable dwelling (the remains of which were not excavated due to time constraints) and a smaller building or working area, all enclosed by a palisade (Figure 6.12). It was occupied before the ditches of the Eweford Cottages enclosed settlement began to fill up (see below).

To enclose the homestead, the occupants dug a trench (008) in an oval shape, measuring about 22m long by 15m across, leaving a gap for an entrance on the east. At its



6.9 Scoop A at South Belton in plan and section.

northern terminal, they dug the trench about 0.8m wide and 0.24m deep, giving it a gently curving profile, while on the south-west it was slightly narrower and deeper. The trench may have lain open for a while, accumulating a silty layer (007) in its base, along with a cow's tooth. Then upright timbers were set in it, their bases braced with packing stones that clustered at regular points along the length of the palisade trench. Excavated material, consisting of mid brown orange sandy silt (003), was backfilled around the posts, and a roughly retouched flint scraper (SF 39) and a large sherd of pottery (SF 4) were incorporated in the fill.

Inside the enclosure was an area of sediment, up to 8m across, which was clearly distinct from the surrounding natural subsoil and may have related to the remains of a structure (005). In addition to this putative structure, which was not excavated, the occupants created another, smaller building about 5m in diameter inside the palisade. They scooped out a circular area (012), giving it steep sides and a flat base to form the floor, and they appear to have built a low stone wall (009) around the edges to enclose it (Figure 6.12). Their activities inside it built up an occupation layer (010). Trampled into it were the remains of their fires, cereal parching episodes

6.1

Animals at the later prehistoric A1 sites

Animal bones were recovered from four sites along the route of the A1: Eweford Cottages, Phantassie, Biel Water and South Belton. Although most of the bone was poorly preserved, and much of it was burnt or completely calcined, it was possible to identify the bones of several different species. Large domestic mammals dominated all of the assemblages: cattle, sheep/goat, pig and horse were all identified, although only at Eweford Cottages were all four present at the same site. It is not surprising that pigs and horses were absent from Phantassie and Biel Water respectively, given the poor state of bone preservation and the small sizes of the assemblages.

Table 6.1 Animal remains from the later prehistoric A1 sites

Eweford Cottages	*Phantassie*	*South Belton Ford*	*Biel Water*
cattle	cattle	cattle	cattle
sheep/goat	sheep/goat	–	sheep/goat
pig	–	pig	pig
horse	horse	–	–
large ungulate	large ungulate	large ungulate	large ungulate
small ungulate	small ungulate	small ungulate	–
–	ungulate	ungulate	–
indeterminate mammal	indeterminate mammal	indeterminate mammal	indeterminate mammal
small mammal	small mammal	small mammal	small mammal
–	–	field mouse	bird: Corvid

It was difficult to determine age at death in most cases because of the small size of the surviving fragments. However, dental evidence from Phantassie showed that immature and young adult cattle had been killed, while young pigs had been killed at Eweford Cottages and Biel Water.

The bones also provide some evidence for the appearance of the sheep: a fragmentary sheep skull from Phantassie, although incomplete, showed evidence of having borne horns. Another skull fragment from Phantassie bore a single small horn core and was probably from a female sheep.

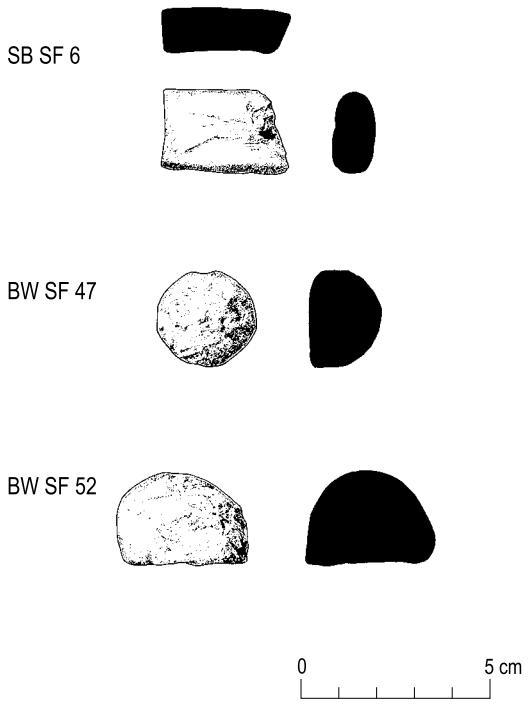
Some of the bones from Eweford Cottages, Biel Water and South Belton had been cut using metal tools. The most striking example was a cattle first phalange (toe bone) from Eweford Cottages. Seven parallel hack marks on the anterior surface of the bone, probably made by a heavy blade such as a cleaver or axe, were interspersed with five thinner, parallel knife cuts, also made by a metal blade. Some bones from Biel Water still bore traces of having been gnawed by carnivores, such as dogs or foxes, probably after having been thrown into an open rubbish pit.

The bones provide the only evidence of the animals which contributed to the local economy at all four sites. Exploitation of domestic rather than wild animals seems to have been the norm. However, although deer bones were absent from the sites, deer were probably hunted. At the nearby Iron Age site of Broxmouth hillfort, a substantial assemblage of well-preserved animal bones provide a good comparison for the material from the A1. At Broxmouth, the bulk of the assemblage was from domesticated animals, mainly cattle, while deer were relatively sparse (Barnetson 1982, 101–5). Similarly, during the Iron Age phases at Castle Park, Dunbar, the assemblage was dominated by cattle and sheep/goat bones with only a few deer bones (Smith 2000, 195). The same proportions occurred in the animal bone at Fishers Road East and West, Port Seton (O'Sullivan 2000, 54; Hambleton and Stallibrass 2000, 148). Exploitation of wild species does not, therefore, seem to have been widespread in East Lothian at this period, implying that communities were managing their domestic livestock in ways that met their protein requirements. A further factor in the apparently rare killing of wild mammals such as deer and wild boar in the East Lothian Iron Age may have been agricultural pressure on their habitats.

CATHERINE SMITH

and meals: fragments of charcoal from birch, hazel and oak, hazelnut shell and heavily burnt cereal grains (Miller and Ramsay, see Chapter 12 and Archive). Hazel (*Corylus*) charcoal from the floor produced a radiocarbon date of 410–200 BC (SUERC-8197). Also pressed into the floor deposit were burnt and unburnt bones of domestic cattle, pigs, other ungulates and the mandible of a crow or rook (*Corvus corvus/frugilegus*) (Smith, see Chapter 12 and Archive). There was evidence of butchery on one rib shaft fragment (SF 51), which bore a thin knife cut.

Later, the putative wall collapsed or was deliberately destroyed, and pitched boulders (016) covered the floor (010). The inhabitants did not bother to clear the stones away, but dumped organic rubbish over them that built up as a silty midden layer (001). This also contained charcoal from birch and oak, along with burnt cereals and burnt and unburnt bones of domestic cattle, sheep/goat and other ungulates. Notably, one cattle tarsal bone (a naviculo-cuboid) had a hole (*c.* 10mm diameter) pierced through it and two knife cuts on its anterior surface. The inhabitants also left behind sherds of pottery from at least three vessels, including a large, barrel-shaped pot (Figure 6.13: V 1); a stone ball (Figure 6.10: SF 47), perhaps a gaming piece or a slingstone, and a broken grinder (Figure 6.10: SF 52) (McLaren and Hunter, see Chapter 12 and Archive). They seem to have used the former structure as a midden pit, leaving it open to the elements and to scavengers like foxes or dogs; two fragments of bone (one from 010 and one from 001) had been gnawed by carnivores (Smith, see Chapter 12 and Archive). Two fragments of birch (*Betula*) charcoal from the midden layer yielded identical radiocarbon dates of 390–190 BC (SUERC-8192 and SUERC-8196). The similarity in calibrated ranges between these dates and that from the occupation deposit (010) suggests that the wall collapsed and the scoop filled with midden soon after it was abandoned.



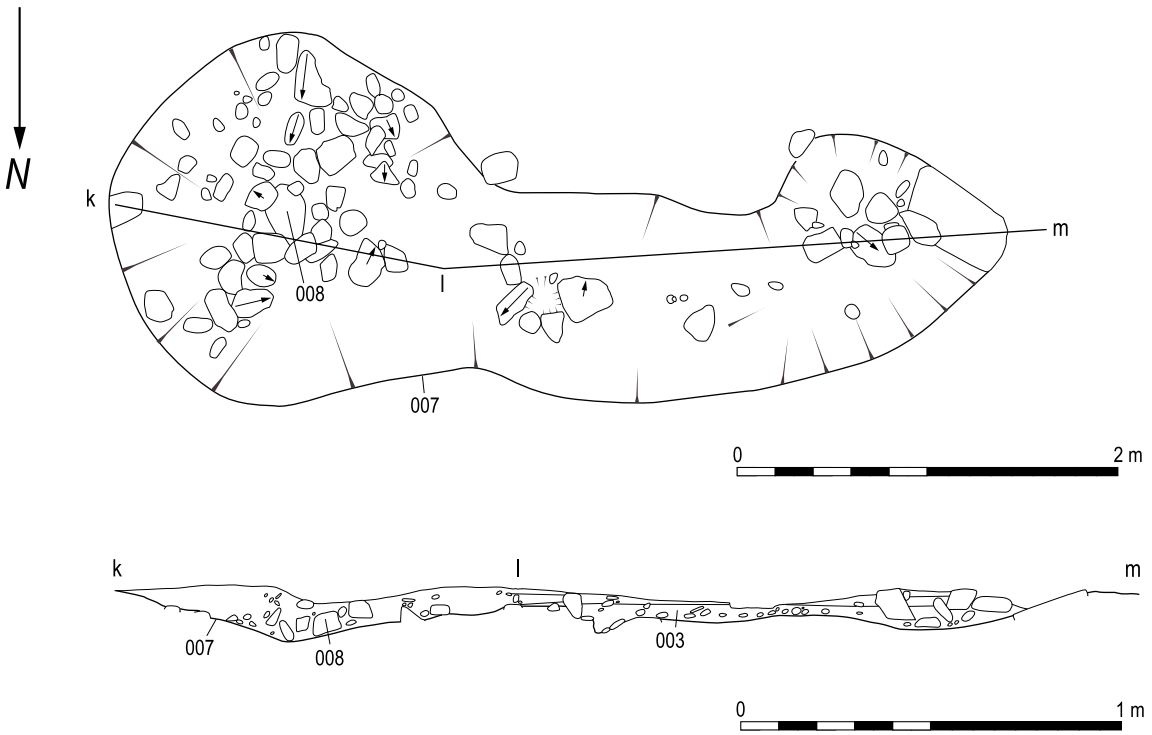
6.10 The heavy stone implements from South Belton and Biel Water.

At some point, the occupants also removed the palisade. A band of dark silt (013) along the base of the cut on the south side suggests that they deliberately demolished it, perhaps rocking the posts back and forth to remove them. This would have left only the rotten bases in place, with the clusters of stone packing lingering in the upper fill.

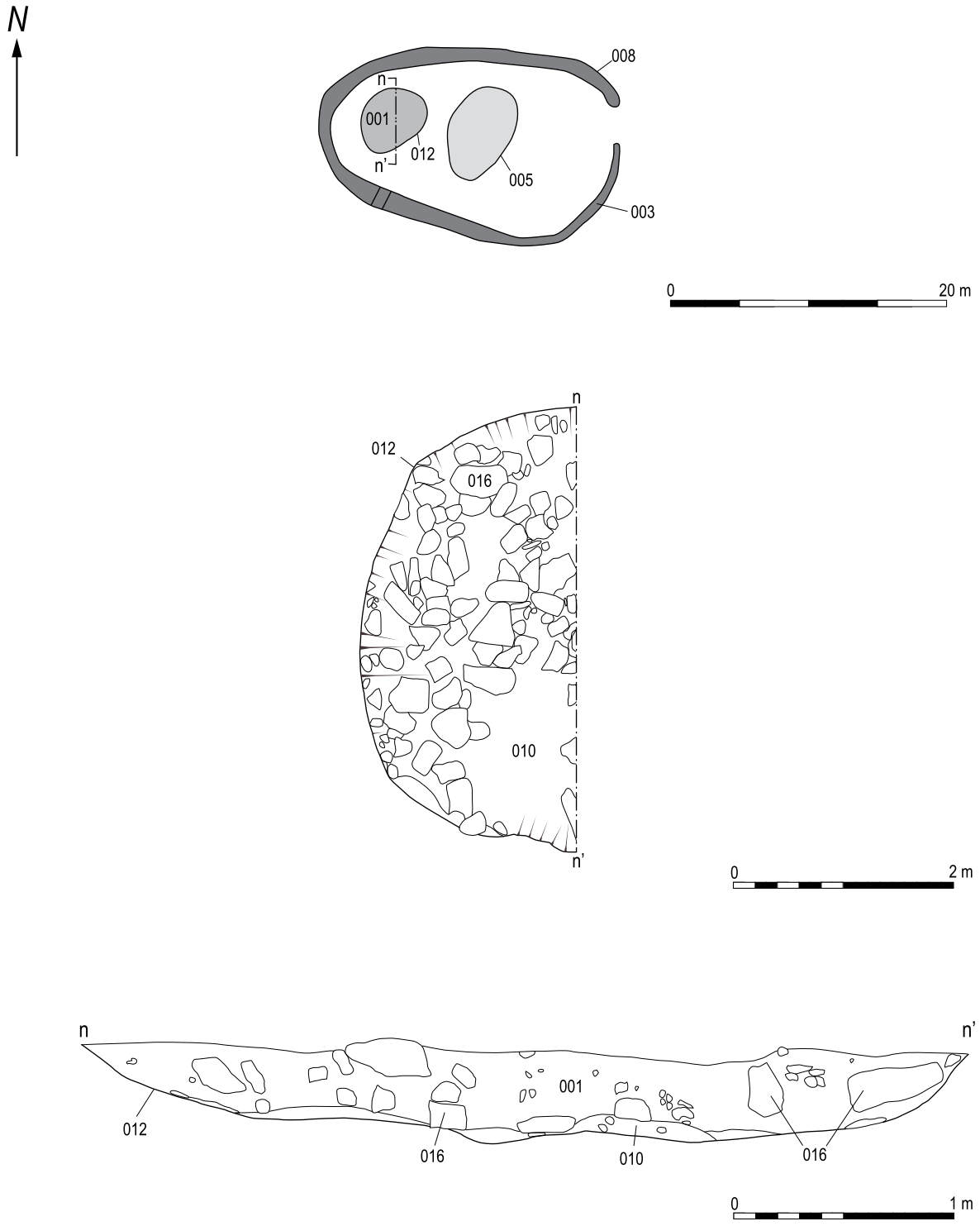
Thistly Cross

Located *c.* 500m to the east of South Belton (Figure 6.1) were the partially surviving stone footings of a single structure, built in a natural hollow. At the base of the hollow, an area of approximately 12m by 6m (016) had been excavated and filled with stones to form a metalled surface (010). The structure had been built on this stone surface, which may have then served as a yard (see Figure 6.14).

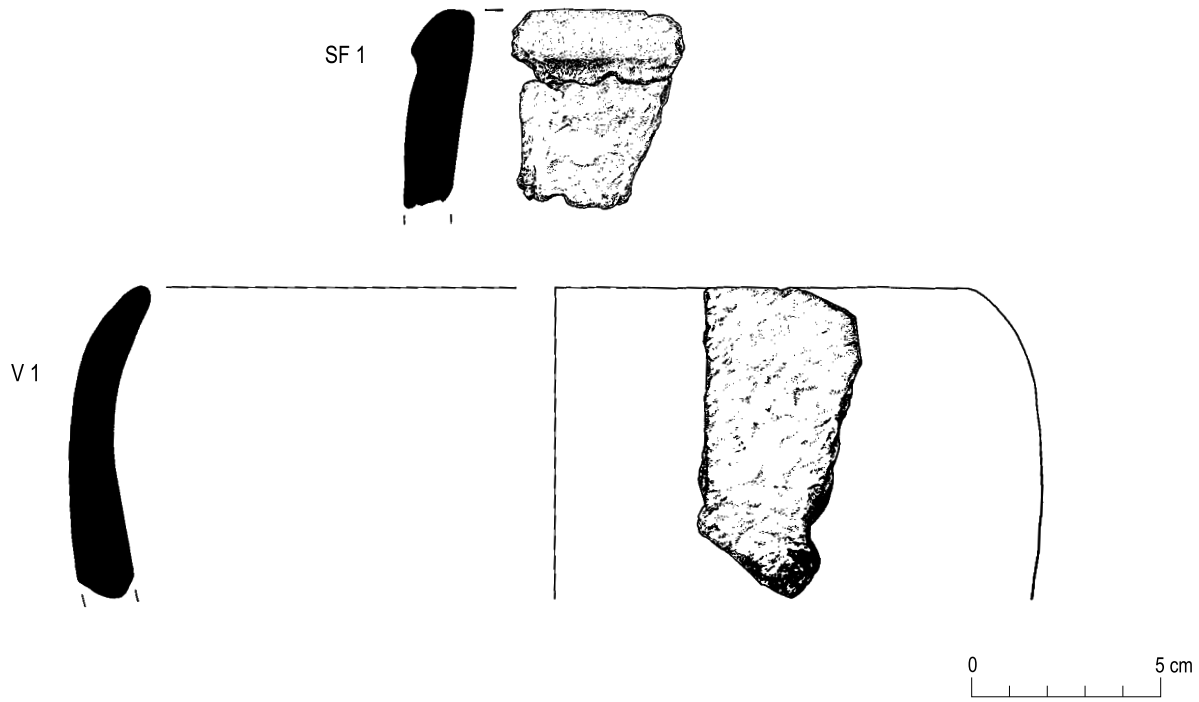
The remains of the structure may have been partially robbed out or damaged by ploughing. They comprised a length of wall (1) with outer facing stones (002/018) and a rubble core (003), which could be traced for 4m. Another double-skinned wall (2) ran parallel to this, 1.2m to the east. Traces of what may have been a third wall (3) were evident at the southern end of walls 1 and 2, with the



6.11 Scoop B at South Belton in plan and section.



6.12 The Biel Water enclosure (top), showing the scoop (012) in plan and section.



6.13 The pottery from Biel Water and Thistly Cross.

remnants of a wall face (019) and rubble core (007 and 020) surviving. On balance, the structure was probably sub-rectangular in shape and it may have had an internal division, represented by wall 2. Incorporated into wall 1 was a stone with a pecked-out hollow (Figure 6.15: SF 2) that may have been used as a mortar (McLaren and Hunter, see Chapter 12 and Archive).

Between walls 1 and 2 there survived traces of an occupation deposit (009); its presence suggests that the walls were contemporary. Ten sherds of pottery were found in the deposit, and these probably derive from four different coarse pottery vessels (Figure 6.13: SF 1). One had a distinctive bevelled rim with a slight finger-tip groove beneath (MacSween, see Chapter 12 and Archive). The exterior and interior surfaces of these sherds are variously sooted, suggesting that they were used for cooking.

To the east of wall 2 was a layer of stone (014), which may represent rough paving (Figure 6.14). It was unclear whether this related to a second phase of the structure's use, or whether the difference in deposits to either side of wall 2 reflected different rooms or cells in the structure.

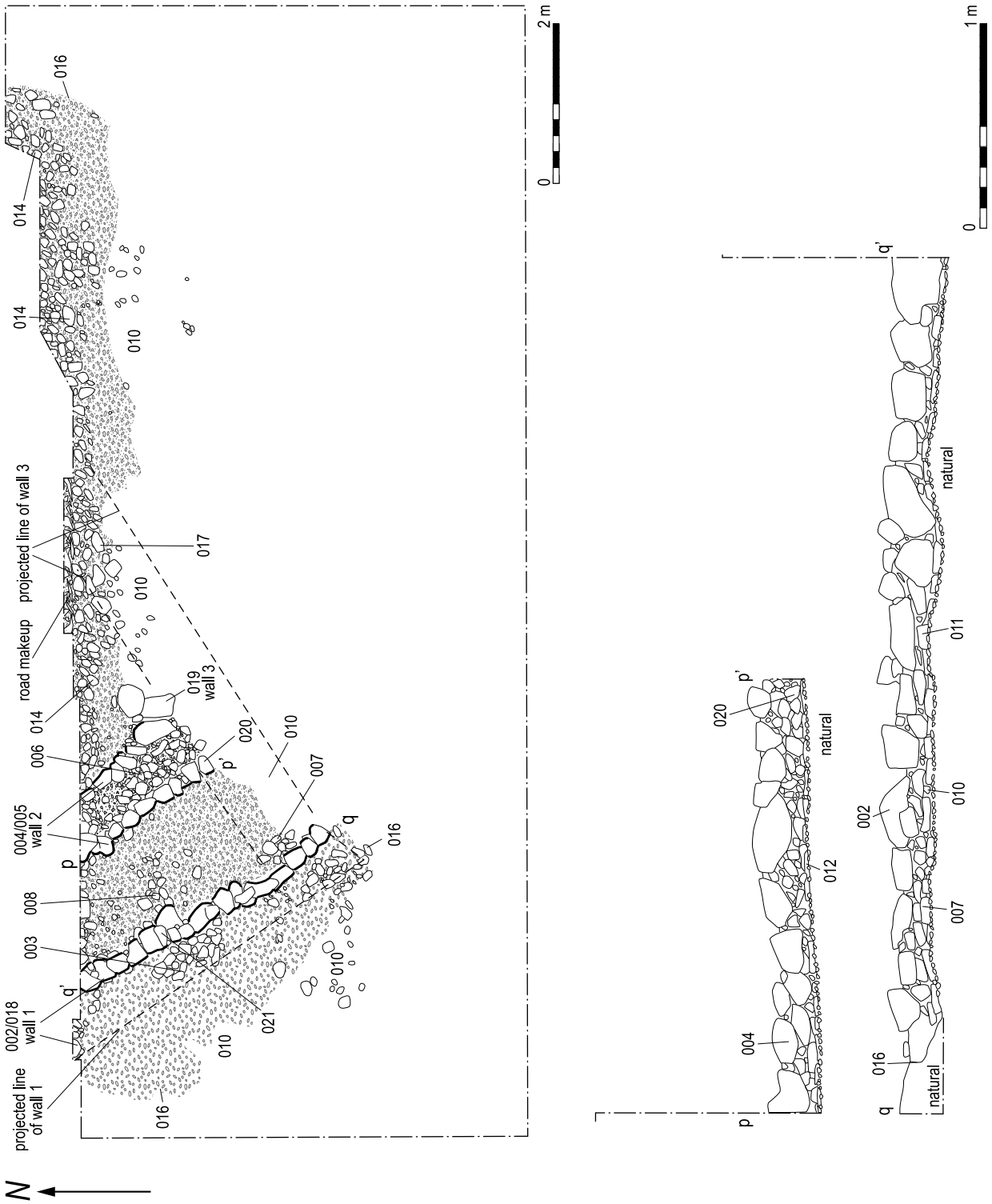
Investigation around the structure established that it was probably unenclosed, with no traces of a palisade or ditch. While no dating evidence was recovered, the nature of the pottery suggests a later prehistoric date.

Eweford Cottages Settlement

About 400m to the east of the Eweford West mortuary site, a large enclosed settlement existed from the later first millennium BC (Figures 6.1 and 6.16). Excavation of a small slice of the enclosure's western edge yielded evidence for its origins, for the infilling of its ditches and for a later period of settlement.

The enclosed settlement (390–200 BC)

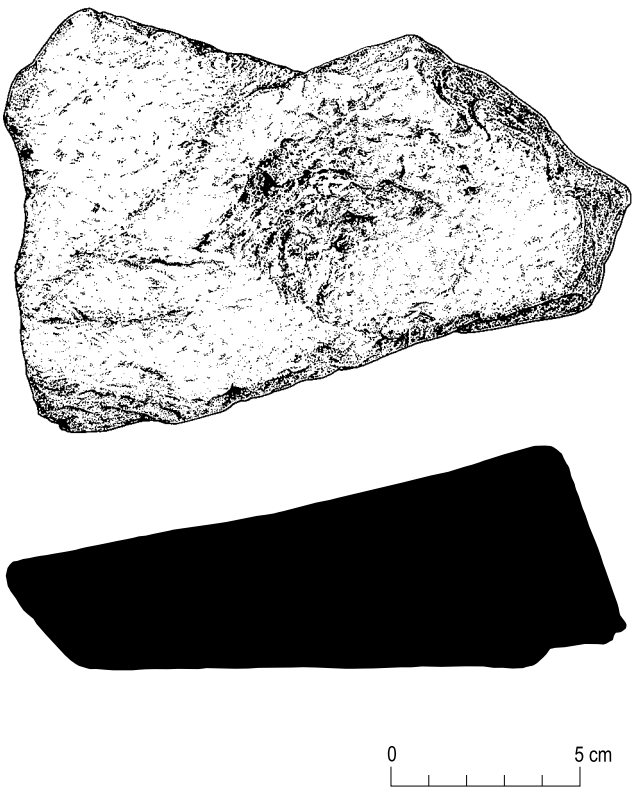
The group that created the enclosed settlement at Eweford Cottages chose a slight natural rise. Cropmarks indicate that they defined the settlement by digging at least two concentric ditches, about 5m apart, to form a roughly circular enclosure that measured about 60m in diameter (Figure 6.16). Other lengths of ditch along the perimeter are also evident in the cropmarks visible on aerial photographs, so there may have been phases when new ditches were dug and old ones refurbished or abandoned. The excavations examined only the western edge of the enclosure, which lay outside the scheduled area and



6.14 The structure at Thistly Cross in plan and section.

beneath a C-category road, revealing evidence for the cutting and infilling of the outermost ditch and for later settlement activity.

Here, the early inhabitants of the settlement dug the lengths of ditch that defined the enclosure's western entrance; the excavation trench exposed the ditch terminals on either side (Figure 6.17). They excavated the ditches (A (009) and B (100)/(120)) up to 2m deep and more than 3m wide at the terminals (Figure 6.18). When the diggers reached the base their heads would have been below ground level, and they would have had to throw the spoil out over the sides or pass it up to helpers in baskets or buckets. In the terminals they created narrow, flat bases, but further along they dug the bases into 'V' shapes. The excavation of the inner and outer ditches, if they were contemporary and dug consistently to this depth, must have taken many days of hard labour to create the entire enclosure.



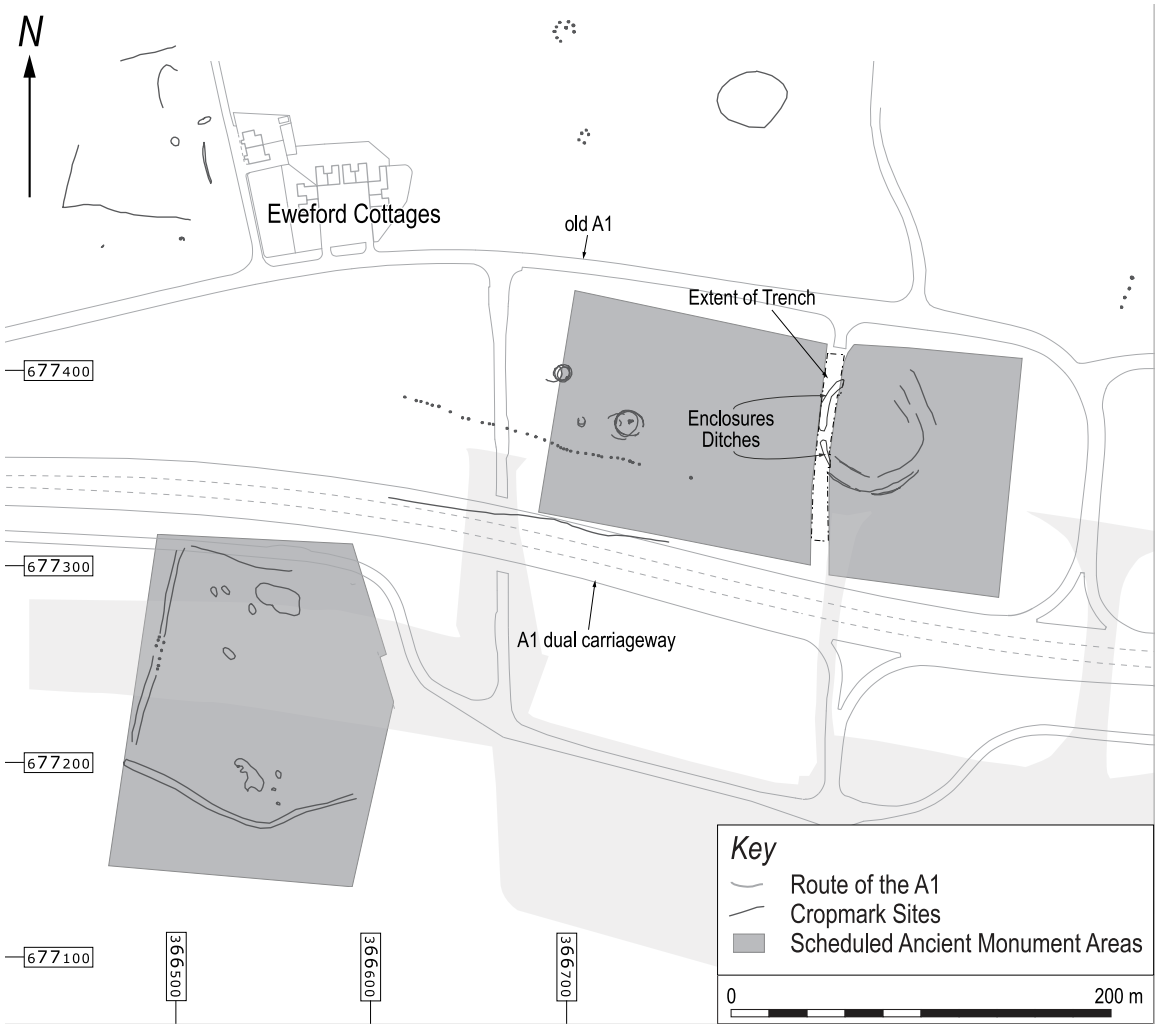
6.15 The pecked stone from Thistly Cross.

Radiocarbon dates indicate that people dug these ditches sometime before the third or fourth century BC (see below). The terminals flanked an entrance about 4m wide, broad enough for carts and people to pass easily. The entrance was placed to look west, toward the ancient mortuary site at Eweford West and the massif of Traprain Law. No evidence was found for a gate. In choosing its position, the enclosure's occupants may have considered physical factors such as prevailing winds and drainage, but other, more esoteric factors such as superstition or local politics might have also played a part. It is not clear from the cropmarks whether the enclosure had another entrance.

The builders of the enclosed settlement also set stone kerbing (122) (slot 9) and (139) (slot 10) along the inner edge of the northern ditch (B) (Figure 6.19). This may have been set to stop erosion at the edge; alternatively and more likely, these were the footings for a rampart, with the excavated spoil heaped against them to mark the enclosure above ground as well as below it. The excavated portion of the ditches had been truncated and disturbed by later activity, making it difficult to establish with certainty whether the kerbs related to a rampart.

The occupants of the Eweford Cottages enclosure kept the outer ditches open for a period of time; this would have involved regularly clearing out rubbish and silt that accumulated in them. The excavations found slight evidence for this kind of maintenance in the form of a possible re-cut in ditch A, as evident in slots 5 (045; Figure 6.18, t-t') and 6 (036) and also in slot 5 by a possible primary silting (131) of the re-cut (Figure 6.18, u-u'). Eventually, however, the occupants began to neglect the ditches, allowing the sides to weather and erode. Their bases filled with sandy silts that washed in and were not cleaned out; (037)/(129)/(131)/(042)/(043)/(049)/(051) in ditch A, and (098)/(096)/(088)/(113)/(114)(115) in ditch B. Two samples of birch (Betula) charcoal recovered from these early silts, (096) in ditch B and (037) in ditch A, produced identical radiocarbon ranges of 390–200 BC (SUERC-8172, SUERC-8178), showing that this neglect began in the third or fourth century BC.

As the silts accumulated, they captured fragments from the daily life of the settlement. Small pieces of bone from cattle and horses (Smith, see Chapter 12 and Archive) washed into the earliest silts (129)/(131) in ditch A.

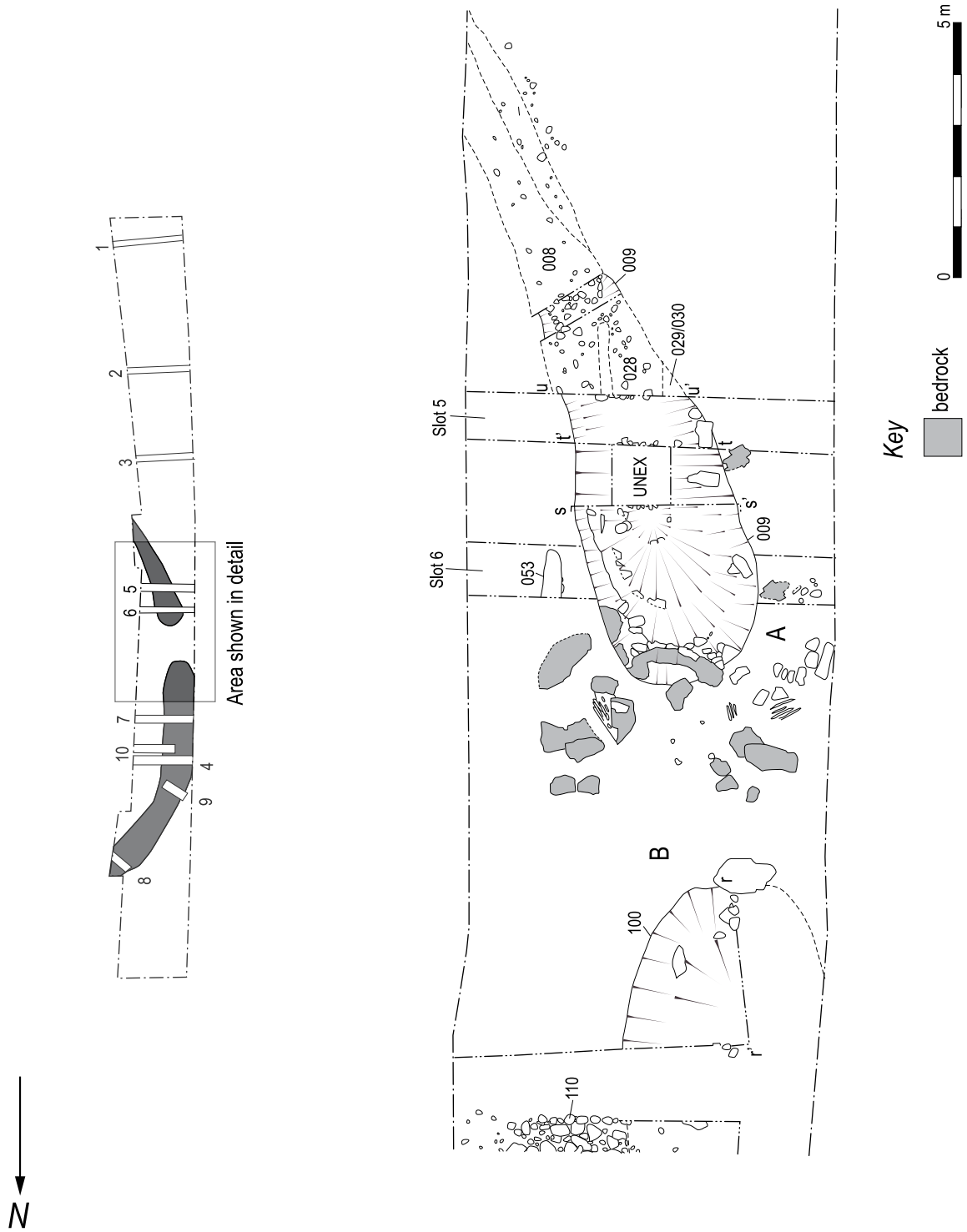


6.16 Cropmarks and scheduled areas at Eweford Cottages and in the vicinity.

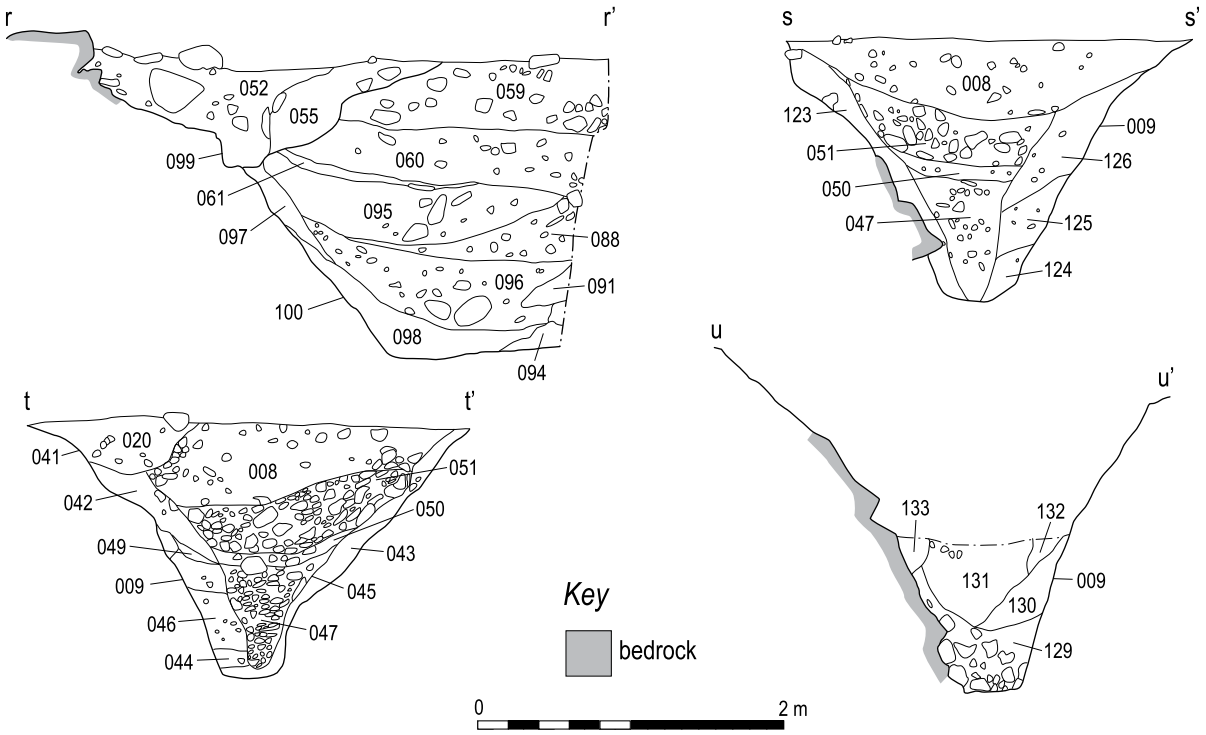
On windy days, pollen from nearby fields and charcoal from domestic hearths blew into the ditches, lodging in the damp sediment. The charcoal, which came from birch, hazel, heather and oak, show that the inhabitants were gathering fuel from local, mixed deciduous forests and heathland (Miller and Ramsay, see Chapter 12 and Archive).

After the silts had built up to a depth of a metre across most of the ditches (and up to 2m in the ditch A terminal), the settlement's occupants altered the way they were treating the ditches. Rather than simply allowing them to silt up naturally, they began to fill them in deliberately. In doing so, they effectively erased the enclosure that had defined their settlement. Particle size, magnetic susceptibility and phosphate analysis of the lower and upper ditch fills confirmed the on-site interpretations: the lower fills accumulated naturally, through silting, while the upper ones were the result of human activity and derived from occupation waste and manure. These analyses also suggested that both ditches filled in at the same time, as their fills were very similar (Wilson, see Chapter 12 and Archive).

To fill the ditches, the inhabitants gathered midden material and dumped it in them. The midden dumps were all quite similar (see sections, Figure 6.18), consisting of dark brown to black sediment, rich in fragments of bone, burnt cereals, pottery and charcoal ((008) and (071) in ditch A and (095), (061), (060) and (059) in ditch B). The fact that relatively little occupation debris had washed into the earlier, incidental fills suggests that the occupants stored their rubbish in other places, somewhere away from the ditches, before they re-used it in this particular way.



6.17 The excavated ditch terminals at Eweford Cottages enclosure.



6.18 Sections through the ditches at Eweford Cottages enclosure.

Sherds representing six different vessels (Figure 6.20: V 1, 3, 5, 7) were found in the fills of ditch B, all of them from bucket-shaped vessels (MacSween, see Chapter 12 and Archive). One vessel (3) was decorated with a series of dots around the lip and a groove below. Another vessel (7, Figure 6.20) was represented by a sherd from a deposit (107) sealed beneath paving (104) next to the open ditch. Many of the sherds bore evidence of sooting and residues, suggesting they had been used for cooking.

In ditch A, pottery sherds representing three different vessels (V 9–11), were found in the uppermost midden fill (008) (see Figure 6.20: V 10). These vessels were generally finer than those from ditch B, and may indicate a chronological distinction (MacSween, see Chapter 12 and Archive). Blackthorn type (*Prunus spinosa*) and birch (Betula) charcoal from two midden fills (008 and 061) in ditch A, and a grain of emmer/spelt wheat (*Triticum*) from one of the same midden deposits (061), all yielded the same calibrated radiocarbon ranges of 350–40 BC (SUERC-8177, SUERC-8187 and SUERC-8176 respectively). This would suggest that the ditches were filled in over a fairly short period of time, an interpretation supported by the absence of silts between episodes of dumping.

Subsistence and the daily grind

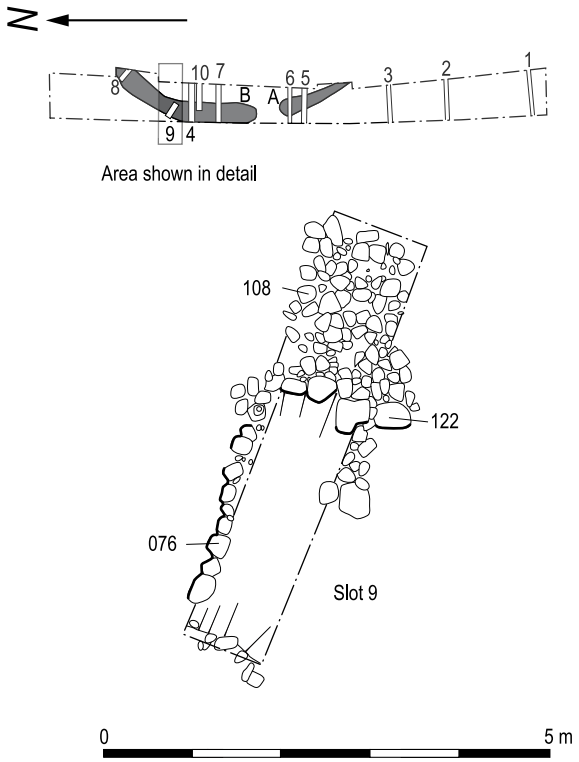
The midden fills yielded abundant information about contemporary life in the settlement. They show what households were burning in their domestic hearths: birch, hazel, blackthorn, alder, willow and oak (Miller and Ramsay, see Chapter 12 and Archive). This would have involved excursions to regenerated scrub woodland in order to cut branches or trees, or to gather sticks from the forest floor. Burnt hazelnut shells, elderberry and rowan seeds show they were also gathering wild fruits and nuts to eat (Miller and Ramsay, see Chapter 12 and Archive).

The fires they tended served other purposes besides cooking food and providing warmth. The midden fills contained burnt cereal grains, including six-row barley (naked and hulled) most abundantly, as well as emmer wheat, spelt wheat and oats. They also contained small quantities of burnt chaff, cereal weeds and the stems and underground twigs from heather plants. These show that people were processing cereals at the settlement – cleaning the grains to eliminate the chaff, then parching them to draw out the moisture and preserve them from fungal attacks (see text box 6.2). The small amount of chaff suggests that this waste was created later in the

process, probably after winnowing (Miller and Ramsay, see Chapter 12 and Archive).

Micromorphological analysis of thin sections through two midden fills (109 and 054) in the ditch B terminal identified the residues of burnt turf (Simpson, see Chapter 12 and Archive), and the botanical analysis of various midden deposits also found carbonised weed seeds from turf that grew on heathland or damp grassland (Miller and Ramsay, see Chapter 12 and Archive). The settlement's inhabitants may have used turves in their buildings, for walls, roofs or even furniture, adding it to their midden or compost heaps when the buildings fell down or walls were refurbished. They may have also collected turf to use in cereal parching.

We can picture someone setting a fire to dry the grain, perhaps spreading the cereal on a rough mat suspended over it and using damp turves to diffuse the heat and prevent the flames from touching the grains. On occasion, the mat would catch fire or some of the grains would slip into the flames and burn. At the end of the day, the fire's attendant would collect the dried grain and add it to the store that would see the settlement through to the next harvest. He would rake out the hearth, gathering up the charred grain, the charcoal and the remains of burnt turves. Thrown on the midden heap, the ashes would mix with animal bones and teeth, organic food waste,



6.19 Plan of the kerbing (122) along the inner edge of the northern ditch (B).

6.2

Cereals' transformation from crop to food

Cereal crops go through several stages of processing after harvesting until they finally end up in a form that can be eaten or stored.

Once the grain has been threshed from the stalks, the chaff has to be removed from the grain itself by pounding and sieving. The parching stage involves gently heating the grain to preserve it from mildew, so that it can be stored longer. Evidence of this process can be seen in the form of charcoal from the fuel used to heat the grain, the waste chaff thrown onto a fire and sometimes also burnt grain. Cereals could end up carbonised if the heat was so intense that the grain caught fire or if some accidentally dropped into the parching fire.

Evidence for parching fires and their associated waste was found at Eweford Cottages and at Phantassie. These carbonised assemblages included an abundance of small heather twigs and underground stems of grasses and sedges, along with cereal grains and occasional fragments of chaff and weed seeds. The heather type twigs and grass/sedge rhizomes may be the remains of turves that had been collected from heathland, either to be used for fuel on the parching fires or, more likely, to damp down the parching fires to prevent the grain from getting too hot and burning, instead of drying. This association of carbonised heathland turves with cereal parching fires was also observed at Fisher's Road West, another Iron Age site in East Lothian.

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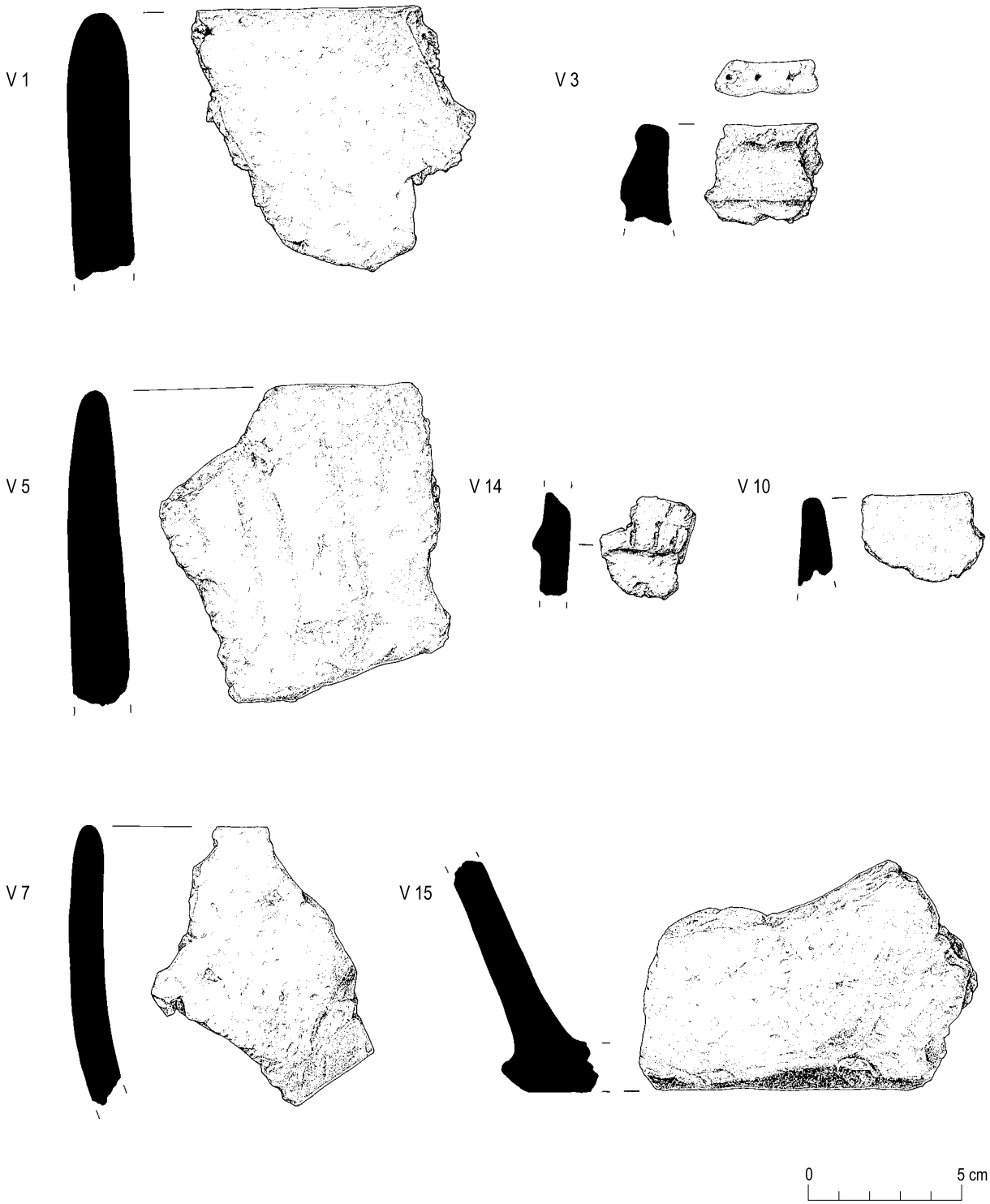
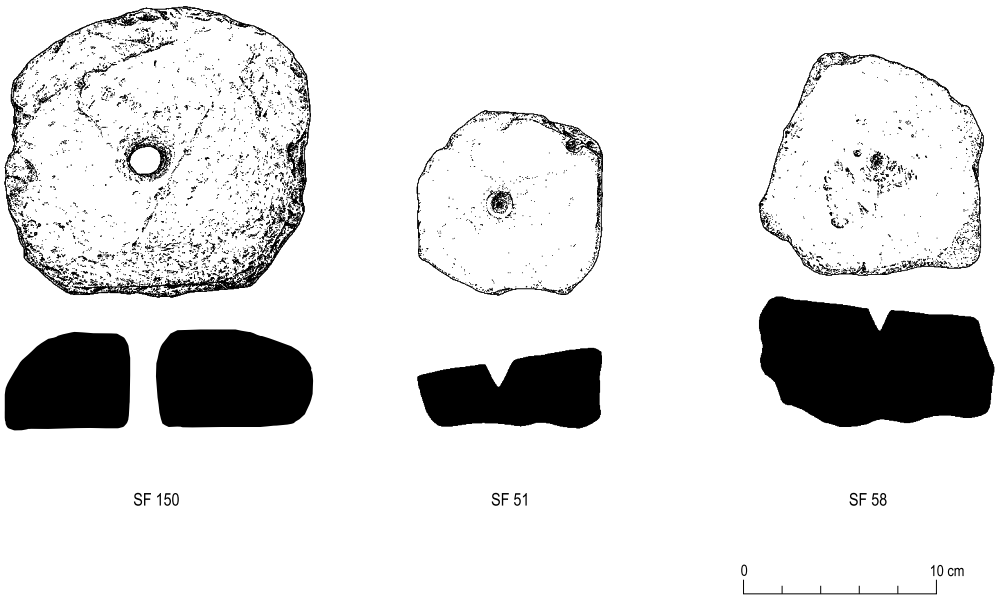


6.20 Pottery vessels from Eweford Cottages.

6.21 Kerbs, walling and stony surfaces sealing the ditches.



6.22 The querns from Eweford Cottages.

sherds of pottery, bits of textile, broken wooden and bone implements. Most of this material would later decay away under the action of aerobic bacterial activity in the site's relatively dry, freely draining silty loam soils.

Animal bones from the midden fills show that cattle, sheep/goats, pigs and horses were consumed at the settlement (see text box 6.1). They would have been butchered for food, and their hides and wool used for clothing and textiles and the bone and antler for tools, pins, toggles and hafts. Some of the animals would have provided milk at certain times of the year, which in turn could have been used to make cheese and butter. The micromorphological analysis of the midden fills also found fine mineral residues, indicating high temperature burning (above 800° C). This is consistent with metal based 'industrial' fuel combustion activity (Simpson, see Chapter 12 and Archive), and perhaps suggests that people were at work smelting and smithing metal at the settlement.

The unenclosed settlement (40 BC to AD 210)

After the ditches were filled in, the settlement at Eweford Cottages began to spread out over the line of the old enclosure. This began sometime after 40 BC.

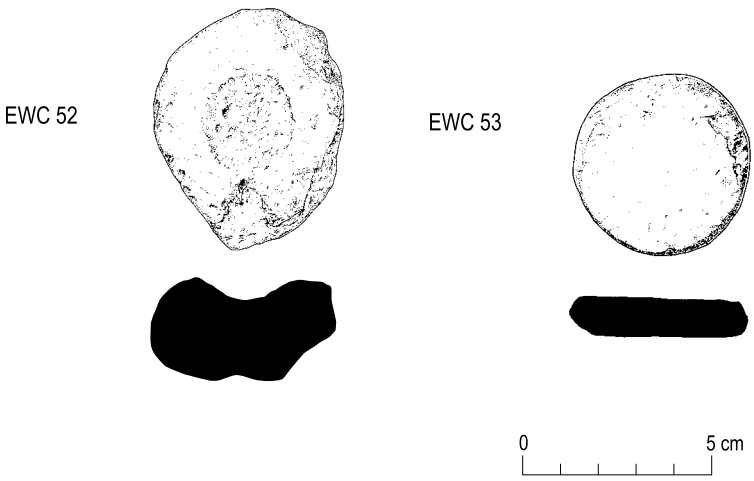
The occupants of the settlement set boulders and smaller stones to form kerbs or wall bases over the filled-in ditches (Figure 6.21). Most of these sealed the northern ditch (B). The two most substantial (079 and 080) ran parallel to each other, with one (079) continuing farther to the north; these may have formed a thick, double-skinned wall which returned to the east at its southern end (as (084)). They laid a short length of kerb (081) to extend south from the corner of this putative structure, and another (076) extending from it across the line of the filled ditch. To the east of the possible double-skinned wall, they laid a spread of sub-angular stones (082) over a sub-rectangular area with an extension to the east. They may have done this to level the ground, and to provide a firm base for a floor (a timber one, for example). Equally, it is possible that the length of stonework (076), which ran on a slight arc across the in-filled ditch, may have been a remnant of a structure pre-dating the creation of the other kerbs or walls (079) and (081).

To the east of these kerbs, they laid an area of paving (104) along the eastern side of the northern ditch (B), respecting its edge (not illustrated). Into the paving they set part of a well-used, bun-shaped rotary quern base (SF 58) (Figure 6.22). Bun-shaped querns are thought to date to the period from the first century BC to the second century AD (Mackie 1972b, 144; McLaren and Hunter, see Chapter 12 and Archive). Other lengths of kerbing or wall bases (128)/(076)/(084) identified during excavation could be the fragmentary remains of other buildings. For example, the kerbing (128) could represent the fragmentary remains of a double-skinned structure; its arc could be related to the kerb (076), together forming a small, sub-circular structure *c.* 5m diameter. The settlement's inhabitants may have rebuilt structures at different times in the same area, robbing out walls and re-using stones for new ones, so the excavated picture

6.23 The possible house platform and paving sealing the northern ditch, in plan and section.

may be the result of piecemeal, ongoing building activity. Later activity on the site, particularly its metalling for a road before the construction of the modern C-category road, truncated and compressed the stony features and made their phasing difficult to untangle.

At the northern end of the excavated area, the occupants dug a broad scoop (119) up to 0.5m deep across the line of the old ditch, truncating the upper fill (113) (Figure 6.23). They created a flat base and vertical edges, perhaps to serve as the foundation for a house platform. While the scoop stood open, the sides slumped and silted slightly (121)/(118) after bursts of rain. As people carried out their everyday activities inside it, they created an occupation deposit (103) rich in birch, hazel and heather charcoal, burnt cereals and animal bone. A grain of six-row barley (*Hordeum vulgare sl*) from it produced a radiocarbon date of 60 BC–AD 90 (SUERC-8182), while a fragment of hazel (*Corylus*) charcoal yielded a date of 40 BC–AD 140 (SUERC-8181). After this layer had built up, they dug a large pit (127) into it. It held a reddened, heat-affected slab, which may have served as a hearth.



6.24 The stone mortar and disc from Eweford Cottages.

Later, they sealed the floor layer and the pit with flat stones to form an area of paving (021) about 3m by 2.5m in extent. Into it they set the upper and lower elements of two old, well-used rotary querns (Figure 6.22: SFs 50 and SF 51), side by side. As they continued to use this area, they built up a layer of black-brown silty sand (101) over the paving stones, scattering their food and hearth waste into it: bones of sheep/goat and pig (Smith, see Chapter 12 and Archive), both burnt and unburnt; birch, hazel, oak and heather charcoal, and burnt cereals (Miller and Ramsay, see Chapter 12 and Archive). They also discarded a small, polished bone implement (SF 28; not illustrated), a stone mortar (SF 52) and a stone disc (SF 53) that might have been used as a palette (McLaren and Hunter, see Chapter 12 and Archive) (Figure 6.24). Sherds of pottery from two different bucket-shaped vessels (V 12 and 15) were also found in the layer (Figure 6.20: V 12). A grain of hulled six-row barley (*Hordeum vulgare var vulgare*) from the occupation deposit (101) produced a radiocarbon date of 40 BC–AD 210 (SUERC-8186). A stone setting (135) along the deposit's southern edge could represent the remnants of the structure's wall.

The people that began building these new elements of the settlement may have been the same ones that filled in the ditches. A sherd of pottery found in the uppermost midden fill (059) of terminal B came from the same vessel (V 1, Figure 6.20) as another sherd found between two stones of the overlying kerb (081). This would suggest that, soon after they finished filling in the ditches, the settlement's inhabitants began to build on top of them. The radiocarbon date ranges from the later deposits point to this phase of the settlement having continued for perhaps two centuries.

Probably in the early modern period, a millennia and a half after the inhabitants had abandoned the settlement, rounded stones (028) were laid to form a metalled road over this western edge of the enclosure. The stones used were similar to those that formed the surfaces and structural elements of the post-enclosure settlement, complicating the archaeological record. Finally, the modern C-category road was built over this road, truncating the earlier archaeological remains in some places, particularly to the north.

Discussion

Lothian's small farming settlements in the mid to late Iron Age

Most of the archaeological remains treated in this chapter relate in some way to settlements. The ditches at Howmuir may have represented the boundaries between a dwelling and its surrounding field systems. The single post, which may have stood while the ditches silted up, hints at structural remains in the vicinity. The discrete dump of pottery and the palaeobotanical evidence suggest that the ditches lay on the margins of a settlement, probably comprising timber structures, from which the pottery derived. While the ditches' infilling during the second

millennium BC involved some disposal of refuse, they were mainly silting up naturally with sediment that washed or blew in from the surrounding fields. The small pit dating to the mid first millennium BC hints that Howmuir continued to be a focus of activity, albeit perhaps intermittently.

A clearer impression of settlement comes from the remains dating to the late first millennium BC to early first millennium AD at Eweford Cottages, Biel Water, South Belton and Thistly Cross. At Biel Water, unburnt and burnt animal bone fragments had been incorporated into a charcoal-flecked floor deposit. When these are considered with the evidence of butchery on one piece of bone, it suggests that households were processing and cooking meat in or around the building. The presence of a possible gnawed bone in the floor deposit also suggests that a dog had lurked inside. The collapsed stonework which sealed the floor deposit indicates that the scoop had been enclosed by a low wall, perhaps the footing for a more substantial timber and/or turf structure of which no further trace remained (see Figure 6.25). After the structure had been abandoned, people apparently continued to live close by, as they began dumping refuse in the pit. Fragments of pottery and a possible stone gaming piece were flung into it, along with further burnt and unburnt animal bone remains. The settlement may have housed a family group who were practising pastoral agriculture. Such small farmsteads may have been more common in the middle of the first millennium BC, precursors to larger, amalgamated, enclosed settlements such as Eweford Cottages.

A similar use of scoops for dumping refuse is evident at South Belton. The pits there were filled with fragments of burnt and unburnt animal bone, one of which showed evidence of butchery. Associated with these remains was a broken whetstone, perhaps used to sharpen the butcher's knife.

At Thistly Cross, we perhaps have a glimpse of the kind of domestic context from which the refuse at South Belton derived. Sherds from several pottery vessels were incorporated in the floor of what may have been a small room in a building. Although the structure is undated, the remains at Thistly Cross are comparable in character to the stone kerbing (079, 080 and 128) at Eweford Cottages and the pottery is consistent with a later prehistoric date.

Eweford Cottages and the evolution of enclosure

The origins and lifespan of the settlement at Eweford Cottages (Figure 6.26) coincided broadly with those of several other excavated enclosed (and later unenclosed) settlements on the Lothian plain, including Broxmouth (Hill 1982b), Fishers Road East and West (Haselgrove and McCullagh 2000) and St Germains (Alexander and Watkins 1998). The Eweford Cottages settlement appears to have originated as an enclosure rather earlier than Fishers Road East and West, but probably well after the creation of Broxmouth's substantial ditches and ramparts; the sequence at St Germains is not dated. Recent excavations by Durham University at a number of large enclosures around Traprain Law have also produced interesting results (Haselgrove forthcoming). Excavations at Standingstone established that an open settlement existed there during the mid to late first millennium BC, on the site of a late second millennium BC enclosed settlement (Haselgrove, pers comm). At Knowes, an enclosed settlement was established in the later centuries of the first millennium BC; the ditches were filled in and a scooped complex of stone-built structures existed by the early centuries of the first millennium AD (*ibid*). At Whittinghame Tower, the ditches of another enclosed settlement were out of use by the early first millennium AD, when a scooped

6.25 Reconstruction of the homestead at Biel Water.

complex with cobbled surfaces was built on the same site (*ibid*).

The creation of many of these large enclosures, with their deep ditches and in some cases ramparts, coincided with a period of extensive woodland clearance in southern Scotland (Innes and Shennan 1991; Dumayne 1993). As forests gave way to more open ground for agriculture, perhaps Lothian communities felt a need to create their own sense of enclosure around the places where they lived, as well as find uses for the trees they were felling. Enclosures would have increased control over who entered and left the settlement and how they did this, and may have been linked to communities' defining themselves in stricter terms. The very act of creating these enclosures would have made considerable demands upon labour and time (Haselgrove and McCullagh 2000, 186), demands that may have been met through communal efforts, or through the calling in of social or economic obligations, or even through slave labour. These and other issues related to later prehistoric domestic architecture are addressed more fully in Chapter 10.

A picture emerges from the botanical, bone and artefactual assemblages at Eweford Cottages of a settlement with a mixed farming economy. Those living here grew, cleaned and ground grain, and they butchered livestock inside or close to the enclosure. They may have practised some kind of metalworking at high temperatures, perhaps to make or repair their own tools. By implication, they may have also woven cloth, worked hides, made cheese and other dairy products and even pottery, but the excavations produced no direct evidence for these activities. They would have spent time regularly gathering fuel, both wood and turf, possibly at the same time as they were clearing land for crops. The greater proportion of oak in the botanical assemblage (in comparison to the later site of Phantassie; see Chapter 7) supports the interpretation that they were clearing older forests at this time.

The seasons and agricultural cycles would have governed their routines to some extent, as would have their belief systems (Barrett 1989a, 115). When they filled in the enclosure's ditches using rubbish created and stored up in their daily lives, they fundamentally

6.26 Eweford Cottages enclosure under excavation.

changed the nature of their settlement, and this must have expressed a change in how they perceived it themselves. The curation and re-use of midden material in this period is a phenomenon observed at other sites in the area (including Phantassie, see Chapter 7; Alexander and Watkins 1998, 248; Hill 1982b, 150; Haselgrove and McCullagh 2000, 78–9, 173). It may have been rooted in particular beliefs, and it is worth addressing in more detail (see Chapter 10). The inhabitants of the later, open Eweford Cottages settlement may have found other ways to express their beliefs, such as setting old quernstones into new floors or buildings.

The same mixed farming economy seems to have endured at the settlement during its open phase. The inhabitants do not seem to have changed the ways that they interacted with their physical environment, nor shifted their attention to different resources. They continued to process grain (including barley and wheat) and to eat domestic livestock (pigs, sheep/goats and cattle).

The filling in of the enclosure ditches, in the last century or two of the first millennium BC and into the early first millennium AD, accords well chronologically with the same phenomenon at other excavated enclosures in the area, including Broxmouth (Hill 1982b) and Fishers Road East (Haselgrove and McCullagh 2000, 172–3). This period also saw the creation of the cist at Pencraig Hill, which lies close to two (as yet undated) large cropmark enclosures at Overhailes (NMRS NT57NE 33) and East Linton (NMRS NT57NE 17). Perhaps whatever was leading to these fundamental changes in settlement enclosure prompted communities living near the former mortuary site on Pencraig Hill to link themselves to the monument, and to ancestral heritage or rights, through this act.

The economic traditions visible at Eweford Cottages had a longstanding history, developing from at least the mid first millennium BC, when the scoops at South Belton were filling up, and they continued in practice at the much smaller homestead at Biel Water. These two sites provide valuable glimpses into human activity in the environs. The rubbish-filled scoops at South Belton hint at small-scale domestic and farming settlements around the time when ideas for constructing monumental settlement enclosures were gathering momentum and taking effect. The homestead at Biel Water, tucked inside its palisaded enclosure, and the small stone structure within a natural hollow at Thistly Cross, may have been two of many dotting the coastal plain between the large enclosures and the more substantial farmsteads or villages like Phantassie.

The cists: acts of remembrance

The remarkably similar acts carried out at the ancient (fourth millennium BC) mortuary sites of Eweford West and Pencraig Hill raise interesting questions about the ideas and beliefs of communities living in Lothian in the mid to late first millennium BC. Both acts involved digging into these ancient sites, creating formal receptacles and leaving human remains behind, in effect making them part of the monuments. In both cases, the people who did this must have known that the monuments had originally been places concerned with the dead, and they believed it was still appropriate to use them in that way. Also in both cases, they knew where they should set the cists in relation to the footprint of the long-abandoned monuments: at their western edges, in the entranceways. This knowledge had endured through the many generations that had lived and died since the monuments were destroyed, and it also endured over the 200 to 800 years that separated the two acts. This in turn suggests that strong oral traditions recounting factual or mythical histories had survived over millennia, though they may have changed considerably with the passage of time (see Bradley 2003; Rowlands 1993). Such histories may have been recalled around the domestic hearth, and perhaps the hearth waste or midden deposited in the cists alluded to that context. The uses and expressions of social memory at these two places are explored further in Chapter 11.

Conclusion

The various excavations discussed in this chapter produced a range of evidence for settlement in later prehistoric Lothian, over a period of perhaps 1800 years. They have afforded glimpses of settlement and domestic activity at different scales – from the simple, midden-filled scoops at South Belton to the enormous enclosed settlement at Eweford Cottages. Similarly, the nature and intensity of people's activities at these different sites varied over time and location.

Pieces of evidence from the individual sites evoke particular moments and scenes: downpours at Howmuir washing ploughsoil down slope into the settlement's ditches; the dismantling of the Biel Water palisade, rubbish filling the collapsed structure, carrion picking over the remains. At Eweford Cottages, the rhythms of the settlement over a longer period have emerged, with substantial building projects, the redefinition of boundaries and the settlement's expansion and contraction over hundreds of years. The longer-term and daily rhythms glimpsed here echo those uncovered in even more detail at the excavated site of Phantassie, discussed in Chapter 7. Chapter 10 probes the evidence from these and other excavated sites in the region to understand them in the context of contemporary society.