V

AN EXCAVATION IN HOLY ISLAND VILLAGE, 1977

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With contributions by Enid Allison, Marion Archibald, Lucy Bown, Alison Donaldson, David Higgins, Alison Locker and James Rackham

THE HOLY Island of Lindisfarne must rank as one of the most frequented "ancient places" in the British Isles. It can justly claim to have witnessed the very start of the Viking Age, the attack of A.D. 793 being the first fully recorded such episode by raiders from Scandinavia. Given to St. Aidan by Oswald of Northumbria in A.D. 635, it was the source and primary see of Northumbrian Christianity until repeated Viking harassment caused its abandonment in the mid or late 9th century (Sawyer, 1978, 5). Yet in spite of its popularity, fame and political importance, it is barely known archaeologically.

The most famous Lindisfarne treasures from the Golden Age of Northumbria, the Lindisfarne Gospels and the relics of St. Cuthbert, are now housed far to the south in London and Durham, and little survives above ground from this period on the island today. Intermittent finds of Anglo-Saxon date—fragments of crosses, the small incised slabs known as pillow-stones, some coins, and an Anglo-Saxon brooch—have been found among the ruins in the medieval priory, refounded as a cell of Durham in *c.* 1093; and also in the vicinity of the medieval parish church.

These finds are housed in a small museum on the island. Although they may not rival the material in Durham or London in interest, it has long been recognised that the present display does them less than justice, particularly in view of the large number of tourists which visit the island every year. Accordingly, in the mid 1970s, the Department of the Environment decided to build a new museum, on an empty plot opposite the present one. This site was immediately to the north of the parish church, and presented a worthwhile opportunity to explore some part of the island's archaeological deposits.

In the 1880s, the site of the medieval priory was cleared by the then owner of the island, Sir William Crossman. Brief records of chance finds and discoveries made in the course of this work survive in the Crossman papers, now in the Northumberland County Record Office, and for the first time, a carefully measured plan of the ruins was drawn by the architect C. C. Hodges. Crossman's published report on this work (Crossman, 1892) is largely concerned with the interpretation of the monastic plan; no serious attention is paid to the non-masonry archaeological strata. Some work was also carried out on the ruins on St. Cuthbert's Island (Crossman, 1892a).

Further clearance by the Ministry of Works in the period before and after World War I resulted in the discovery of many medieval finds, which have not yet been fully studied or published, and many of the fragments of Anglo-Saxon sculpture now housed in the museum. The latter were initially published by Peers (1925) and have recently been fully studied by Cramp (1984).

Little archaeological work occurred on the island for the next few decades; in 1935 a chance discovery of a microlith near the castle added a prehistoric dimension to the island's history (Buckley, 1937) which has been further extended by the discovery of an extensive flint scatter in 1980 at Ness End Quarry (Beavitt, O'Sullivan and Young, 1985). In 1962, Dr. Brian Hope-Taylor excavated a number of separate small areas on or adjacent to the Heugh, the craggy dolerite eminence to the seaward side of the priory. It is believed that he also carried out an archaeological survey of the island.

The site of the early monastery remained uncertain in spite of these researches, which will be more fully discussed elsewhere. However, the heavy concentration of Anglo-Saxon finds in the vicinity of the priory and parish church offered the promise that something might be discovered within the area available for excavation. In view of the unique importance of Holy Island, any opportunity of this kind should obviously be seized with alacrity.

The site of the excavation was without any visible standing structures and in the recent past had been in use as a garden. Earlier maps of the island likewise indicate no structures, although there is some change in the boundaries of property divisions. The plot in question faces end on to the street known as Church Lane, and at present is separated from the museum building by a short road which connects the market place with the parish churchyard (Fig. 1). This is of recent origin; both the enclosure award map (NRO/683/9/2) and the 1st edition Ordnance Survey map of 1852, show that the roadway, and the museum site, were part of a continuous plot at the south-west corner of the market place. No structures are shown within this plot on either of these maps; the plot to the west is also vacant. Earlier maps simply indicate a small scatter of structures to the north of the Market Cross. It therefore looked probable that the site had not been an integral part of the original village plan, and might convceivably have belonged to the church, or even been part of a church enclosure larger than the present churchyard.

The Excavation

Initially, the work was planned to last for a period of five weeks. The depth of stratigraphy proved to be considerably greater than expected, however, and the excavation was extended twice for two periods of two weeks' duration. The time available was inadequate for the total excavation of all strata remaining on site. Priority was therefore given to the earlier deposits.

Before excavation the site was surveyed by Fred and Gladys Bettess, with the assistance of students from Sunderland Polytechnic; but no geophysical survey was attempted. Advice on environmental matters was sought prior to excavation from the Biological Laboratory, Department of Archaeology, Durham University. It

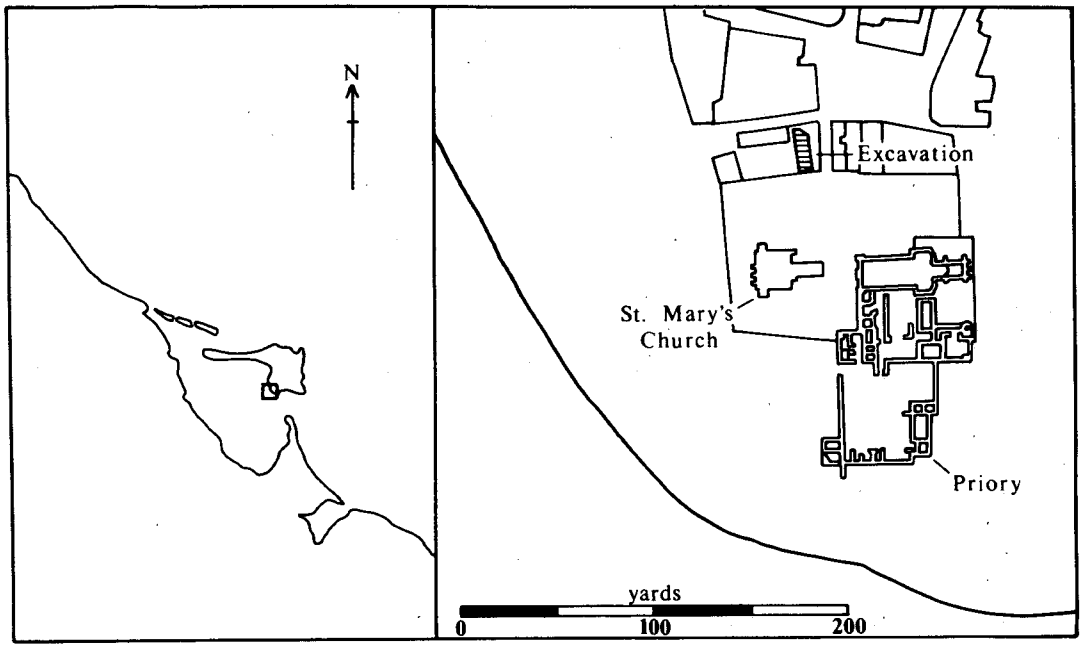

Fig. 1. Location of excavated site.

was not expected that organic remains would be preserved on site, and therefore no sampling strategy for these was devised. Due to the expected clayey nature of the soil and subsoil, no on-site sieving took place either. This was probably a fairly serious omission as it would appear to have considerably distorted the faunal evidence. The archaeological deposits were unfortunately rather rich in fish, small mammal and bird bone, but although care was taken, only the large bones would have been easily visible to the excavators. The problem was recognised to a certain extent in the course of the excavation, and some rather small samples were taken, from pit deposits. These indicated the bias of the main assemblages but it was obviously not possible to redress this at the post-excavation stage.

Initially, an area 6·5 m×8 m was opened with a 1·5 m wide extension running northward for 6 m. It later became possible to extend the excavated area to the north. All deposits were removed by hand. The bulk of the stratigraphy on the site consisted of a complex series of deposits of early post-medieval date (Phases 4–6), and earlier features were usually truncated and disturbed. The site archive, comprised of pro-forma sheets, record book, finds records and plans, will ultimately be located with the finds either in the New H.B.M.C. Museum on Holy Island, or with the North-East Area Museum Service.

Post-Excavation

Following the recent recommendations of the D.O.E./H.B.M.C. this excavation report is not intended to be a comprehensive record of the site and its finds. The pottery report is perhaps rather longer than would normally be the case in a Level 4 report, but this can easily be justified by the shortage of published pottery reports from non-urban contexts in North-East England for the period. The reports on other finds are selective, but not excessively so; only certainly recent, or hopelessly fragmentary or unidentifiable material has been excluded.

Some account has been given of the mode of excavation to enable proffered interpretations to be viewed in their correct perspective. However detailed descriptions of individual contexts and lengthy considerations of problems of stratigraphy have been omitted and only selected plans and photographs have been utilised. This selection will probably not meet with universal approval, but some compromise seemed essential. All material not published in this report can be consulted in the site archive. All reports, unless otherwise stated, were written by the author.

Acknowledgements

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The writer would also like to thank everyone who worked on site, particularly assistant supervisors and site assistants Eileen Tomaney, Gilly Robson, Nicky Pearson, and Kevin Brown; Celine Reilly (for her cooking!) and the many islanders who supported the excavation in various ways. She would also like to acknowledge the support of successive D.O.E. Inspectors, Ian Stuart and Stephen Johnson, and the assistance of the following in post-excavation work, the final preparation of the report, and in other ways: Paul Beavitt, Lucy Bown, Eric Cambridge, Rosemary Cramp, Sheena Crawford, Liz Kemp, Susan Kruse, Graham Morgan, Georgina Shaw, D. Sowerbutts, and Rob Young.

Phasing and Stratigraphy

The site stratigraphy has been divided into seven phases. However, only in some phases were the horizons absolutely distinct. The interface between Phase 1 and Phase 2, and between Phase 2 and Phase 3 was clear everywhere on the site, as was the interface between the final Phases, 6 and 7. The distinction between Phases 3 and 4 was usually reasonably clear, but in some cases lack of concrete dating evidence must preclude absolute certainty.

The distinctions between Phases 4, 5, and 6 were unfortunately more problematic. These contained the most complex sequences and disturbed contexts on the site, deposits of Phase 6 especially containing much residual material. The allocation of certain contexts to particular phases has therefore relied in some degree on the interpretation placed on the activity represented by that context. It is

realised that this is not a wholly satisfactory approach, but it is inevitable given the fragmented nature of the deposits. The three phases together span the 16th and early 17th century, and great refinement of dating is not really possible within this span. The clay-pipe horizon occurs in Phase 5 and the English Tin-Glaze horizon in Phase 6; but it is impossible to draw a sharp chronological distinction in the material from Phases 4 and 5.

The Subsoil

Beneath the archaeological deposits were those of "natural" geological origin only. "Natural" was not uniform within the area excavated. The surface "natural" consisted of orange/brown boulder clay, but some features (e.g. Pit 200) cut the full depth of this (over 1 metre) and bottomed out onto the underlying red sandstone.

PHASE 1: Saxon or earlier; Fig. 3 (239, 240, 241), pls. IIa, IIb

Only three deposits were allotted to this phase; 239 was a shallow hearth, really little more than a circular depression in the boulder clay, the bottom of which had been reddened by heat. It contained a small quantity of blackish sandy loam with some charcoal, which was found to be insufficient for a carbon 14 determination. Adjacent to it, to the west, was a small area of flat sandstone paving, also resting directly on the underlying boulder clay. No datable finds were associated with these contexts.

Plate IIa. Phase 1: Area of flat paving (240) cut by later pits.

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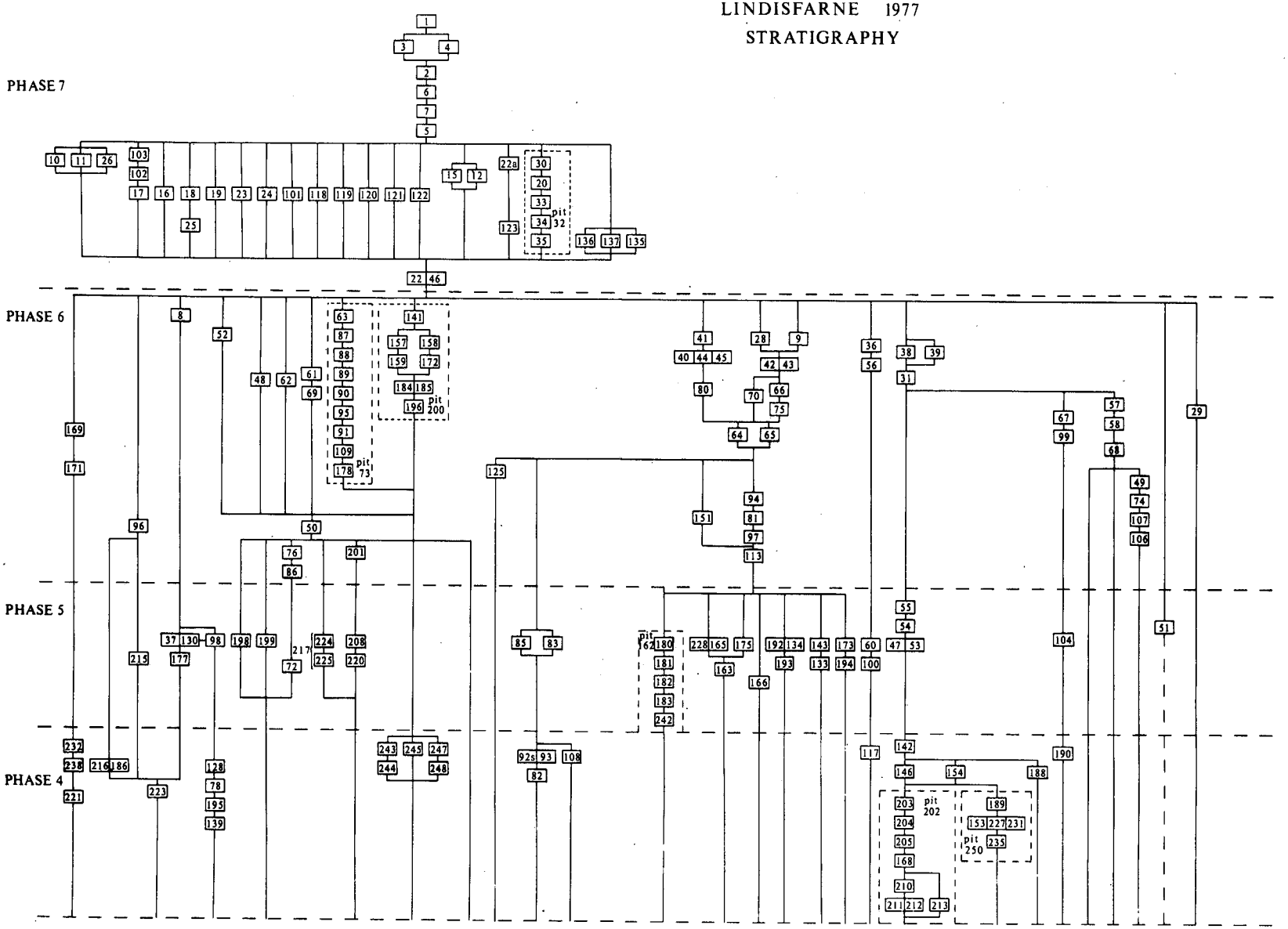

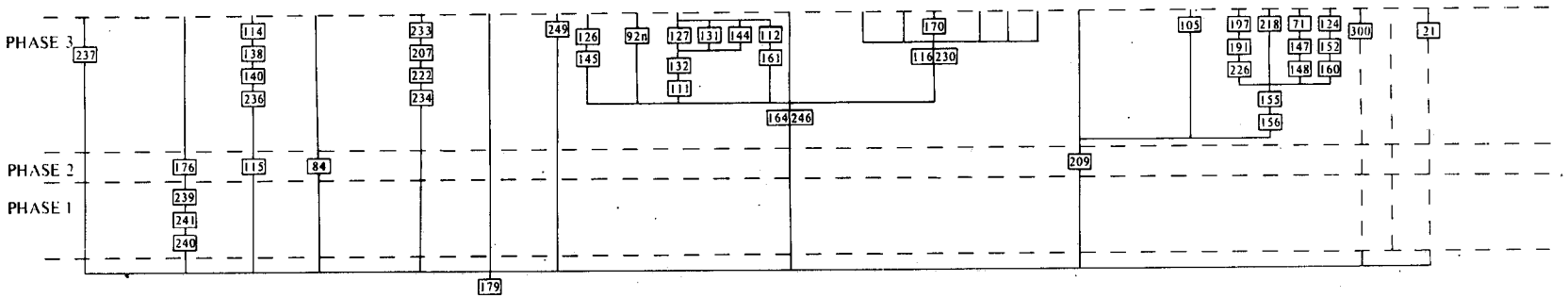

Fig. 2. The site stratigraphy.

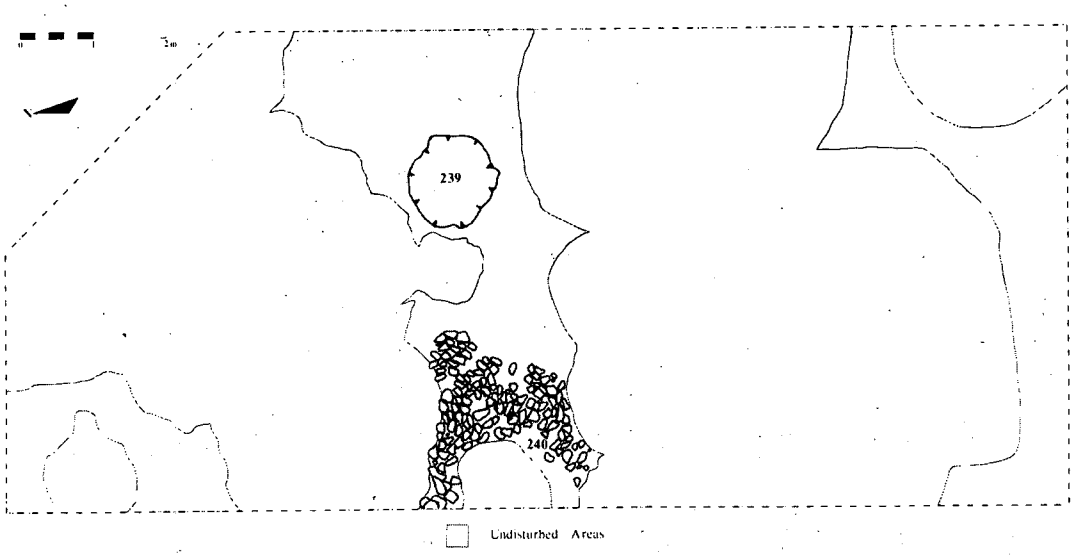

Fig. 3. Surviving ?Early Medieval features; Phase 1.

As most of the surface of the boulder clay had been cut and disturbed by later features, the lack of other deposits in this phase is not at all remarkable; later activity would, in any case, have removed them. These features must, however, indicate human activity, and could be pointers to structures on the site before the later medieval period. The hearth and paving may represent internal rather than external features of a building, evidence for the walls of which has been obliterated by later activity. The paving is clearly cut by the cess-pit and extends westwards beyond the excavated area.

It is not too fanciful to suppose that we are here dealing with the first material evidence for the domestic buildings of St. Aidan's monastery, or an associated secular structure. This proposition is not based solely on the proximity of the site to the concentration of Anglo-Saxon finds in and around the priory; some material of Anglo-Saxon date was also found in residual contexts during the excavation: a copper-alloy ringed pin of 7th to 11th century date (see below, Fig. 15.1) and an 8th-century coin. It is of course possible, though perhaps less probable, that this phase is of even earlier date.

PHASE 2: Late Saxon–Earlier Medieval

Overlying the features on Fig. 3 and also the natural boulder-clay surface, where this was undisturbed, was a reasonably deep stratum (up to 30 cms) of fine light-brown

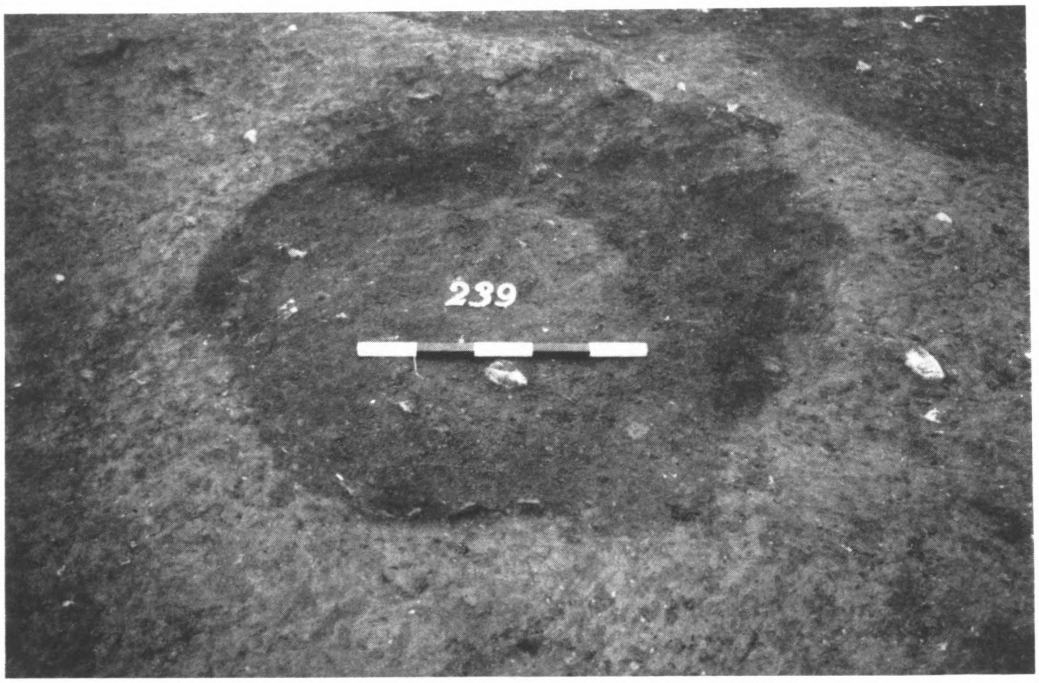

Plate IIb. Phase 1: Shallow hearth (239).

sandy loam, which bore the appearance of a wind-blown deposit. This layer was identified in a number of discrete areas and given a series of separate numbers (84, 115, 176, 209), but may be reasonably interpreted as having originally formed a single deposit overlying the whole site.

This was remarkably free of finds although it did contain some animal bone and a small number of medieval sherds. In view of the nature of the deposit these may probably be regarded as intrusive; many were of very small size and could have been moved by worm or other animal actions. The layer itself may represent a period of abandonment of the area, perhaps spanning the period between the final abandonment of the island monastery in 875, and its refoundation in the late 11th century; or even later.

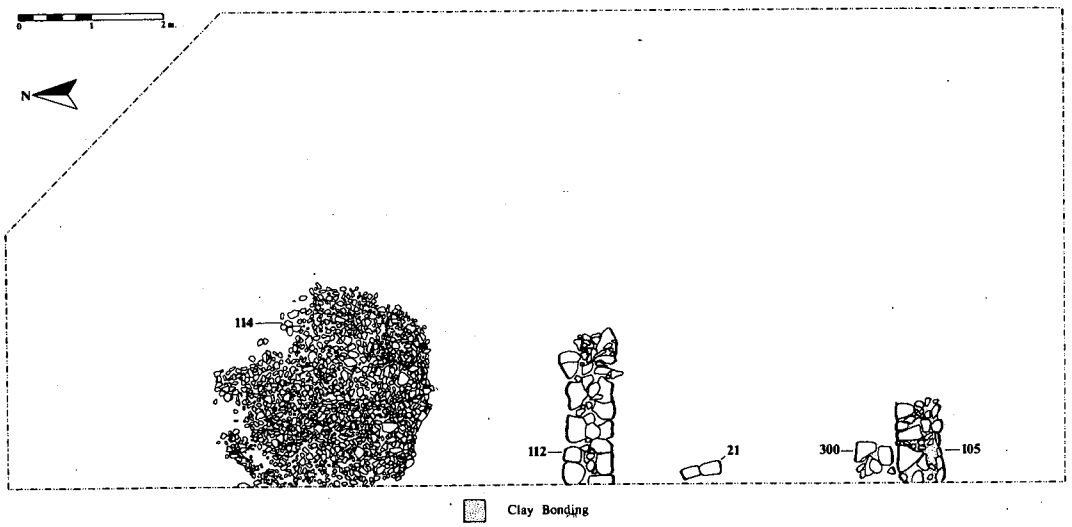

Fig. 4. Selected Medieval Features. Principal structural features only are shown. Phase 3.

PHASE 3: Later Medieval (Fig. 4)

Features in this phase have little archaeological unity, and their interpretation is problematic. The site was so disturbed by post-medieval pits that virtually no horizontal stratigraphy was preserved, and individual contexts were generally assigned to this phase by virtue of the fact that they were cut by later post-medieval features.

A number of parallel structural features, unfortunately too fragmentary to be related to each other, were located along the west section. Wall 105 had seemingly been levelled during Phase 4. Associated with this was a small area of limestone paving (152) bedded in clay (160), and probably (though the area between the two was destroyed) a small cobbled area (156). Walls 21 and 300 also appeared to cut only early deposits, although their stratigraphic relationships were never very

clearly established as they were only ever visible end on in the section Wall. 112, which rested on deposits of Phases 1 and 2, was cut by Pit 162. All of these walls were parallel, and of similar construction; they were made of roughly shaped limestone and sandstone, clay-bonded and with rubble cores. No use was made of ashlar blocks.

Other features placed within this phase reinforce the impression of a building in the immediate vicinity, extending outside the area excavated. The most clearly defined of these was a fine, cobbled cess-pit (Pl. IIIa). This was well preserved and

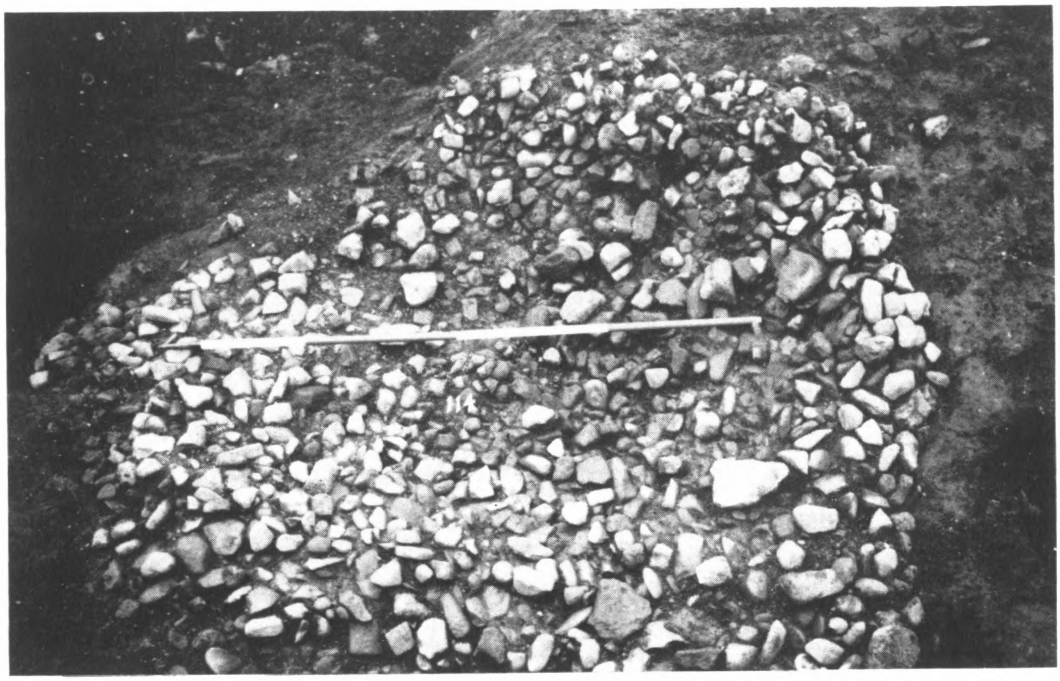

Plate IIIa. Phase 3: The cobbled cess-pit.

consisted of a deep cut, filled with loose dark brown loam (140), with a yellow clay lens (236), overlain by a layer of packed cobbles (111/138). The cobbles filled a dish-shaped depression in the lower fill, and were overlain by a sticky black loam (139) which was partly contaminated by later finds. A sample from this upper fill was taken for biological analysis. It was high in phosphate but no human parasite remains were found, possibly due to poor soil preservation. The cess-pit abutted the west section and its drain most probably lay outside the area excavated, although it could have been obliterated by Pit 200. It had no direct relationship with other features on the site.

Associated with Wall 112 was a patch of tumble to the north (145); to the south was a line of flat paving stones (161). Small dumps of ash and shell (127, 144) and a

post-hole (131) were cut into the abutting clayey layers 132 and 126. These partly overlay the more mixed 111, which was elsewhere not clearly distinguishable from the overlying mixed soil of 113 (Phase 6), both rather thick deposits of loam with clay and charcoal mixed in. A number of other deposits of a varied nature were also assigned to this phase on the basis of finds and/or stratigraphy: 71 (a rather enigmatic dump of re-deposited natural orange clay, possibly dug up from some feature to the south of the excavation), 92n, 116/230, 124, 147, 148, 158, 164/246, 120, 191, 197, 207, and 237. There can be no real certainly that all of these usually fragmentary deposits are contemporary, but they are clearly later than Phase 2, and earlier than the deposits of Phase 4.

A small number of pits could also be dated to the later medieval period. These had usually been truncated or disturbed by later pits, in the northern part of the site, pits connected with this phase include Pit 222, with a brown loamy fill and charcoal concentrations, itself cutting 234, with a black ashy fill; Pit 226, with a shelly fill, and Pit 249, a pit largely obliterated by 200, and possibly a part of it, although finds indicate an earlier date.

PHASE 4: Early Post-Medieval

This phase was most clearly defined in the southern part of the area excavated, where four separate pits—117, 190, 202 and 250 clearly underlay the floor levels of Building A (Phase 5) and the levels below it (142, 154, 146). Pit 117 was a shallow ash pit directly underlying the north-west corner which contained imported 16th-century wares, and provided a good *terminus post quem* for the construction of this building. Pit 190 was a small shell-pit; but the other pits were of much more substantial size. Pit 202 was cut to a depth of 1·2 m, and contained a series of ash, charcoal and mortary lenses, in a brown loamy fill. This also contained early 16th-century German Stoneware and Cistercian Ware.

Pit 250 was much larger still, and a rather enigmatic feature. In plan it covered an area of 4·20 m×3·20 m, and was cut to a depth of 1·5 m, through earlier deposits and the natural boulder clay. When the western half was excavated it became unsafe and the eastern half was left unexcavated. The fill contained some red ashy lenses, but the usual ingredients of a pit—household rubbish—were rather sparse. It is difficult to see the need for such a large pit for what seemed to be rather a small quantity of refuse. It is possible that it was dug for some other function; perhaps clay extraction, to provide the bonding materials for walls and make-up levels for floors of houses in the village. Finds again indicate an early post-medieval date.

A number of general build-up layers (78, 92s [this was probably contaminated by later material] 82, 128, 216/186, 188, 223 and 238) seem also to be of this period. Many of these were very small or ephemeral deposits in the interstices of the pits, and may in some cases represent the same layers, but no horizontal relationships could be established.

In the northern part of the site the stratigraphy was so disturbed by Pit 200 that it was virtually impossible to get a clear impression of what had immediately pre-dated Phase 5; but a number of pits which underlay the fragmentary walls, or were

clearly earlier than Pit 200, were assigned to this phase: Pits 221, 232 which contained much broken shell (see table below), 243, 244, 247, and 248. Overlying the cess-pit, but probably earlier than the building, was a small dump of oyster shells (195). The upper fill of the cobbled cess-pit has been placed in this phase on the basis of finds. A dump of stones (108) may represent tumble or robbing of an earlier wall.

The finds in this phase indicate a span in the latter part of the 16th century, but there is no very hard division between it and the next phase. The site was clearly extensively used for rubbish dumping; there are no structural features which can be placed with confidence in Phase 4.

PHASE 5: Early Post-Medieval (Fig. 5)

Two buildings, only partly contained within the area excavated, were built on the site, probably shortly after the Dissolution, about the middle of the 16th century (Pl. IV). Finds and stratigraphy indicate that they were constructed either at the same time or within a short space of time, although below floor level they could not be directly related stratigraphically.

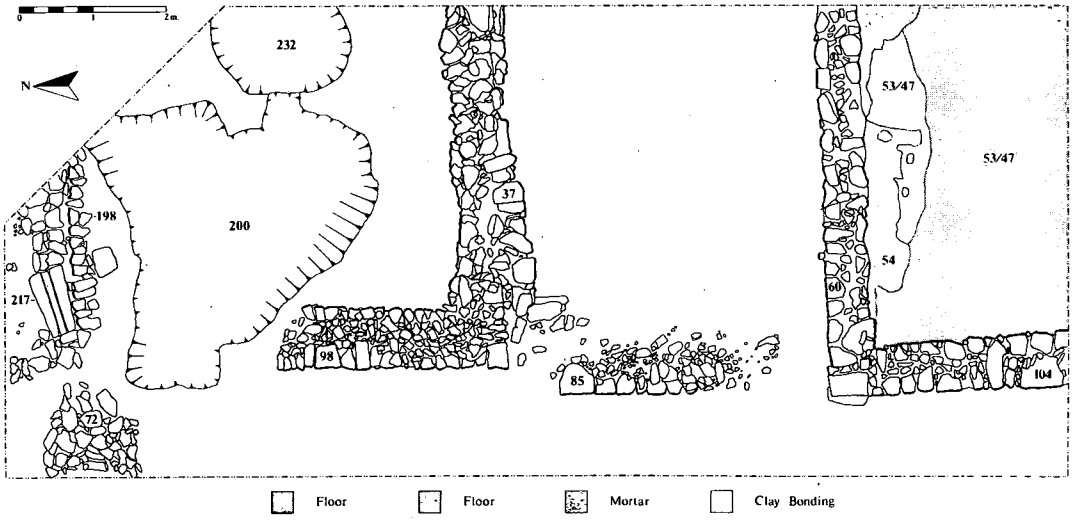

Fig. 5. The two Post-Medieval Buildings, A and B, and Selected Post-Medieval Features. The complex series of pits between the buildings, probably at least partially contemporary with their use, has been omitted.

The northern building (B) measured *c.* 6·5 m N–S externally and was evidenced by three walls, and an external drain, just beyond the north wall. The floor levels within the building had been totally obliterated by Pit 200, which had also cut through the west wall (97, 199) of the house. The northern wall (198) was also rather fragmentary; its southern face had been completely removed by the pit. The

Plate IIIb. Phase 5: The drain to the north of Building B.

southern wall (37/130) survived to a height of four courses. 215 was possibly tumble from it; 177 may represent the disturbed remains of paving. The drain to the north of the building (217) led into a soakaway (72). Excavation of this feature, a deep, circular pit filled with rounded boulders, had to be abandoned at a depth of 1·2 m as it undercut the section and became unsafe. The drain itself was partly lined and covered by small flat stones. It also made use of a trapezoidal, finely worked, slab of red sandstone with a broad, central groove. This was the only properly worked piece of ashlar on the site, and could have come from the dissolved priory: none of the walls of the buildings themselves utilised any properly worked masonry. The fill of the drain (225) was kept for biological analysis (see below).

The southern building (A) was rather better preserved than B, but no complete dimensions were obtained as both northern and western walls extended (60/100, 104) beyond the area available for excavation. Like Building B, and the earlier walls of Phase 3, these were made of unmortared, clay-bonded roughly shaped sandstone and limestone, with rubble cores. They had very shallow (less than 10 cm) bedding trenches. Internally, the building had a packed clay floor (47/53) covered with a thin skim of mortar (55, 54) which was well preserved only along the inside of the north wall, where it appeared to lip up against the face. There was no trace of a hearth, nor any indication of an internal roof support within the floored area.

Separating the two buildings was a poorly constructed wall (85) more or less in a line with their western walls. This has been interpreted as a yard wall; it was considerably less substantial than the walls of the buildings, and was probably constructed at some later time, but before they went out of use. This wall partly enclosed but also partly overlay, an extremely disturbed series of pits. There was no indication of cobbling or paving such as one might expect in a yard area, and it seems probable that some of the pits were contemporary with the period of use of the houses, but some may have been later. The phasing of this part of the site must be considered very tentative. Pits 162, 194, 133/143, and 134/192 have been interpreted as contemporary with the use of the buildings: they were cut through at the level of the bases of the walls, and underlay the same deposits. 83, 163, 165, 175 and 173 were other deposits and features in this area which may be dated to the same period.

The dating of this phase must remain rather open-ended. Pit 134 contained a clay-pipe bowl of the early 17th century; the other pits were probably of 16th century date. The continued use of the buildings into the following century, however, is also supported by the find of English Slipware in the floor of A. Other structural features could not be closely dated by their finds. Building B may have gone out of use slightly before Building A, as the material from the sump contained nothing definitely later than *c.* 1700; but the only certain date for the abandonment of the buildings is supplied by Pit 200.

PHASE 6: Early Modern

Features in this phase underlay the garden soil and associated features, and cut or overlay deposits connected with Buildings A and B. The most prominent feature was a large pit, 200, which cut through from below the garden soil to the underlying natural sandstone and boulder clay. It also removed floor levels, and parts of the northern and western walls, of Building B. The pit fill consisted of a number of different dumps and lenses, interleaved and dipping in a manner which precluded stratigraphic excavation. This was initially attempted, but had to be abandoned; the lower levels of the pit were excavated in spits, and this is one factor which accounts for the rather mixed nature of the contents. The other problem is that the pit itself seems to have cut through a number of earlier pits, for example, 222, 232, 234; and almost certainly completely obliterated others, but incorporated the durable and datable finds in its own fill. The lowest level of the pit, 196, was still producing English Tin-Glaze, but it and the upper fills contained quantities of material disturbed from its proper context, which must be residual. The pit contained a large volume of material, measuring *c.* 3·4 m×3·9 m, with a depth of up to 1·8 m.

Other pits of this phase were much smaller, some being no more than shallow scoops or dumps. The only other pit which cut through to the natural was 73, a pit with a series of sandy, silty and stoney fills. Other pits were much shallower, and were mostly ash and shell pits: Pit 57/58, a small pit cutting through the floor levels of Building A; 49/74, a pit with ash, clinker and slag adjacent to Wall 104; 151, a shell pit; 169/171, with a charcoal and shell fill; 80, a vestigial ashy patch; and 66/75, and 70 which were rather ephemeral.

Some features were essentially dumps of material left after the robbing-out of earlier buildings. These included various packs of clay and rubble over Building B (8, 61, 86, 28, 29, 96), robber trenches of the walls of Building A (35, 56, 67, 99) and associated tumble (106, 107). Some material seems also to have been disturbed from the cobbled cess-pit (48, 62, 69); and there was also some rubble connected with Walls 85 (125) and 37 (94). In addition, there were a number of shallow or ephemeral features cutting these (31, 38, 39, 52, 9).

Overlying the pits in the space between the buildings, and Building A, where the deposit was more shallow, were a series of mixed clay and soil dumps, some more clayey than others, but not always easily separable: 41, 40/44/45, 42/43, 50, 64/65, 68, 76, 80, 81, 97, 113, 201. These could be interpreted as levelling-up deposits for the garden, but finds and composition indicate that they are slightly different, and earlier, than the garden soil above.

This phase probably lasted from about the mid 17th century to the mid 18th century. Pit 200 seems to be the earliest feature for which there is abundant dating evidence; pottery indicates that it was opened up about the second or third quarter of the 17th century. Clay pipe dating suggests that the garden soil was probably deposited about 1750; none of the material in Phase 6 can be certainly dated after this and material from the robber trench of Wall 60 is of early 18th century date.

PHASE 7

The contexts of this phase were of recent date. The basic component was quite a deep (up to 80 cm) deposit of garden soil (1, 2, 5, 22/46, 22a) overlain by a number of features, or through which they had been cut, successively. Features connected with the garden included three paths (3, 4, 6/7) as well as spade marks (26) and what was probably the foundation of a cold frame (135, 136, 137).

There were also a number of shallow pits, dumps, and disturbances caused by animals (10, 11, 12, 15, 32, 102/103, 123). The most striking features were a series of roughly parallel gullies, probably celery beds, running east–west across the northern part of the site (16–19, 22–23, 101, 118–122). These were approximately 25–30 cm wide and filled with a rather darker loamy fill than the deposits which they cut, 22/46. They were up to 30 cm deep.

The topsoil deposits contained surprisingly large quantities of residual, medieval wares. Some of these may have been disturbed from below, but very few of the cut features actually penetrated the full depth of topsoil, and it seems more probable that the soil itself was brought to the site, already rich in earlier finds, from somewhere in the vicinity; perhaps it was raided from the Priory.

DISCUSSION

Clearly one cannot expect the excavation of a small slice of stratigraphy in Holy Island Village to provide a full picture of previous settlement history.

In general terms, it can be seen that the excavation produced evidence relevant to the early archaeology and history of the island, and to the growth and

development of Holy Island Village; also, it provided insights into the economic life of the island, with information about food and diet, farming and fishing, and local patterns of rubbish disposal. It also produced evidence of trading contacts, in both a positive and negative sense.

As noted above, the early archaeology of the island is surprisingly little known. None of the individual features of St. Aidan's monastery can be clearly identified or precisely located, apart from the cemetery which seems on present evidence to have been within the area of the priory ruins. However, an Early Christian date has been claimed for at least some of the remains on the Heugh (Magnusson, 1984, 49), foundations on St. Cuthbert's Island (Cramp, 1981) the site of the present parish, and/or priory church, and is here proposed for the features in Phase 1.

The list need not end here. There is at least one other chapel site, in its own enclosure, waiting to be found. This was dedicated to St. Columba, and seems to have been on the north side of Holy Island Village, west of the road to Berwick. It survived into the 16th century, when it is mentioned on a number of occasions in a list of freeholdings on the island.

There were a variety of buildings with different functions in the Early Christian monastery, which included, at least in the 7th century, two churches (Bede, *Historia Ecclesiastica*, 3,17) a guest house (anon. *Life of Cuthbert*, ch. 16), a dormitory (Bede, *Life of Cuthbert*, ch. 16) and a watchtower (*Ibid*, ch, 40). Others can be inferred by analogy; but if there was a predictable pattern to these features, there is no prototype which can be safely used as a model. Lindisfarne monastery was itself a daughter house of Iona, and maintained very close links with it in the 7th century. Iona would certainly provide the best comparison, but unfortunately Iona is also little known although recent excavations have identified structures of the Early Christian period (Barber, 1981; Reece, 1981) and the approximate location of the monastery is known (RCHMS, 1982).

One feature probably absent from Lindisfarne, but present at Iona and at virtually all monastic sites in Ireland, as well as at a number of other monasteries influenced by Hiberno–Saxon monasticism, is the *vallum monasterii* or boundary bank. There is no reference to an enclosure at Lindisfarne in any contemporary sources, and no remains which can be interpreted as one on the island today. The archaeological evidence, briefly reviewed above, suggests that in fact the monastic buildings may have been quite scattered, although all features putatively associated with the monastery are in the south-west quadrant of the island. There is, of course, also the possibility that some of these features, though early, are secular. Lay people, or at least women, were clearly buried on the island. A reeve requested this privilege of Cuthbert for his wife (Bede, *Life of Cuthbert*, ch. 15), and one of the pillow-stones bears a woman's name, *Osygd* (Cramp, 1984, 202–3).

The traditional view is that the island was abandoned after the monastic community left except for burial: some of the pre-conquest carvings from the priory have been dated to the 10th century (Cramp, 1984, 194–200). However the stones of later date include a number of cross-shafts, which are not usually purely funerary and hint at a secular community. Also, a settlement site of the period has been

identified on the north coast of the island, in the Dune area. This was first discovered in the 19th century, and was partly excavated in 1984 (Beavitt, O'Sullivan and Young, 1985). It seems to date from the 9th or early 10th century, on the basis of coins and other finds.

Nonetheless, the evidence of Phase 2 seems to hint at a period of abandonment of at least part of the area probably occupied by the Early Christian monastery. The small quantity of finds associated with the phase should not obscure its barren nature; it represented a very clear, undisturbed horizon, sealing the layers below, and marking a sharp break with the later levels above.

Monks returned to Lindisfarne at the end of the 11th century, by which time a secular community with its own church seems to have been established. The immediate post-conquest period is not clearly represented on site. The earliest datable artefacts which are found in abundance are cooking pots of Tweed Valley type, probably 13th century or later in date. These are unfortunately mostly found in residual contexts (Fig. 6). Little light is shed on the village plan at this date by those features which have been assigned to this phase. The walls indicate a general east–west alignment (hardly surprising immediately north of the church) but no clear indication of north–south boundaries, apart from a hint that these are at least slightly different from later ones. The walls of this period underlie or are cut by walls at right angles to them in the 16th and 17th centuries. No light is thrown on the Church Lane frontage. As we have seen, all of the walls in this phase run under the west section and must be part of some building to the west. No ashlar appears to have been used in its construction, which may be a sign of a secular origin. Phase 3 can be dated broadly to the period *c.* 1200–1500, but most of the features contain some Reduced Greenware and should therefore probably be placed within the last century of this span.

Phase 4 is characterised by pits, some apparently for rubbish, one possibly for clay extraction. At least some structural elements of the previous phase became redundant and were damaged by pit-cutting. This phase has been dated to the end of the 15th and first half of the 16th century on the basis of imports, mostly Low Countries Red Earthenware and German Stonewares, which reflect the typical pattern of imports along the eastern seaboard at this time (Brooks and Hodges, 1983). Holy Island was a small settlement at the end of the Middle Ages, probably accommodating a population of about 150–200. It had a Saturday Market, though this was in decline, and its priory and coastal position probably made it more susceptible to external contacts than a village inland.

The priory had to a certain extent acted as a defensible focus in the Border troubles of the 15th century, and after the Dissolution the lacuna was filled by the construction of Holy Island Castle, and the stationing there of a permanent garrison from 1550. It is to this period in the island's history that Buildings A and B belong. One was clearly a dwelling room, properly floored. They were linked by a boundary wall, but the space between them was not cobbled or paved for a yard; instead it was used for rubbish disposal. They may have been two separate houses but as they seem to occupy the same plot it is more probable that Building A is a

dwelling and B an out-building, perhaps a barn or cowshed. The drain to the north of it points to the latter function.

Plate IV. Phases 5, 3: Buildings A (foreground) and B (background) from the south. Pit 200 is the course of excavation. Medieval features 114, 112, 21, 300 and 105 are visible along the western section.

It is unfortunate that no complete dimensions were recovered for A, which would facilitate comparisons. Clay-bonded walls about 1·0 m thick, and packed clay floors, occasionally with some more sophisticated coverings are common constructional techniques on rural buildings in Northumberland. For example, at

Alnhamsheles (Dixon, 1981), the Period 2 building of the 16th century, a two-roomed structure, had one room with a compacted clay floor, and another with a paved floor. The walls were constructed of boulder facing-stones with a rubble and earth core. It measured 20·0 m×5·0 m externally. Building 2 at Starsley Burn (Harbottle and Newman, 1973), which was possibly also an ancillary building, and of 16th or early 17th century date, was similarly constructed of clay-bonded, rubble-covered masonry, and measured *c.* 5·0 m×9·5 m externally. A slightly later structure at West Whelpington, Site 1a (Jarrett, 1970, 212) measured *c.* 9·0 m×5·0 m externally, and had clay-bonded walls and possibly clay used to level up the floor. At Sandboard Knowe, Harbottle (1974) excavated a similar, single-roomed structure of comparable date, construction and size. These building techniques are rooted in a medieval tradition and are evidenced, for example, in houses at West Whelpington (Jarrett, 1970) and Memmerkirk (Harbottle and Cowper, 1963).

There can be no certainty that both of the Holy Island buildings were single-roomed, but a width of *c.* 5·0 m seems common for houses of this type, and an overall length of twice or three times the width, depending on the number of rooms. This is, however, narrower than the width of Building B (*c.* 6·5 m externally). If Building A was 5·0 m wide, then the southern wall might well have been located just under the churchyard wall; it was not posible to test this hypothesis for fear of the wall collapsing. Notable in this case is the absence of a hearth, which might reasonably have been expected either in the middle of the floor or against one of the external walls. It might of course have lain against the south wall, but in this case one would have expected some sign of it on site, as the gap is only *c.* 1–5 m. The entrance to the building is not known, but probably opened into some now lost vennel between the market place and the churchyard.

The buildings went into disuse in the second quarter of the 17th century. The population of Holy Island appears to have been expanding throughout the 17th and 18th centuries (Cartwright and Cartwright, 1976), but for some reason this part of the village was not built on again; Pit 200 is the latest deposit which contains abundant quantities of imported wares, and seems to have been simply a rubbish pit, albeit of massive size. At least in the latter part of the house's existence, the western limit of the garth was probably defined by Wall 85, which if complete, would have made a continuous north–south boundary with the end walls of the houses. This was probably a new boundary.

The site seems to have been extensively used for rubbish disposal in most phases of its existence, including periods of time when buildings were present. Pits are of course a normal aspect of life in towns, but most rural medieval and early post-medieval communities disposed of the bulk of their waste more productively, by spreading it out on the fields. On the shore opposite St. Cuthberts Island, by Jenny Bell's Well, is a deep midden containing large quantities of dumped material dating from at least the 13th century to the present. The digging of pits for refuse seems rather a waste of effort when there were already plenty of opportunities for dumping rubbish elsewhere. It can only be suggested that this "town" practice was a product of different economic practices at a local level, possibly a very localised level.

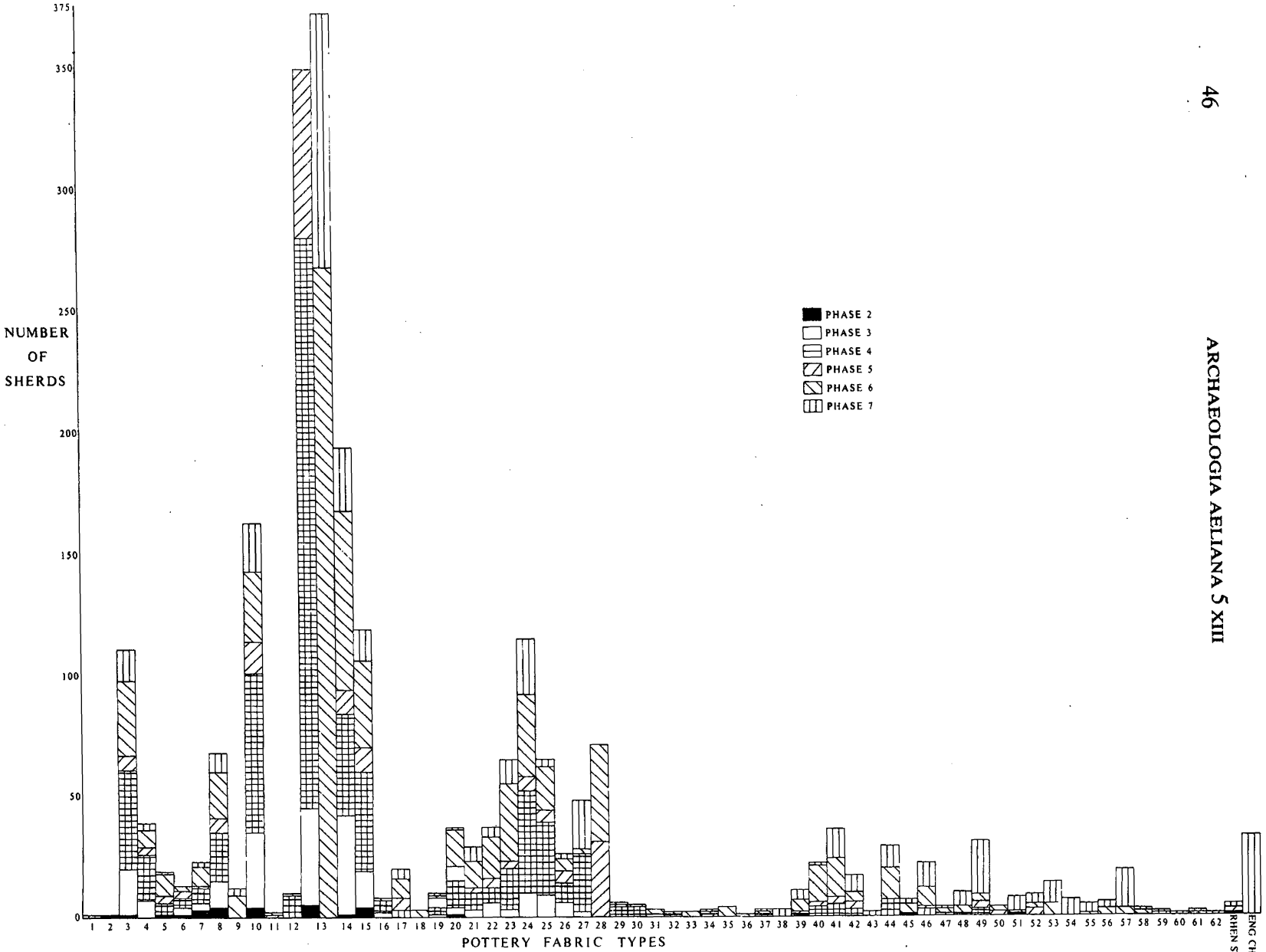

Fig. 6. The distribution of Pottery Fabric Types by phase.

Throughout the medieval and post-medieval levels the quantities of fishbone and decayed shell from shellfish testify to the dependence of the Island people on fish foods, much of which seems to have been caught offshore; but the usual range of animal foodstuffs is also present. Probably about a century after the buildings were abandoned, a quantity of loamy soil was brought onto the site and it was converted for use as a garden. In the late 19th century, this corner of the village saw some re-organisation.

Although producing results less enlightening than was hoped for, the excavation highlighted the complexity and changing usage of a small area in the village throughout the centuries. The form and nature of the early monastery and secular settlement throughout the medieval period remains enigmatic, and it can only be hoped that when other opportunities to excavate on the island arise, they will throw more light on the early monastic phases.

THE POTTERY

Lucy Bown

Fabric Analysis: Methodology

The fabric groups are presented as local, regional, imported or of the post-medieval period. Their chronological relationship is shown in Figs. 6 and 7.

The pottery was examined under a ×20 binocular microscope and divided into fabric groups by the visible inclusions present in the clay. Fabric description cards were compiled using the method of classification recommended for the pottery archive of the D.U.A., Museum of London (Orton, 1978).

The recording sheets, fabric description cards and accompanying type series can be consulted where the archive is presently lodged, The Dept. of Archaeology, University of Durham. Munsell colour codes have been quoted where close parallels could be found.

In this report the term "temper" applies to any mineral inclusion present in the clay. An attempt to distinguish between inclusions which have been added to the clay and those which appear in the clay has not been undertaken. All the pottery is believed to have been wheel thrown.

Where the inclusion size is referred to as fine, medium or coarse, the following is a guide:

Fine	Less than ·5 mm across
Medium	·5 to 1 mm across
Coarse	1mm to 2 mm across
Very Coarse	More than 2 mm across

The number in brackets at the end of each entry for the illustrated sherds refers to the original site context.

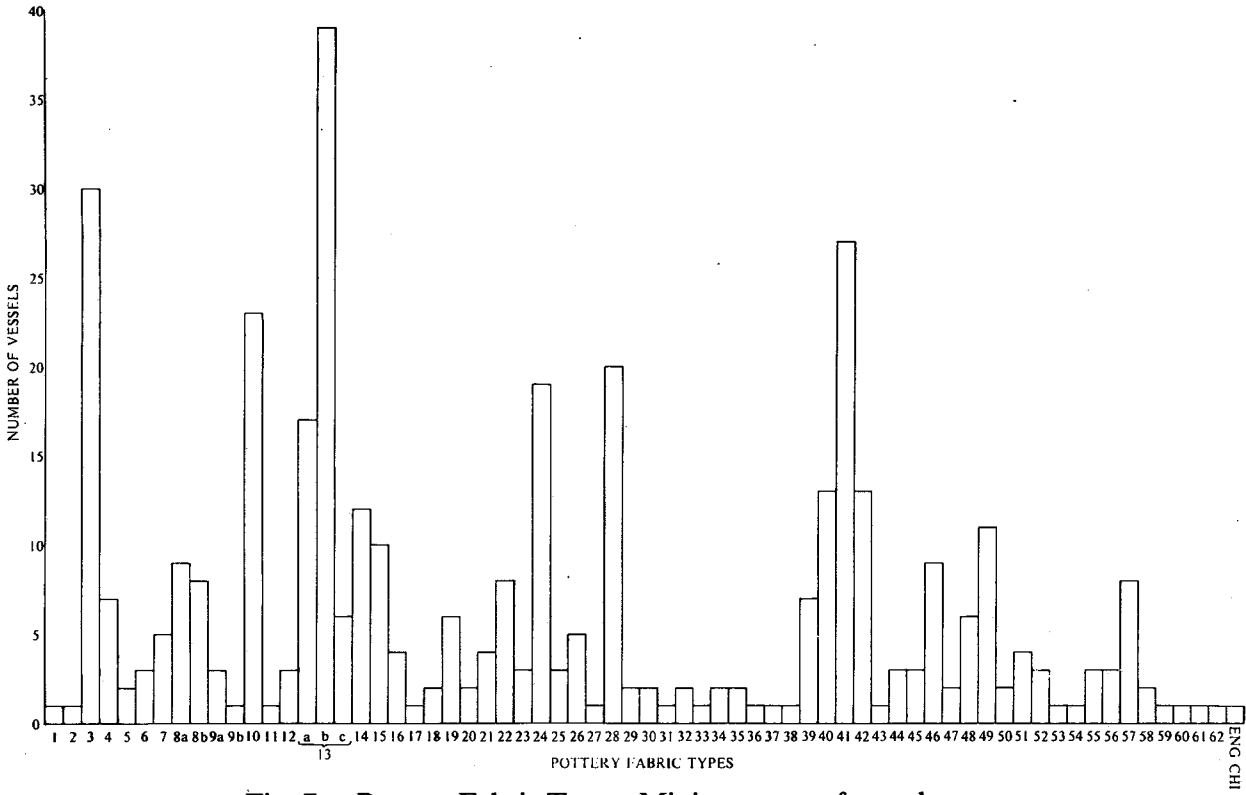

Fig. 7. Pottery Fabric Types: Minimum no. of vessels.

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2,391 sherds are present in this assemblage. They can be divided into 62 fabric types, ranging from a possible 11th century to a 20th century date. Though the site is badly disturbed by pits some horizons can be detected in the pottery sequence (see Figs. 6 and 7). Local and regional medieval wares occur in every phase of the site with the exception of Phase 1. A chronological sequence in the pottery therefore can only be indicated by relative sherd percentages.

Phase 7. As might be expected, a large variety of pottery types are found in the layers of topsoil and garden soil which constitute Phase 7. These contexts contain the highest percentage of post-medieval English wares, 17–20th-century Staffordshire wares, 18th–20th-century china and earthenwares, 17th-century Slip-wares [f 49–52] and Tin-Glazed Earthenwares [f 48] and late 15th–16th-century Cistercian Ware [f 46].

Of the imported pottery found residually in this phase the highest percentages in Phase 7 are in the Raeren/Aachen [f 4] and Cologne/Frechen Stonewares [f 42] and Low Countries Red Earthenware [f 28]. Local and regional medieval pottery types occur residually.

Unfortunately the one sherd of Saxo-Norman date tempered with Permian Yellow Sand [f 1] is found,out of period, in Phase 7.

Phase 6. This phase comprises post-medieval pits and rubbish dumps which cut through the floor surfaces of the preceding buildings. The assemblage relates, probably, to occupation elsewhere on the monastic enclosure at Lindisfarne, possibly by the army in the 17th century.

The major feature in this phase, Pit 200, cuts through the floor of Building B and occupies the entire internal area of the structure. It contains a fairly mixed assemblage of pottery dating broadly from the late 15th to 17th century. There appears to be no clear chronological sequence in the pottery. A small percentage of the early medieval wares, i.e. Scarborough Ware [f 10], Tweed Valley Ware [f 3], Colstoun Ware [f 8] and Buff-White Ware [f 9] occur throughout the pit and must be residual. Contemporary material is represented by the Oxidized and Reduced Greenware fabrics [f 14, f 13] which occur mostly in the lower levels of the pit. A high proportion of the pottery is made up of late and post-medieval imported wares, some of which can be closely dated. Of particular note in this respect is the 17th-century Low Countries Red Earthenware roof finial found in the uppermost layer of the pit, and a base sherd from a cooking pot of the same fabric type dated to *c.* A.D. 1400 in the bottom layer of the pit. However the bottom layer of the pit also contains 17th-century English Tin-Glaze. Other late imported wares include Low Countries Greyware [f 29] and Low Countries Whiteware [f 30], two sherds of a Martincamp flask [f 33] and all four types of Rhenish Stoneware. A tiny rim of Beauvais Earthenware [f 35] was also found near the bottom of the pit. Later regional wares include Cistercian Ware, Slipware, post-medieval Stenhouse/ Throsk-type Ware [f 44] and English Tin-Glaze which are contemporary in date with the imported wares. The pit assemblage is therefore quite mixed but the majority of wares would appear to fit a late 15th to 17th century date.

Other layers in Phase 6 appear to echo quite closely the types of pottery found in Pit 200. There is a moderate percentage of post-medieval English wares, and the highest percentages of Oxidized and Reduced Greenware and a small percentage of every type of imported ware found on the site. Additional to the types in Pit 200 are sherds of Beauvais Earthenware, Sgraffito decorated Beauvais Ware [f 34], sherds of Spanish Merida-Type Ware [f 31] and sherds from the same Martincamp flask as in Pit 200. A small percentage of early medieval wares again must be residual in this phase.

Phase 6 therefore probably relates to activity on the site in the 17th century, but with much residual pottery. The sudden surfeit of imported pottery being thrown away in Pit 200 and present in the other contexts of this phase suggests a new influence on or near the site attracting the more exotic types of import. Since only one or two vessels are present in any of these imported wares, with the exception of

the Low Countries Red Earthenware and the Rhenish Stonewares, it is possible they are arriving on the site as personal possessions rather than by trade.

Phase 5 comprises the layers and features associated with the construction and occupation of Buildings A and B. Building B is entirely destroyed by Pit 200, however the contexts associated with Building A yield some interesting pottery assemblages. The clay floor of the building contains a mixed assemblage of roughly 16th to 17th century date containing Low Countries Red Earthenware, Langerwehe Stoneware [f 40], 17th-century English Slipware and one sherd of Scarborough Ware.

The main imports which occur in this phase are the Rhenish Stonewares and a remarkably high percentage of Low Countries Red Earthenware. The outstanding collection of vessels in Low Countries Red Earthenware found in Pit 162 confirms an association of this pottery type with the buildings. Most of the complete vessel profiles which can be dated are from this pit, for example, a *c.* 1400 tripod cooking pot, a 15th-century tripod cooking pot, a common 16th-century cooking-pot rim form and sherds from four other vessels (some of which fit sherds in a contemporary Pit 192/134). Pit 192/134, contained part of a Beauvais Sgraffito dish, Low Countries Greyware, Cologne/Frechen Stoneware, a sherd of Low Countries Slipware from the same vessel as in Pit 200 and sherds of Reduced Greenware. The pottery assemblage in this pit appears to fit a 16th century date. The Low Countries Greyware is of earlier date but is feasibly still in use in the 16th century.

This phase contains few medieval English wares. A high percentage of Reduced Greenware is found in this phase and a small percentage of residual earlier medieval wares. The presence of Low Countries Red Earthenware in Pit 162 dating to three different centuries is difficult to explain. However the pottery assemblage from this phase appears to be broadly of late 15th to early 17th century date.

Phase 4. The pottery in this phase displays very similar trends to that in Phase 6. The pits and tips of this phase underlie Building A and extend over the entire southern area of the site, and analysis of their contents confirms an early post-medieval date for Building A. Pit 117 underlies the north wall of Building A and contains Raeren/Aachen and Cologne/Frechen Stoneware, Low Countries Red Earthenware, a fabric of unknown provenance [f 23] found in the 15th century at Berwick-upon-Tweed (Moorhouse, 1982, 117 (Moorhouse type 10)) and a residual sherd of Scarborough Ware. The pit therefore, can be assigned to a 15th to 16th century date. Pit 202, also under Building A contains Fabric 23, Cistercian Ware, a rod handle of Low Countries Greyware, Low Countries Red Earthenware of later date and a sherd of Frechen Stoneware decorated in the early 16th-century style. The pottery from this pit can thus be dated broadly as being of late 14th to 16th century date. Building A must have been constructed in the 16th century since it is found to seal sherds of Frechen Stoneware and pottery types of late 14th and 15th century date.

Two contexts pre-date Building B but these appear to be quite disturbed: they contain the only sherd of Saintonge Polychrome Ware [f 32] found on the site, but in association with Low Countries Red Earthenware of later date, Low Countries

Greyware, Fabric 23, and a considerable quantity of Reduced and Oxidized Greenware. The Saintonge Ware is clearly residual. Sherds of the early medieval wares still occur, also residually. The Reduced Greenware is found in its greatest quantity in this phase, confirming this as a major tradition reaching a peak in production at this time. The imported wares also seem to belong to the 15th and 16th century.

Phase 3 contains no post-medieval wares. Relatively high percentages are found of Scarborough Ware, Colstoun-type Ware and Tweed-Valley Ware. Reduced and Oxidized Greenwares still occur in considerable quantity. Some features in Phase 3 are stratigraphically sealed. Directly underlying the wall of Building B a large cess-pit is sealed by a heavy layer of cobbles. The cobbles contain a very mixed assemblage of pottery with a high proportion of Scarborough Ware, Tweed Valley Ware and Reduced Greenware alongside odd sherds of local types and a sherd of the Low Countries Greyware. However, the layers within the pit are purely medieval containing Tweed Valley Ware, Scarborough and Colstoun Ware with some sherds of Fabric 24, Reduced Greenware and Oxidized Greenware. This pit assemblage therefore has a late 13th to 15th century date. In other pits underlying Building B Scarborough Ware is found in greater quantity, together with Tweed Valley Ware, Reduced Greenware, Fabric 15 and other unprovenanced wares which appear to be of early date. To the side of Building A, below Phase 4, an area of undisturbed Phase 3 stratigraphy contains sherds of Reduced Greenware, Colstoun-type Ware, Scarborough Ware, the possible Scottish fabric 15 and a possible local fabric 7, all of medieval date. The contents of layers in Phase 3 therefore confirm it as of 13th to 15th century date.

Phase 2. Only 26 sherds in all were found in this phase which vaguely emulate the trend found in Phase 3. The largest quantity of Scarborough Ware and the Colstoun-type Ware are found, but the number of sherds in the Tweed Valley Ware are smaller. Surprisingly the early-medieval Yorkshire types and Buff White Ware [f 11, f 12] do not occur, however, they appear on the site in such small quantity they should not be relied on in interpreting the site. One sherd of possible Saxo-Norman date [f 2] occurs in this phase but needs independent evidence to confirm the date of the pottery type. Phase 2 clearly contained earlier medieval contexts where no post medieval or imported pottery occurs.

Phase 1. No pottery was found in this phase.

It can be seen that the pottery does follow some chronological sequence. The earlier medieval types occur in larger quantity in Phase 2 and 3, the earliest contemporary imports appear on the site in Phase 4, i.e. the Low Countries Greyware and the Low Countries Red Earthenware. The earliest Rhenish Stonewares begin in Phase 4 also, but decrease in Phase 6, whereas the later Raeren/Aachen and Cologne/Frechen products continue into Phase 7. The 16th and 17th century imports, the Beauvais Wares, the Spanish Merida Type, the Martincamp flask and the Werra dish [f 43] begin in Phase 5. A general influx of imported pottery onto the site can be seen in Phase 4 and extends through to its height in Phase 6.

The post-medieval types do not reflect the stratigraphic sequence so clearly, but of note are the first appearances of Cistercian Ware in Phase 4: 17th-century Slipware types in Phase 5 and English Tin-Glaze of 17th century date in greatest quantity in Phase 7.

THE CATALOGUE OF FABRIC TYPES (Figs. 8–11)

Saxo–Norman Wares

FABRIC 1

One sherd of pottery tempered with Permian Yellow Sand was recovered unfortunately in a residual context from a pit in the upper levels of Phase 7. This fabric type is found commonly in the North-East, for example at Hart, Hartlepool and Jarrow, and is probably of 11th to 12th century date. Thermoluminescence dates calibrated to A.D. 1060–1290 and 1115–1335 were produced from sherds of the same pottery type found at Jarrow (Mills, pers. comm.). The fabric is hard but fairly friable, abundantly tempered with well-rounded white, pink and translucent yellow quartz of medium size. Flakes of calcite and mica show predominantly on the external surfaces. Some traces of secondary burning are present, and though the sherd has been subjected to heat, it appears to have been oxidized originally to a dark ruddy brown (10R 4/4–6). The Permian Yellow Sand beds are located extensively to the south of the Tyne Valley. A kiln site for this type of pottery lies within that region.

FABRIC 2

One small club rim, probably from a small cooking pot, might also fit into this early category of pottery. The fabric is very hard and sparsely tempered with coarse well rounded quartz similar in nature to the Permian Yellow quartz. The surface of the sherd is roughly broken by quartz and mica. The vessel has probably been wheel thrown. The core is reduced but a fine external margin is oxidized to give a light reddish brown (5YR 7–6/4). The postulated early date of this sherd is supported by its recovery from Phase 2 of the site.

Medieval pottery: Local Wares

FABRIC 3 *Tweed Valley Ware* (Fig. 8)

This pottery type is one of the groups of early medieval wares found at Lindisfarne. It is typically fired to a very pale buff colour (10YR 8/2–3), occasionally with buff (5YR 6/6) or very pale brown tinges (10YR 5/3) on the upper part of the rim. Some rims have a thin reduced core. The fabric is moderately tempered with well-sorted, medium-sized milky and glassy quartz. Red iron ore is abundant in the fabric matrix. The external surface of the pottery is very powdery and soft, apparently having been coated with a thin clay solution. This has been brushed over the whole surface of the vessel and used to highlight features in the form. The brush strokes across the

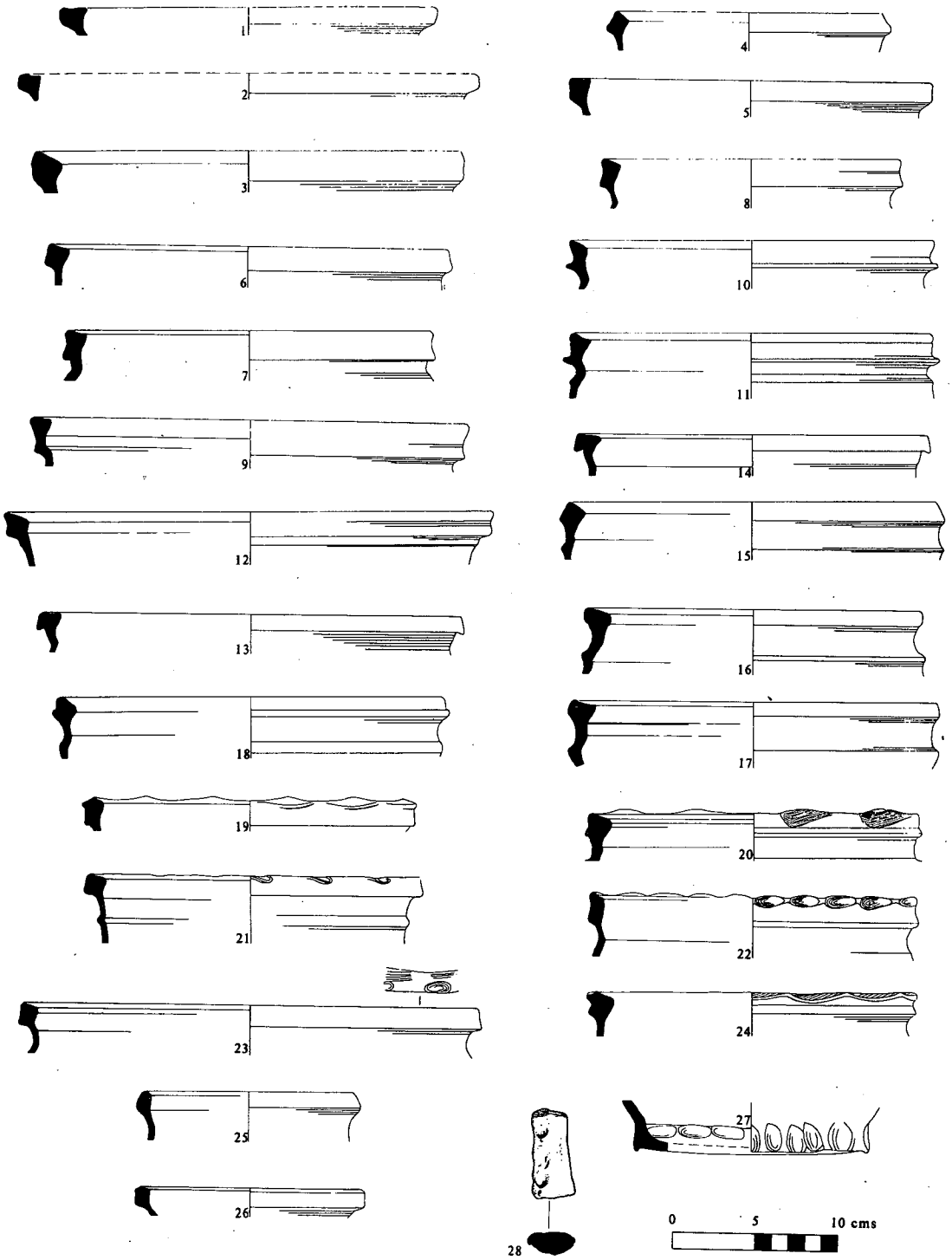

Fig. 8. Catalogue of illustrated pottery: 1–28: Fab. 3 (Tweed Valley Ware).

thumb indentations are deliberately on a diagonal contrasting with other areas of the rim where the strokes continue horizontally around the vessel.

In recent years this pottery type has been found in considerable quantity on sites in the Borders region and North Northumberland and is probably a part of the Scottish White Gritty Ware tradition. Comparison with other sites in the region shows that this same fabric type is found at the Hirsel (Mills, forthcoming) and at the Oil Mill Lane site, Berwick-upon-Tweed as pottery type 1 (Moorhouse, 1982). Examination of the pottery from the 1982 excavation of the Kirksite in Eyemouth shows similarities between this fabric and the local types A, B, C and D from Eyemouth both in fabric and form (Jones, forthcoming). Similarities also occur in the cooking pot forms and colour descriptions of the pottery from the 1971 excavation of Kilns 1 and 2 at Colstoun (Brooks, 1980).

A wide range of rim forms are found in this fabric. The majority have a square clubbed rim which is elaborated with thumb indentations and the addition of small carinations. The body sherds are all thin-walled and obviously the product of a skilled potter. A high percentage of the body sherds are unglazed. Vessel forms present are rounded cooking-pots, straight sided cooking-pots, a possible globular jug form and a shallow dish. Stylistically the striking resemblance to the cooking-pot forms at Colstoun suggest that this pottery belongs broadly to a late 12th to 13th century date. Though it is spread through every phase of the site at Lindisfarne, a distinctly high percentage of sherds occur in Phase 2 and 3, apparently supporting an earlier medieval date for this fabric type.

1–6 Rounded cooking-pots, clubbed rim form, diams, 17–28 cms. Contexts 46, 192, 139 and 140; other examples in 142, 189 and 45.

7 & 9 Rounded cooking-pots, more elaborate clubbed rim form, possibly inclining towards the development of an external flange; diams. 23 cms (221) and 27 cms (196) respectively.

8 Rounded cooking-pot, clubbed rim form, diam. 18 cms (223).

10 Rounded cooking-pot, rim with external flange; diam. 22 cms (35).

11 Rounded cooking-pot, elaborate external flange on rim and carination on shoulder of vessel; diam. 23 cms (139).

Vessels 5–11 show the possible typological development of an external flange on the rim.

12 Rounded cooking-pot, clubbed rim form; diam. 30 cms (154).

13 Rounded cooking-pot, elaborate clubbed rim form; diam. 26 cms (203).

14 Rounded cooking-pot, elaborate clubbed rim form; diam. 21·5 cms (139).

15 Rounded cooking-pot, clubbed rim form and external carination on shoulder of vessel; diam. 23 cms (50).

16–17 Rounded cooking-pots, elaborate rim form and carination on shoulder of vessel; diams. 22 cms (139) and 20·5 cms (50).

18 Rounded cooking-pot, rim with small external flange and carination at shoulder; diam. 24·5 cms (90).

19 Rounded cooking-pot, clubbed rim decorated with thumb imprints on external edge; diam. 20·5 cms (111).

20 Rounded cooking-pot, clubbed rim decorated with thumb imprints on external edge of rim, brushed with slip, and small external flange on rim; diam. 20·5 cms (242).
21 Possible straight sided cooking-pot, clubbed rim with small nicks on the external edge of the rim and carination on neck of vessel; diam. 21 cms (234).
22 Rounded cooking-pot, clubbed rim with thumbed external edge; diam. 20 cms (234).
23 Rounded cooking-pot, clubbed rim with thumb imprints on upper surface and scored lines; diam. 28 cms (207).
24 Rounded cooking-pot, elaborate clubbed rim with thumbing on the external edge; diam. 20 cms (119).
25 Possible jug rim, possibly similar to rounded jug form as found at Oil Mill Lane, Berwick-upon-Tweed (Moorhouse, 1982, Fig. 14 no. 1); diam. 13·5 cms (61).
26 Clubbed rim, possibly from small jar or shallow dish; diam. 14 cms (163).
27 Base of jug, with thumbed edge, traces of lead glaze on external surface; diam. 22 cms (35).
28 Strap handle, with thumbed decoration. (178).

FABRIC 4

This fabric also occurs at Berwick-upon-Tweed (Type 19). It is possible that stylistically Fabric 4 is a development from Fabric 3. There are similarities between the fabrics in feel, sherd thickness and colour. Fabric 4 differs from 3 in that it is more heavily tempered with varying sizes of quartz and most of the sherds are glazed on the external surface. Three large strap handles and the occasional body sherd have slip on the external surface beneath the lead glaze, but none have the powdery slurry applied to sherds of Fabric 3.

The fabric is fairly hard and a buff white colour (10YR 8/3) with occasional darker reddish yellow (5YR 7/6) external surfaces. The handle fragments have a dark grey (7.5YR 5/0) reduced core. The fabric is abundantly tempered with fine and medium sized sub-rounded quartz. All the body sherds are thin-walled; some are sooted on the external surface, the occasional base is plainly finished and probably from a jug, as are the strap handles. The only rim is from a small dish or skillet in exactly the same form as found in Fabric 14, see No. 79. Sherds in this fabric are found from Phase 3 to 7, but are most common in Phases 3 and 4.

FABRIC 5 *Kelso-Type pottery*

This fabric is similar to vessels from a sealed pit group found in excavation of Kelso Abbey in 1981. Research into possible clay sources and kiln site show that the clay beds for this fabric type lie within a 20 mile radius of Kelso and are the lacrustine clays and lake alluviums of the Tweed Valley region (Cox, pers. comm.). At Lindisfarne, fifteen very small body sherds are found in this fabric. A few have a light watery lead glaze on the external surface but no suggestion of vessel form can

be given. The fabric is white-firing and tempered abundantly with very fine irregular quartz and sparsely with larger, medium-sized quartz, some of which are pink from firing conditions. Red iron ore is moderately present in the clay, mostly fine but with the occasional coarser fragment.

FABRIC 6 *Kelso Abbey Redware*
This fabric is identical to that identified as Kelso Abbey Redware in the reference collection of the National Museum of Antiquities of Scotland. However, further information on the products of the Kelso kilns is needed before this can be confirmed. Though only a small number of sherds belonging to this fabric group were recovered from the site, they are strikingly distinctive. The fabric has been fired at a high temperature and is very hard. The clay is moderately tempered with glassy quartz varying from fine to medium in size and a sparse amount of very fine red iron ore. The external margins are oxidized to a reddish yellow (7.5YR 7/6) and most sherds have a reduced core (7.5YR 6/0). All sherds have a slip on both the internal and external surfaces, which give this pottery its distinctive smooth light red (2.5TYR 6/6–8) surfaces. All the sherds are from very thin walled vessels of fine quality. The majority have some form of carination or rilling, apparently forming the shoulder of a small vessel such as a cup or jug. The sherds were found scattered between Phases 2, 3, 4 and 5. It is therefore difficult to suggest a date for this pottery, since its provenance is unconfirmed and its contexts varied.

FABRIC 7
It is possible that this fabric is local to the Tweed Valley. This is suggested by the existence of similar types of white-firing clays, found locally in the Borders region. The fabric varies from a buff pale brown (10YR 8/4) to a pinkish white and light red colour (near 2.5YR 6/6–5/6). It is abundantly tempered with tiny glassy quartz just visible at ×20. Slightly larger quartz, coloured pink in firing, of up to ·5 mm in size and black iron ore of up to 1 mm in size, also occur. All the sherds are heavily sooted and where exposed to subsequent heat the external surfaces have reduced through to the core. These are possibly from straight sided cooking-pots, though the sherds are too fragmentary to estimate any vessel form accurately. The base angles are plain, knife-trimmed and possibly slightly sagging. Some sherds have traces of lead glaze on the external surface. This pottery type occurs in every phase of the site; however, its presence in Phase 2 and 3 confirms the medieval character of the sherds.

FABRIC 8a *Colstoun-type* (Fig. 9, no. 29)
This pottery type is characterised by the laminated streakiness of the fabric caused by a mixture of red and white firing clays. The same streakiness was found to occur in experimental firings of the clays at Colstoun and in the daub fragments from the kiln field (Brooks, 1980). The fabric is heavily tempered with fine and coarse quartz and quartzite. Very fine red iron ore and mica are visible in abundance on the external surfaces. The pottery is a light red colour (2.5YR 6/8) throughout. All

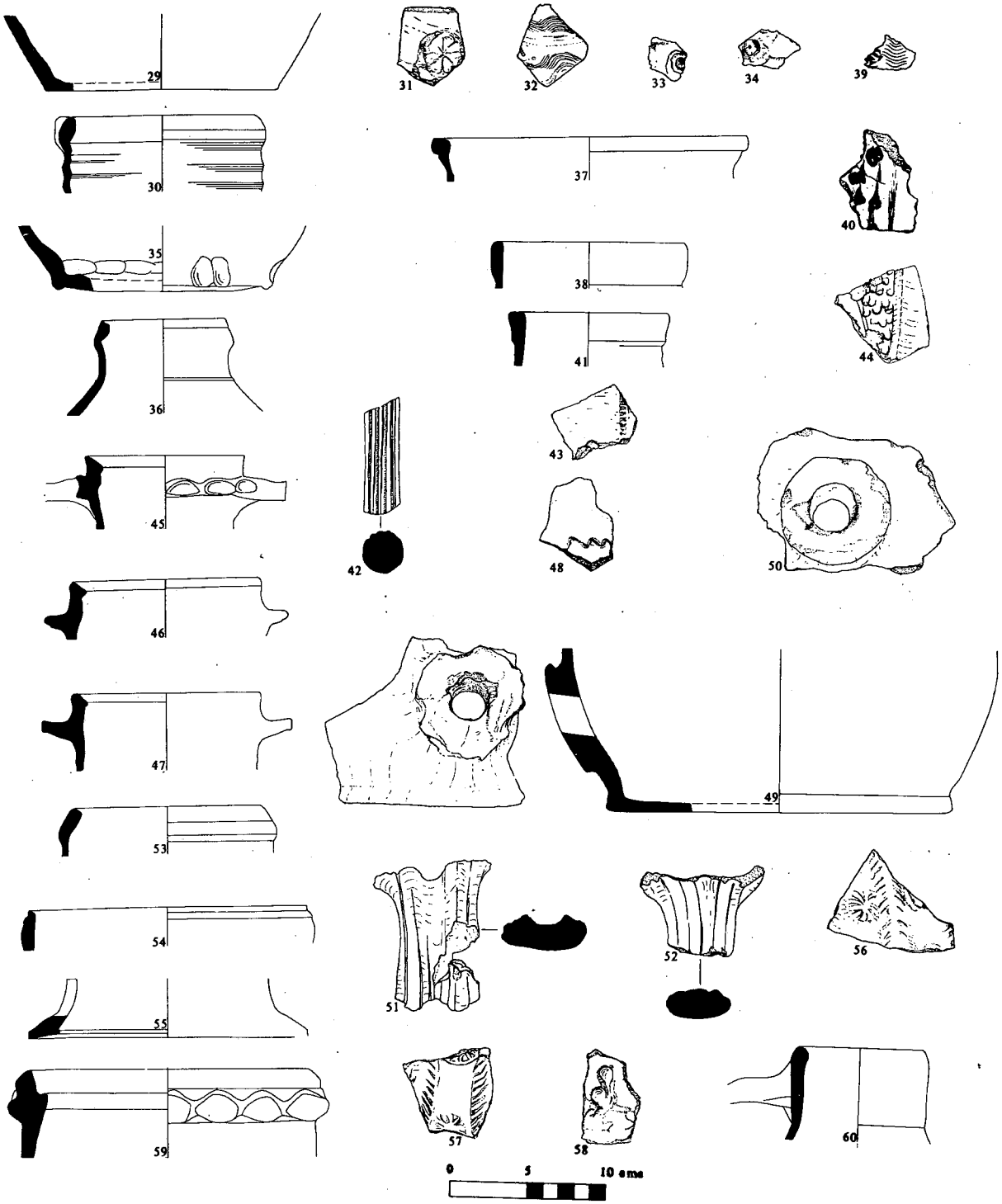

Fig. 9. Catalogue of illustrated pottery: 29–60: 29–35 Fab. 8 (Colstoun Type Ware); 36–37 Fab. 9 (Buff White Ware); 38–44 Fab 10 (Scarborough Ware); 45–60 Fab. 13 (Reduced Greenware).

sherds are in general quite thick and coarse, and appear to be from cooking-pots or jugs. Some sooting occurs on both body sherds and base angles. The majority are unglazed; however, patches of glaze do appear on external surfaces only ranging from a dark olive green to a light brown lead glaze. Glazes appear to have been applied to the shoulder area of the vessel. (The splashed glaze suggests an early medieval date.) One sherd has inscribed line decoration vertically around the upper part of the vessel.

29 Base of rounded jug or cooking-pot. The bottom is flat and the base of the walls have been quite heavily knife trimmed. The external surface varies in colour and it is possible that a slip has been applied to the vessel. A thin encrusted sediment adheres to the internal surface; diam. 15 cms (112 and 176 join).

FABRIC 8b *Colstoun-type* (Fig. 9, nos. 30–35)

A second Colstoun-type fabric is represented by a small number of sherds, probably all from jugs. These sherds are all glazed and frequently decorated with the same motifs as found on the Colstoun kiln material excavated by Dr. David Clarke (Brooks, 1980). The fabric is hard, and moderately tempered with quartz and the occasional coarse fragment of red iron ore. The quartz grains are irregular and vary greatly in size from fine to coarse. The pottery is a pink-buff colour (7.5YR 8/4–7/6) throughout with the exception of some of the thicker sherds which have a thin light grey reduced core (2.5YR 8–7/0). Where unglazed the surfaces are inclined to be pink rather than buff. On visual inspection the fabric seems similar to some of the material found at the Colstoun kiln site.

30 Jug rim with pinched spout and cylindrical neck with pronounced ridges. The rim is only slightly thickened. Lead glaze appears around the neck of the jug and probably extends down to the shoulder; diam. 13·5 cms (221).

31 Body sherd from a jug decorated with circular motif, like a wheel stamped into an applied pad of clay. The stamp is 2·7 cms in diameter and the whole sherd glazed in a light olive green glaze. (136).

32 Body sherd decorated with wavy combed lines running horizontally around the vessel, probably a jug. Partially glazed in light olive green glaze. (142).

33 Sherd with anthropomorphic design resembling an eye. This example has a raised central circle which is unglazed and pierced with a small hole. It is glazed all over, with the exception of the motif, in light olive green. (142).

34 Sherd with anthropomorphic design, resembling an eye. The whole motif is glazed in a light olive green lead glaze, but the pupil appears dark brown since the hole has filled with glaze. Parallel motifs are known at the Colstoun kiln site (Fig. 5 no. 82 and 83, Brooks, 1980), though they differ in being impressed into a deliberately chosen dark brown-firing pad of clay. (50).

Other decorative motifs common to Colstoun jugs are circular motifs stamped into applied pads of contrasting brown clay. A thick walled body sherd at Lindisfarne has the same circular stamp with internal cruciform design in an applied pad. The pad of clay is not of contrasting colour but has been glazed to produce a

contrasting dark brown, presumably by the addition of iron to the lead glaze. The rest of the external surface is glazed in a light olive green glaze. A second badly damaged sherd appears to have had applied strips of clay added in small wavy bands running horizontally around the vessel. A larger applied strip runs vertically down the sherd and the whole surface has been glazed. Examples of bases in this fabric are all in a splayed thumbed form, and the obtuse angle of the walls suggests they are from fairly squat globular jugs.

35 Jug base with sagging bottom and thumb pinched edge. Splashed light olive green glaze; diam. 24 cms (221).

This fabric type, in view of its similarity to the Colstoun kiln material, probably fits an early medieval date. Like Fabric 8a it has a high sherd percentage in Phase 2 and is presumably residual from Phase 4 onwards.

Medieval Pottery: Regional Wares

FABRIC 9a *Buff White Ware* (Fig. 9, nos. 36 and 37)

Both Fabric 9a and 9b are identical to those fabrics of the same name found at Jarrow (Mills, pers. comm.) and in Newcastle-upon-Tyne where it was found to be a predominant local type in the late 13th to early 14th century (Ellison, 1981). Both fabrics belong to the same pottery type; one is thought to be an earlier product than the other.

The earlier fabric, 9a, is abundantly tempered with fine white quartz and red iron ore. Larger quartz, coloured pinkish in firing also occasionally occur scattered through the clay matrix. These are more rounded and range in size from fine to medium. The clay would appear to be unrefined since the occasional very coarse red iron conglomerate up to 6 mm square is present. One particular example has caused the clay to blister and the vessel to break in firing. The fabric is typically buff-pink (7YR 8/4) with reddish yellow surfaces (5YR 6/6) where unglazed. One sherd is deliberately unglazed and decorated with two parallel lines of slip running vertically down the vessel. On other sherds an iron wash and subsequent lead glaze have been applied over the rim and upper part of the vessel producing mottled dark brown flecks under a yellow glaze. Only nine sherds were recovered in excavation, of which one small jug and cooking-pot could be partially reassembled.

36 Rim of jug. An iron wash has been applied over the lip of the rim and to the external surface. A lead glaze has then been applied thickly over the rim and more thickly over the body, fired in oxidizing conditions and resulted in a glossy light yellow orange glaze; diam. 8 cms (159).

37 Unglazed rim of cooking-pot; diam. 20 cms (34).

The sherds were all residual from Phases 6 and 7. The small number of vessels may indicate that these were brought to the site by visiting people and not by trade. The kiln site is believed to be within the immediate vicinity of Newcastle upon Tyne and certainly large assemblages of this pottery type are being found in the Tyne area, for example at Jarrow (Mills, pers. comm.) and Chester-le-Street (Evans, pers. comm.). This pottery type would appear to belong to the Tyne region rather than the Tweed or Borders region.

FABRIC 9b *Buff White Ware*

Three sherds fit the characteristics of those later wares being produced in the Buff White Ware tradition at Newcastle-upon-Tyne (Ellison, 1981). The fabric has been fired at a high temperature, is much harder than Fabric 9a, and is reduced to a light grey (10YR 7/1) core with yellow-buff external margins (10YR 7/4). The fabric is tempered with very fine angular quartz which pack the matrix and more occasional larger quartz of up to 1 mm in size. The most diagnostic feature is the black iron ore which occurs in moderate quantity ranging from ·5 mm to 2 mm in size. The sherds from Lindisfarne occur residually in Phase 6. The only vessel form present is suggested by a large thick base, the external surface of which has been lead-glazed and is overfired approaching a vitrified glaze; a feature typical of the later products in Buff White Ware.

FABRIC 10 *Scarborough Ware* (Fig. 9, nos. 38–44)

Of the 138 sherds of Scarborough Ware, 11 sherds have been identified by Peter and Nita Farmer as being in a Phase I fabric. The fabric is a pinkish red (near 2.5YR 6/6), ruddier than the Phase II sherds and less heavily tempered with quartz. The sherds are in general thicker than the Phase II sherds. Several vessel forms and decorative styles are present:

38 Upright rim from tall jug, probably Type B. Dark lustrous copper green glaze on external surface and over the lip of the rim; diam. 12 cms (126).

39 Body sherd from a jug with incised lines on an applied pad of clay, either from a hand or part of a beard. It is most likely that this decorative motif in low relief forms a hand, placed adjacent to a raised band of clay running down the sherd and vessel which might be a leg. (139).

40 Two contiguous sherds from a biconical jug decorated with rough circular pads. Iron filings have been added to the lead glaze over each pad creating a yellow-orange body glaze with darker brown pads as decoration (132 and 113; join).

A fourth jug sherd in the Phase I fabric is decorated with a small raised boss with "raspberry stamp impression" as defined by Rutter (1961).

The greater number of sherds, with estimated minimum number of 16 vessels, vary considerably in colour which together with their hardness, brittle texture and thinness comply with the definition of the Phase II fabric. The fabric is abundantly tempered with milky and glassy quartz with the occasional occurrence of fine red iron ore, there is also the occasional white crystalline component, probably limestone. Both the dark copper green glaze and clear lead glaze are used and dark pellets occur as decoration. The fabric varies in colour from a light pink (near 2.5YR 6/8) to a buff (7.5YR 8/6/ 7.5YR 7/4).

41 Typical Scarborough rim from tall jug with upright rim and pinched spout; Jug Type B (Farmer, 1971). Very dark lustrous copper green glaze applied to the external surface and over the lip of the rim; diam. 10 cms (113).

42 Rod handle from Jug Type C or B. Grooved and glazed in lustrous light green lead glaze; fabric under glaze is reduced whilst elsewhere it is light pink. (71).

43 Body sherd, probably from jug, with strip of rouletting applied vertically down the vessel. Dark copper green glaze on external surface of the sherd. (139).

44 Body sherd from tall biconical jug, decorated with a cluster of applied scales representing a bunch of grapes as is known on other examples of Scarborough Ware (Rutter, 1961). This sherd is a good example of the use of both Phase I and II fabrics on the same vessel. The applied scales and raised strip are in Phase I fabric whereas the body is in Phase II fabric. The whole sherd is glazed with a clear lead glaze but modified to create different effects. Over the area of scales iron has been added in filings so that the glaze appears a darker brown-orange over the red Phase I fabric. This is bordered by a band of clear lead glaze appearing yellow-orange over the Phase II fabric. A further band of green glaze has been created by the addition of a white-firing clay or slip to the Phase II body fabric. The various coloured bands run down the vessel. (92n).

Other decorative designs are created with different coloured fabrics, including alternating bands of olive green glaze over a light fabric, red, unglazed zones and dark, copper-green glazes. Fine applied strips run vertically down the vessel body on some jug sherds and are coloured dark green by the addition of copper to a lead glaze. One sherd in a pale fine pink Phase II fabric is from a fine table-ware vessel. Both the Phase I and II fabrics occur in high percentages in Phases 2 and 3 at Lindisfarne. There appears to be no clear distinction between the phases in which the Scarborough Fabrics I and II occur. The pottery at Scarborough is dated from 1135 to 1225 for the Phase I fabric, and 1255 to 1350 for the Phase II fabrics (Farmer, 1979).

FABRIC 11 *Yorkshire Type*

This fabric type is represented by two small sherds. They have an almost vitrified, hard fabric, reduced to a dark brown-grey (2.5YR 5–4/0). The fabric is moderately tempered with fine and medium sized glassy quartz and with the occasional medium sized black iron ore. One sherd is unglazed and appears to have a dark metallic finish, whilst the second has an iron glaze reduced in firing on the external surface only. Both sherds are from late contexts in Phase 5 and 6 and are therefore probably residual. This type of pottery is found commonly in Yorkshire in medieval contexts (Moorhouse, pers. comm.), and probably came to Lindisfarne through coastal contact.

FABRIC 12 *Yorkshire Type*

Five sherds of a hard quartz-tempered white fabric were found similar to a Yorkshire type of the 13th to 14th century (pers. comm. S. Moorhouse). The fabric is hard but tempered abundantly with pink and white quartz and therefore seems fairly rough. The quartz inclusions are fine but irregular in shape. Fine red iron ore also occasionally occurs in the fabric. The sherds are minute; three belong to the same vessel and have a mottled copper green glaze. A fourth sherd has a

rolled strip of red-firing clay applied to the sherd under a lead glaze which has fired to a yellow-light green colour. The fifth sherd has a clear lead glaze over a white fabric which has fired to a light green and is mottled with copper filings.

The pottery is found in Phase 3; it is also present in Phases 4 and 6, where it is presumably residual.

FABRIC 13 *Reduced Greenware*

This pottery type is by far the largest found at Lindisfarne. It is the typical dark grey reduced fabric with a green lead glaze which is found throughout the North-East. This type of pottery is also found in quantity at a large number of sites, i.e. at Hartlepool, at Durham, in Weardale, at Jarrow, at Newcastle upon Tyne and in Scotland, i.e. Stirling Castle. In each case several fabrics are present and it is not yet known whether the pottery is the product of several kilns local to each site, or whether it is one large regional type being produced at one kiln site but using several clay sources. At Newcastle upon Tyne experimental firing of the local clay produced similar fabrics suggesting that a kiln site was somewhere in that vicinity (Ellison, 1981). Fabrics between the sites have not been compared; however, the forms are all in the same stylistic tradition throughout the region and seem to represent a long lasting tradition producing predominantly large jugs and cisterns.

At Lindisfarne there appears to be no chronological differentiation between the fabrics of this tradition; the stratigraphy is too disturbed. Each fabric follows the same trend with each phase. The highest number of sherds are found in Phases 3 and 4 and a decreasing number of sherds are found in Phases 5, 6 and 7. However, it is noticeable that this ware is a predominant type in almost every phase of the site (see Fig. 6), and is obviously a long lasting tradition occurring broadly from the 15th to possibly the early 17th century.

FABRIC 13a (Fig. 9, nos. 45–48)

The majority of sherds in this fabric are fairly thin walled, fine and very hard. The clay contains a moderate amount of glassy and opaque quartz of fine near-rounded proportions and a small amount of black iron ore. The sherds vary from a light grey (7.5YR 7/0) to a dark grey (2YR 3/0) and the majority have a near white external margin (7.5YR 7/0) underneath a thickly applied green and olive green glaze. The pottery seems to have been dipped into the glaze. Decorative motifs include incised lines grooved around the vessel body, wavy incised lines and thumb imprints. A variety of base and rim forms of jugs and cisterns are present. One sherd has a hole drilled through it, possibly from a chafing dish or where the vessel has been mended.

45 Lid seated rim from a large bunghole cistern with pronounced thumb-imprinted cordon around the rim, securing a large grooved strap handle. This is probably a large cistern with two or three handles. The lid and bung were probably made of wood; diam. 10 cms (139 and 159; join).

46 Lid seated jug or cistern rim. Note the protruding lip below the rim, decorated with vertical incised lines, probably designed to ease handling of the vessel; diam. 12 cms (35).

47 Lid seated rim from jug or cistern with protruding lip, decorated with incised lines in a very thick lead glaze.
48 Sherd from large balluster or rounded jug inscribed with wavy lines on the shoulder of the vessel. (63).

FABRIC 13b (Fig. 9, nos. 49–58)
This is the largest fabric group within the Reduced Greenware tradition and comprises an estimated fifty vessels. The numerous small sherds make an accurate vessel count difficult. The style of bases, large strap handles and body sherds suggests that the predominant vessel form is again a large jug or cistern but a variety of other forms and decorative motifs also occur. The fabric is quite rough, and coarser than 13a, being more heavily tempered with abundant very fine and fine quartz, just visible at ×20. In some sherds the ocasional medium-sized slightly angular quartz also occurs. Other inclusions are dark red-black iron ore and some carboniferous material, which in some sherds has burnt out during firing. Mica is clearly visible and occurs in abundance throughout the clay and particularly on the unglazed surfaces. The fabric colour varies with firing conditions, but generally has a reduced core (7.5YR 5/0) and buff-light grey or red oxidized external margin and surface. The external surface of vessels all have a patchily applied lead glaze. Where there is a glaze the external margin remains light grey or buff in colour (7.5YR 7/2–4). The internal surface of the pottery is unglazed and in general a light brown colour (7.5YR 7/4). Firing conditions vary greatly: some vessels are notably underfired, and the fabric softer and more crumbly than the typical hard-fired sherds in this fabric.

Vessel forms include bunghole cisterns, a variety of large jugs, shallow dishes, a skillet and a small pedestal base probably from a chafing dish. Decorative motifs include incised lines running in groups horizontally around the vessel, iron staining in vertical strips and some elaborate herringbone and finger designs.

49 Base sherd from a bunghole cistern. (232).
50 A more complete example of a bunghole from a cistern. (185).
51 Glazed strap handle with central groove and pronounced deep incision-line decoration. (196).
52 Glazed strap handle with less well defined grooving, probably from large jug. (140).
53 Rim from small dish or skillet. Light green glaze on external surface; diam. 12 cms (235).
54 Possible rim. The flat bevelled edge stands perfectly on a flat surface. Partially green-glazed; diam. 12 cms (207).
55 Part of a pedestal base. The wall of the vessel has been deliberately cut to form a vertical flat edge. Probably base of a chafing dish. Partly glazed; diam. 18 cms (185).
56 & 57 Two sherds from the same vessel elaborately decorated with a herringbone and incised line design. Raised strips and bosses have been pressed out from the inside of the vessel. The strips have been decorated

with short incised lines to form a herringbone pattern and the bosses with lines in a circle. The sherds are likely to be from a jug. Splashed orange-green glaze. (221, 22).

58 Body sherd from a jug decorated with applied pads and scalloped into shape possibly with the finger. (46).

FABRIC 13c (Fig. 9, nos. 59–60)

This fabric is the most coarse of the Reduced Greenware tradition and has oxidized external margins. It is a very heavily-tempered rough fabric, the most abundant inclusion being medium sized glassy and opaque quartz. Black iron ore of medium and coarse size occur more infrequently. The dark reduced core varies from a medium shade of grey (7.5YR 5/0) to a very dark grey (7.5YR 3/0). The grey core sometimes extends through to the internal surface but the majority of sherds have pale brick red surfaces (near 2.5YR 6/6–8). All sherds have a partially applied thick lead glaze. Large grooved strap handles, thick base sherds and the occasional rim form indicate that the same style of large jugs and cisterns are being made in this fabric as in Fabrics 13a and 13b.

59 Lid seated rim from large cistern, decorated with a thumb imprinted twisted cordon. Very thick walled vessel. A spot of lead glaze occurs on the lip of the rim and below the cordon; diam. 32 cms (139).

60 Jug rim and strap handle. The vessel wall becomes very thin below the handle. Spots of lead glaze occur on the lip of the rim and thickly on the underside of the handle; diam. 8 cms (221).

FABRIC 14 *Oxidized Greenware* (Fig. 10, nos. 61–68)

This is a large fabric group and is possibly local since the same pottery type was found during excavation of the Kirksite at Eyemouth in 1982 (Fabric type 16, Jones, forthcoming). The fabric is usually oxidized to a brick red, slightly lighter than 10R 5/8, with a dark reduced core, though in some examples the reduced core extends through the external margin and forms a grey internal surface. The fabric is very heavily tempered with unsorted quartz varying from under 0·5 mm up to 2 mm in size and medium sized red iron ore. Mica is visibly abundant. This is evidently an unrefined clay and fires to a very friable, rough-surfaced fabric. All vessels are glazed or partially glazed with lead glaze firing to an olive green glaze. The variety of forms and coarseness of the clay support the idea of this being a locally produced pottery type; however it is included here in the text since the clay, though coarser, seems very similar to Fabric 13c and to the Reduced Greenware tradition. It is posible that this is a parallel to the reduced wares in an oxidized fabric. It occurs as a small sherd percentage in every phase of the site.

Vessel forms are cooking-pots, a chafing dish, possible storage jars, a large number of large jugs, a small bowl, and a small pedestal base.

61 Large jug with strap handle. A thumb-decorated collar of clay has been used to attach the handle at the base of the rim. Glaze has been applied to the shoulder area of the vessel; diam. 9 cms (50).

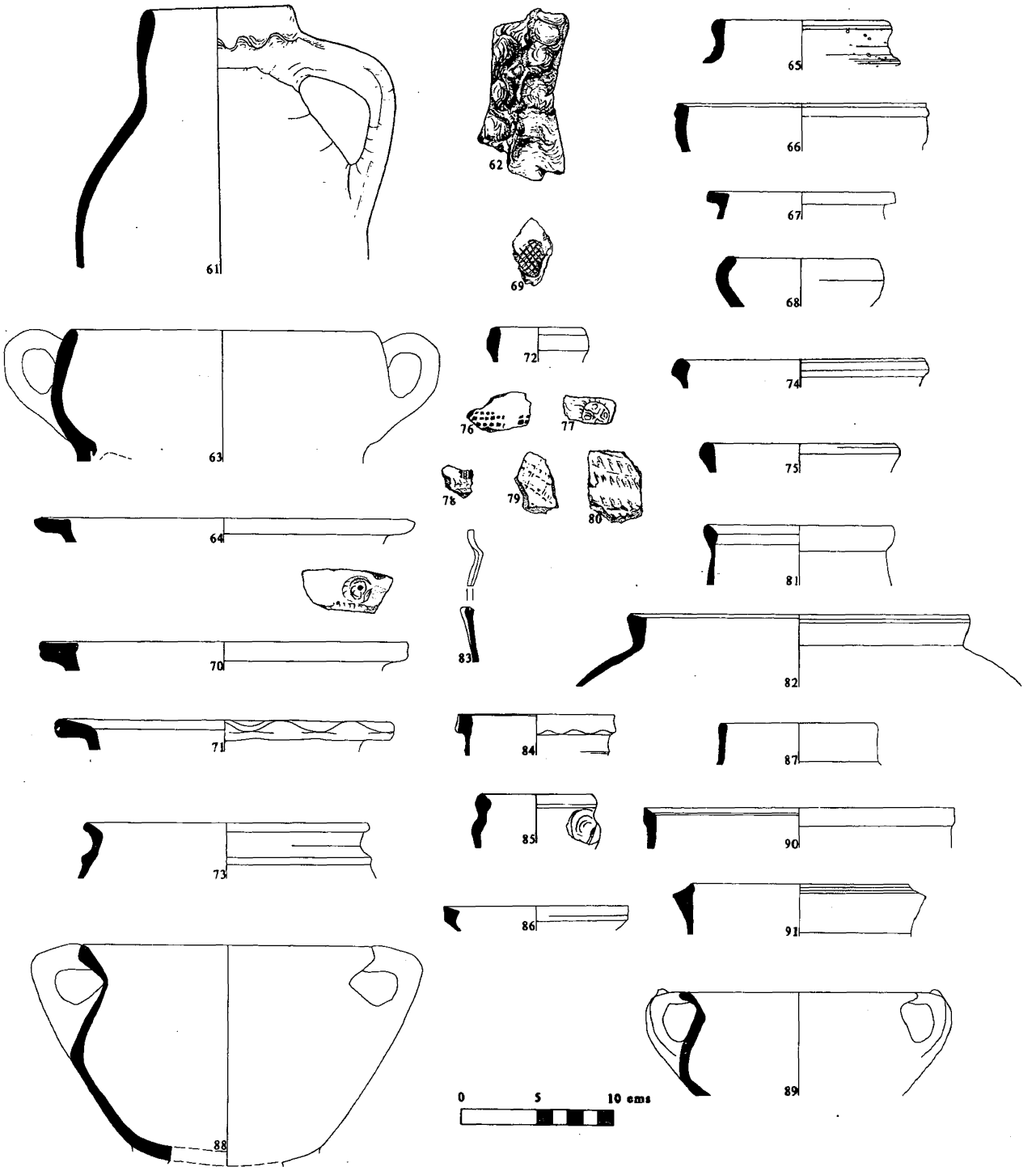

Fig. 10. Catalogue of illustrated pottery: 61–91: 61–68 (Oxidized Greenware); 70–72 Fab. 15 (Scottish White Gritty Ware); Fab. 19, 73–75; Fab. 23, 76–78; Fab. 24, 79–81; Fab. 26, 82–86, Fab. 27, 87; Fab. 28 (Low Countries Red Earthenware), 88–91.

62 Elaborately thumb-decorated strap handle, possibly one from a large multiple handled storage vessel or jug as found at Bothwell Castle (Cruden, 1952, Fig. 13, p. 148). Glazed on upper surface of handle. (46).
63 Rim, handle and upper section of chafing dish. The body has been thrown as one piece and the central pierced section added to the body. The external surface is glazed with a lustrous lead glaze which extends over the lip of the rim; diam. 20 cms (185).
64 Flanged rim from a shallow dish of oval shape, possibly a dripping pan. Thick lead glaze on upper surface of rim; diam. 34 cms (65).
65 Lid seated rim from a globular storage vessel. Green lead glaze, as on external surface; diam. 11 cms (242).
66 Clubbed rim from a small vessel, possibly a bowl or skillet. Lead glaze splashes externally; diam. 12 cms. (189).
67 Everted, squared rim from cooking-pot, unglazed; diam. 16 cms (207).
68 Small flanged rim from skillet or bowl; diam. 9·5 cms (65).

At least twelve cooking-pots are found in a coarser form of this fabric but to all intent and purpose the same pottery type. Perhaps additional temper or a coarser clay were employed for these more robust thick walled vessels. The majority of the bases have individually spaced thumb imprints.

FABRIC 15 *Scottish White Gritty Ware* (Fig. 10, nos. 69–72)

This fabric is typical of the white quartz-tempered vesicular wares commonly found on later medieval sites in the Forth–Tay region. The pottery is reminiscent of that found at Bothwell (Cox, pers. comm.). No fabric descriptions are given for the Bothwell pottery (Cruden, 1952), but since this fabric type is similar to the white gritty wares of the east coast of Scotland and the forms and glaze appear to match those at Bothwell this pottery may originate from the same region. The fabric is abundantly tempered with medium sized angular quartz and a small percentage of red iron ore. It is noticeable that the clay used for additional features such as handles is coarser and more heavily tempered. The external surfaces are oxidized to a reddish-pink (2.5YR 6/6) or a reddish-yellow (5YR 7/6) and frequently have a light grey core (7.5YR 8/0). The majority of the sherds are partially glazed with a lead glaze, firing to a light olive green. Various forms of jug are present; a thickly walled barrel-shaped jug with a large strap handle attached to the top of the rim and also a smaller squat jug form with a straight sided neck and pinched spout. Other vessels are a small skillet, and flanged rims either from globular storage vessels or shallow dishes. Pinched bases from jugs are also found.

69 Body sherd decorated with a stamp pressed into an applied pad of clay, presumably from a jug. The stamp is circular and contains a gridiron. (22).
70 Rim either from a storage pot or a shallow dish. Decorated with a circular stamp in an applied pad of clay identical to those found on Colstoun-type fabric 8b; diam. 32 cms (163).
71 Everted rim with thumbed moulded edge from a storage vessel; diam. *c.* 22 cms (221).

72 Rim from a skillet or small bowl; diam. 6 cms (159).

Scottish white gritty ware is usually found on later medieval sites, however, at Lindisfarne and at the Hirsel this pottery type is also found in earlier medieval contexts. At Lindisfarne it occurs as a fairly high sherd percentage through to Phase 6. The vessel forms and decorative motifs recall an earlier rather than later medieval date.

FABRIC 16 *Scottish White Gritty Ware*

A small number of sherds are in a fine tempered fabric which also occurs at Berwick-upon-Tweed (Moorhouse, 1982, Type 18). The fabric is abundantly tempered with fine irregular shaped quartz and red iron ore somewhat similar to the Scottish white quartz gritted wares of the east coast. The surfaces are a pinkish red (5YR 7/4–6) with a pink or buff core (7.5YR 8/2). The occasional sherd has a reduced light grey core (7.5YR 7/0).

Two bases are present; one is a plain base from a large barrel-bodied jug, the other a broad-based jug with splayed thumb-pinched edge. The only rim is a tiny sherd from the straight neck of a jug. These sherds, again look of early medieval character but are found in Phase 4 and Phase 6 of the site. There are too few sherds to make a positive assumption about the date and provenance of this fabric.

FABRIC 17 *Scottish White Gritty Ware*

This may be a later form of Scottish White Gritty Ware. The fabric is distinguished by its more finely quartz-tempered clay and the softer and more friable nature of the sherds. All the sherds are oxidized to an off-white/light grey (7.5YR 7/0) external margin and have lighter, near white (10YR 8/2) internal margins and surfaces. All are lead-glazed. There is no indication of vessel form and no decoration. The majority of sherds are found in Phases 6 and 7.

Pottery of Unknown Provenance

The following fabric groups are included here since although they are of unknown provenance their general characteristics incline towards a medieval rather than post-medieval date.

FABRIC 18

Three sherds of a distinctive green-glazed ware form this fabric group. Two sherds are from a jug decorated with a fine raised strip and applied scales. The internal surface is a light pink-buff (7.5YR 8/4) and the external surface a near-white. The lead glaze is therefore a very glossy lush green colour. The third sherd is pale pink throughout and consequently has a darker green glaze. This pottery type is also found at Berwick-upon-Tweed (Moorhouse, 1982, Type 6) and may have come to the area by trade along the East coast. The fabric is moderately tempered with fine angular glassy quartz and a high percentage of red iron ore.

FABRIC 19 (Fig. 10, nos. 73–5)
The fabric is highly fired and the quartz variable from fine to medium in size, occurring in moderate quantity together with red iron. Some sherds are reduced throughout to a light grey (10YR 6/1), whilst others have a reduced grey core (10YR 6/1) and oxidized light brown external margins (7>5YR 6/4). A lead glaze is used on the brim of one rim sherd and on the internal surface of a base.

Cooking-pot rims and a base darkened by heat are the only forms suggested by the small number of sherds. Of the ten sherds, two were found in Phase 2, two in Phase 3, four in Phase 4 and one in Phase 7. The carinated cooking-pot and the distribution of the sherds across the earlier phases suggest that this fabric is possibly of mid to late medieval date, i.e. 14th to 15th century.

73 Everted cooking-pot, unglazed; diam. 18 cms (267).
74 Clubbed cooking-pot rim, unglazed; diam. 16 cms (233).
75 Jug rim. Small diameter rim probably from the upright straight sided neck of a squat globular jug; diam. 12 cms (113).

FABRIC 20
This is a distinctively hard-fired fabric with light red external surfaces coated with a white slip. The sherds have light red (2.5YR 6/8) external margins and a reduced core (2.5YR 5/0). The white slip has been applied to the external side of the vessel only. On some sherds a lead glaze is splashed over the slip. Included in the clay is the occasional glassy quartz grain ranging from under 0·5 mm to over 1 mm in size. Very coarse red iron ore conglomerates also occur.

One anomaly is the presence of a lump of chalk occurring in the break of two sherds. Each sherd has half of what appears to be a perfectly spherical hole approximately 1 mm deep and filled with chalk. In the fracture the clay is oxidized around the chalk as if it were present in the firing of the vessel. One rim is from a jug but form is indiscernable. The other sherds are from generally fairly substantially walled vessels; all approx. 4 to 5 mm thick. The thirty-nine sherds in this fabric are from all phases except 1 and 2. It is therefore difficult to suggest a date for this pottery type.

FABRIC 21
Fourteen sherds in a brick-red fabric constitute this group. They have abundant tiny angular quartz with occasional larger medium sized quartz and a small amount of fine red iron ore. The sherds are oxidized throughout to a light brick red (2.5YR 6/6). Some sherds are sooted and others are lead-glazed.

FABRIC 22
This fabric type is marked by the particularly soft fabric, fairly thick walled sherds and a lack of good glazing. The proportion of bases out of the total number of sherds is high and some sooting occurs. The fabric is tempered with ill-sized quartz, ranging from medium to coarse in moderate quantity. There is abundant red iron ore occurring in fine and coarse size, and mica. The fabric is fired to a reddish-

yellow (5YR 6/6) occasionally with a reduced core. The thirty-eight sherds are fairly coarse, undecorated, with no sign of good glazing and seem to be from a utility-type ware rather than a table-ware. The base sherds appear to be from flat-bottomed, barrel-shaped cooking-pots. The highest proportion of sherds occurs in Phase 6, but the second highest number of sherds is in Phase 3. Small numbers of sherds also occur in Phases 4, 5 and 7.

FABRIC 23 (Fig. 10, nos. 76–8)
This is a very coarse rough fabric, usually reduced (10YR 6/1), but occasionally with an oxidized internal surface of pale brown (10YR 8/4). All the sherds have a lustrous thick dark olive green lead glaze and the decorative motifs and incised lines under the glaze suggest that most of the sherds are from jugs. The roughness of the fabric comes from the vesicular clay matrix abundantly tempered with angular quartz, ranging from under 0·5 mm up to 1 mm in size. Fine black ore and mica also occur.

76 Sherd decorated with square roller-notched bands. (46).
77 Sherd stamped with circular motif containing cruciform and dot design. (159).
78 Sherd decorated with applied pad of clay, into which a circular motif containing a gridiron has been stamped. (65).

The highest number of sherds occurs in Phase 4 and Phase 6 suggesting that this pottery type belongs to a later medieval date. It is found at the Oil Mill Lane site, Berwick-upon-Tweed in 15th-century contexts (Moorhouse, 1982, Type 10) and also at the Hirsel site in the Tweed Valley (Mills, pers. comm.). It is possible that this is one type of the Scottish Gritty Ware tradition.

FABRIC 24 (Fig. 10, nos. 79–81)
This is another fairly substantial type of pottery found at Lindisfarne but as yet has no parallels on other sites in the region. The fabric varies with firing from a fairly rough coarse quartz-tempered type of which there are only a few sherds, to a very hard fabric and occasional vitrified sherd. The fabric colour is typically light grey (10YR 7/1) but occasionally oxidized surfaces of buff or brownish red are found. The glaze is an olive green and occasionally has copper staining.

The sherds all appear to be from jugs, but the majority are too small to be committed unquestionably to a vessel. Decorated motifs include square roller-notched bands and regularly spaced stabbing marks in bands running horizontally around the vessel. Iron is added to the glaze to highlight various features, i.e. the central groove on a strap handle and to create darker stained vertical strips. Both strap and rod handles are found, in a more iron-rich fabric which causes the glaze to be speckled with dark brown.

79 Sherd decorated with bands of square notches applied with a wheel. (50).
80 Sherd decorated with bands of stabbing marks probably applied with a wheel rolled over the surface of the vessel at the leather hard stage. (242).

81 Rim of jug? in vitrified fabric and very glossy glaze; diam. 12 cms (189).

The dating of this pottery is difficult. An equally high number of sherds are found in Phases 3, 4, 6 and 7 on the site. Until a stratified parallel from another site is found the questions of provenance and date for this pottery type cannot be answered.

FABRIC 25

A small number of sherds are reminiscent of the Reduced Greenware tradition in having a typically dark reduced core (7.5YR 5/0), but are distinguished from the other fabrics in the Greenware tradition by pinkish buff (5YR 7/4) or light grey (10YR 7/1) internal surfaces. The external surface can be both reduced and oxidized. The glaze therefore, varies from olive green to yellowish orange on the oxidized zones. The fabric is moderately tempered with medium-sized angular quartz giving the appearance of a roughly-tempered fabric. Other inclusions are a small amount of red iron ore of medium size and very fine carboniferous material. Decoration is found on two sherds in the form of applied scales, and alternate bands of glazed and unglazed surface. Dating of this pottery type is again difficult since it occurs in all phases of the site with the exception of Phases 1 and 2 and has no parallel on other sites in the region as yet.

FABRIC 26 (Fig. 10, nos. 82–86)

This is a hard, well fired, brittle fabric with glossy lead glaze applied partially to both internal and external surfaces. Very fine glassy quartz moderately temper the clay with an additional sparse number of larger opaque quartz up to 1 mm in size. Other inclusions are fine red iron ore and mica. The sherds have a reduced core (7.5YR 6/0) and oxidized pinkish-red surfaces (2.5YR 6/6). Forms include cooking-pots, jugs and a small bowl or skillet.

82 Rim from large rounded cooking-pot. Light olive green glaze applied to shoulder and rim zone of the external surface and over internal surface of the base is sooted; diam. 22 cms (242).

83 Rim from tall balluster type jug with pinched spout. The external surface of the spout is glazed; diam. 12 cms (139).

84 Clubbed rim from jug with pinched spout; diam. *c.* 10 cms (113).

85 Jug rim with applied pad where handle has been attached to the vessel; diam. 8 cms (221).

86 Rim probably from small bowl or skillet, sooted externally; diam. 12 cms (139).

Dating this pottery type is impossible. An equal proportion of sherds are found in Phases 3, 4, 5, 6 and 7 at Lindisfarne.

FABRIC 27 *Surrey White Ware* (Fig. 10, no. 87)

Two sherds of Surrey White Ware of an early production type are found residually in Phase 6. The fabric is finely quartz tempered with a small percentage of red iron ore, and is highly fired under oxidizing conditions to a near white. This is probably of 15th century date (Hurst, pers. comm.).

87 Small straight sided rim of jug or lobed cup. The vessel appears to flare out at the base of the sherd; diam. 10 cms (8, 96).

Medieval and Post Medieval Imported Wares

FABRIC 28 *Low Countries Red Earthenware* (Fig. 10, nos. 88–89, Fig. 11 nos. 90–99) The importation of this pottery type from the Rhine–Maas delta ports is known to have begun in the 14th century and carries through to the 17th century (for a further discussion of this ware see Ellison, 1981 and Jennings, 1981). Various fabrics may be present at Lindisfarne and are explained by the numerous production centres exporting through the same ports to England. It is not possible to distinguish which vessels are from which centres, but it is possible to divide the products into an early and late style. Both the fabrics are abundantly tempered with fine angular quartz and a small proportion of fine red iron ore. The earlier fabric is fairly rough, friable and quite vesicular. The later fabric is finer and slightly harder.

The earlier vessels have a darker brick-red fabric and an orange-red glaze which appears spasmodically on the vessel. This style is believed to date from *c.* 1400. A few sherds have copper staining in the glaze. After 1500 and increasingly up to 1600 the fabric becomes lighter in colour and the glaze consequently a yellower orange. A variety of vessels are found in both fabrics. In the earlier fabric six tripod cooking-pots are present, represented by body sherds, rod handles and small pinched feet. Two of these are of early date (1400), and another is a lid seated cooking-pot rim of 15th century date. Other forms present are a small bowl and a plate rim.

88 Tripod cooking-pot of a *c.* A.D. 1400 date; diam. 12 cms (162).
89 Tripod cooking-pot in early dark red fabric and glaze; diam. 10 cms (232).
90 15th-century lid seated cooking-pot rim form; diam. 20 cms. (40).
91 Rim from shallow dish or plate; diam. 20 cms (19).
92 Very fine thin-walled rim from a bowl/cup; diam. 14 cms (78).

In the later fabric the most common vessel form is the cooking-pot. Two large oval-shaped dripping pans, both with pinched feet, are typical of this Red Earthenware tradition. A roof finial identical in size and technique to that found in a 17th-century context in the Castle ditch at Newcastle upon Tyne is found in this later fabric at Lindisfarne in Pit 200 (see Fig. 17, no. 252, Ellison, 1981).

93 Cooking-pot of 15th century date and tripod form; diam. 9 cms (162).
94 Cooking-pot rim, possibly of 16th century date; diam. 16 cms (50).
95 Tripod cooking-pot of 16th century date; diam. 20 cms (35).
96 Tripod cooking-pot rim, the most common 16th-century form found in Newcastle upon Tyne; diam. 14 cms (162).
97 Tripod cooking-pot with globular bodied vessel and deep narrow neck; diam. 6 cms (76).
98 Dripping pan with pinched foot; diam. 16 cms. (63).

Four sherds in the later fabric type have slip-trail decoration. All are from hollow vessel forms. These sherds are probably of 15th or 16th century date, and are from Pit 200 and other pits in Phases 5 and 6.

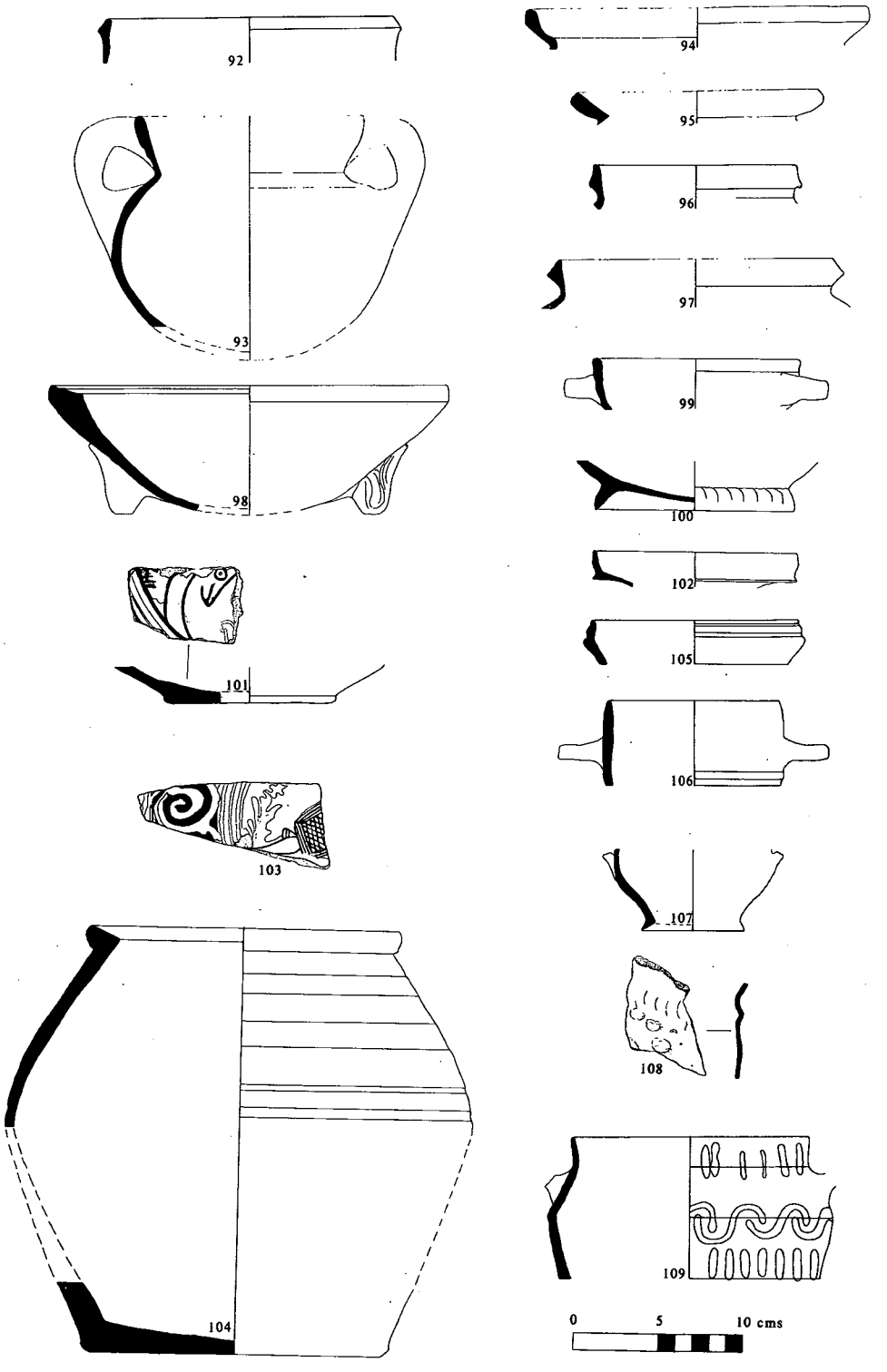

Fig. 11. Catalogue of illustrated pottery: 92–109: Fab. 28, 92–99; Fab. 30 (Low Countries White Ware), 100; Fab. 34 (Beauvais Slipware), 107; Fab. 36 (Beauvais Gres), 102; Feb. 43 (Werra Sgraffito Slipware), 103; Fab. 44 (Stenhouse and Throsk Ware), 104; Fab. 45 (Local Post Medieval Earthenware), 105; Fab. 46 (Cistercian Ware), 106–108; Fab. 53 (Staffordshire Type Slipware), 109.

99 Small porringer with wide band of slip beneath the glaze running round the inside lip of the rim. A small rod handle is attached horizontally to the vessel; diam. 12 cms (40 and 81: join).

There is no clear site evidence for the earlier fabric style coming onto the site before the later fabric. The site is too disturbed to be able to detect such detail. However, it is of interest to note where the stylistically datable forms are occurring on the site. There is possibly some connection between Buildings A and B and the appearance of Low Countries Red Earthenware on the site. In Pit 162 at least seven vessels are present, but of great variation in date, e.g. the tripod cooking-pot of *c.* 1400 (Fig. 100), the 15th-century lid seated cooking-pot form (Fig. 102) and the cooking-pot rim form found most commonly in 16th-century contexts at Newcastle upon Tyne (Fig. 108). Other datable forms occur in Pit 200; the 17th-century roof finial in the upper layer of the pit and two sherds of a 1400 tripod cooking-pot in the bottom layer of the pit.

FABRIC 29 *Low Countries Greyware*

This fabric is a hard, heavily quartz-tempered ware with a small percentage of black iron ore and mica. It is always reduced to a dark grey on the external surfaces (7.5YR 5/0) and at Lindisfarne some of the sherds have a brown core (7.5YR 5/2). As at Newcastle, only a few vessels are found in this fabric compared to the larger numbers in the red earthenware. At Lindisfarne five sherds are present. One rod handle from a jug is typical for this fabric type. Low Countries Greyware is known to have been in production in the 14th century and to a decreasing extent in the 15th century (Ellison, 1981). The first occurrence of Low Countries Greyware is in Phase 4.

FABRIC 30 *Low Countries Whiteware* (Fig. 11, no. 100)

This pottery type is known to be produced from the 14th century but does not come to England in large quantity until the 17th century. It is a very finely quartz-tempered fabric with a small percentage of iron ore. Four sherds are found at Lindisfarne. Three are from a bowl or dish, all from a layer in Pit 202.

100 Base of dish, glazed internally. The foot ring has been applied separately and possibly folded from the underside and knife trimmed on the upper edge. The underside surface of the vessel is unglazed; diam. 12 cms (211).

The fourth small body sherd with clear yellow lead glaze on the internal surface and with copper green staining on the external surface, is from Pit 200.

FABRIC 31 *Spanish Merida Type Ware*

Three sherds from the same vessel are of this Spanish coarseware. The sherds are a red colour (2.5YR 5–6/8) and have been burnished on the external surface. The fabric is comprised of tiny quartz throughout the clay with occasional larger medium-sized quartz. Varying sizes of red iron ore and some grog are also present. Mica is particularly visible on the external surface and is a characteristic feature of this pottery type. All three sherds appear to be from a costrel manufactured in the

same way as a Martincamp flask, with the neck fluted on to the body of the vessel. These sherds are constructed of two layers of clay and hence are possibly from the shoulder/neck of the flask. Two sherds are from Phase 6, another sherd is from a layer (111) in the very disturbed area between the two buildings. The dating of this pottery type is not yet certain; it has been recognized for some years in 16th and 17th century contexts in England, but then turned up in 13th and 14th century contexts at Southampton (Hurst, 1977). At Lindisfarne it would appear to fit the later date.

French Wares

FABRIC 32 *Saintonge Polychrome Ware*
One sherd from a polychrome-decorated jug was found in a layer pre-dating Building B. This tiny sherd is in the typically fine white fabric decorated with lines of brown slip, a small area of green glaze and a clear glaze. These vessels are known to have been brought from south-west France in connection with the Gascon wine trade which reached its peak in the late 13th century. One other plain green glazed sherd is found in Phase 7.

FABRIC 33 *Martincamp Flask*
Three sherds of red earthenware belonging to the same vessel are of a Type III Martincamp flask. The fabric is abundantly tempered with very fine angular glassy quartz and a small quantity of red iron ore and has a hard earthenware texture. The sherds are a bright, brick-red colour (5YR 6/8) with darker red surfaces (2.5YR 6/8) characteristic of the Type III globular flasks (Hurst, 1966). The largest sherd is from the base of the neck showing where the original body has been cut away to make a hole for the neck and the neck then fluted on to the body. Type III flasks are dated to the 17th century (Hurst, 1966). At Lindisfarne two sherds are from the bottom of Pit 200; the third in a layer below an adjacent pit is probably intrusive.

FABRIC 34 *Beauvais Sgraffito Decorated Slipware* (Fig. 11, no. 101)
A particularly good example of a sgraffito decorated dish and one small body sherd are found in this ware. Both are in a fine cream fabric containing fine quartz grains and some red iron ore. The external surface has been coated in a cream slip giving a smooth matt finish to the fabric. The internal upper surface has a red slip applied, into which the sgraffito decoration is grooved. On the small body sherd a red slip has been applied over the white fabric and decorative lines have scored through to the white body fabric.

101 The second sherd is more elaborately decorated being part of the base of a dish. The body fabric is cream/white. Over this a red slip has been applied and subsequently another white slip. The sgraffito lines are made with a deep point and outline the anthropomorphic design of an animal's head which forms part of a central motif on the dish. The central design is bordered by circular lines of cream and reddish brown where the white slip

is grooved away. Three colours are used in the central design but do not conform to the sgraffito lines. The eye of the animal is clearly defined in white slip; the other colours are green, which vaguely follows the animal shape, and blue, which forms the background colour. The sgraffito lines penetrate through the white slip and consequently appear dark brown where the red slip is revealed. (35).

In France Beauvais Sgraffito is believed to date to the second half of the 16th century, yet in England examples are being found dating to the first half of the 16th century. At Lindisfarne both sherds are found in Phase 6.

FABRIC 35 *Beauvais Earthenware*
Four sherds of this ware are found from two vessels at Lindisfarne. The fabric is very fine with a moderate quantity of fine white quartz and a small amount of red iron ore. The fabric is an off-white colour but the glaze on all the sherds is a very even, glossy light copper green. One rim sherd is from a small bowl or porringer with strap handle. The glaze on this particular example is more mottled than usual. These are probably 16th-century imports (Hurst, 1970) pre-dating Building A. The rim from the small bowl is from a layer in Pit 200. The other sherds are from layers in Phase 6.

FABRIC 36 *Beauvais Grès* (Fig. 11, no. 102)
One bowl is found in Beauvais Grès ware from the bottom of Pit 200. The fine bowl or drinking vessel is of 1500–1550 form with inturned rim (Morisson, 1970), a feature of these vessels in the 16th century.

102 Fine drinking vessel or bowl; diam. 12 cms (196).

FABRIC 37 *?French or German Import*
Two sherds from the same vessel one in a very fine white quartz-tempered fabric with bright lemon-yellow glaze externally. The fine white fabric suggests they are possibly North French or German. They are both fairly thick-walled sherds but have no suggestion of form. Both are from insignificant contexts, one in topsoil, the other in Phase 4.

FABRIC 38 *?French or German Import*
One rim from a shallow dish or plate is in a slightly coarser but still fine white earthenware fabric. Both its surfaces have a pale watery green glaze and it is possibly North French or German. It is found in Phase 7.

Rhenish Wares

FABRIC 39 *Siegburg*
Six vessels are found in this light grey stoneware. Some are unglazed and others have a light brown ash glaze. Vessels include the tubular neck of a costrel or bottle in an unglazed fabric, and rims and shoulder sherds from globular squat mugs with

straight sided necks and small strap handles. Siegburg is the earliest of the stoneware industries, with true stoneware beginning in the mid 14th century. The globular mugs are from Pit 200 and the other fragments scattered between Phases 4, 5, 6 and 7.

FABRIC 40 *Langerwehe*
A maximum number of thirteen vessels are found in this distinctive dark grey fabric with purple internal wash and externally glazed brown surface. One base has a frilled foot ring of 9 cms which is probably from a small jug approximately 18–25 cms high (estimated from the table of sizes for Langerwehe jugs compiled by J. G. Hurst, 1977a). The shoulder sherd is from an ovoid jug of Hurst Type IV. Langerwehe is known in Britain from 14th and 15th century contexts and still appears to be common in the 16th century. At Lindisfarne the sherds occur in Phase 4, 5, 6 and 7; the highest number of sherds being in Phase 6.

FABRIC 41 *Raeren/Aachen*
A maximum of 27 vessels can be calculated from rims and bases in this stoneware type. The fabric is a uniform dark grey with grey salt glaze, sometimes over an iron wash and an orangey-brown salt-glaze. Most of the sherds are from bases with an average diameter of 7 to 8 cms, probably mugs. The Raeren industry originated in the 15th century and exported in vast quantity to England in the 15th and 16th centuries. At Lindisfarne its products are recorded in Phase 3, where it is possibly intrusive, and all later phases. The highest number of sherds is in Phase 6.

FABRIC 42 *Cologne/Frechen*
This stoneware industry dates from the beginning of the 16th century at Cologne and then develops at Frechen from the mid 16th century onwards. The close association of the two industries makes distinction between the products difficult. A maximum number of thirteen vessels are thought to be from this industry. Vessel types are difficult to reconstruct from the very small sherds. A tall rilled neck with a small cordon at the base is probably from a mug, the cordon being a feature of Cologne/Frechen mugs (Ellison, 1981, Fig. 29, nos. 288 and 294). Other fragments are strap handles and a base of approximately 12 cms in diameter with a frilled foot-ring. The fabric ranges from a mid-grey to a dark grey, with a brown salt-glaze or light fawn or a darker ruddier brown. A sherd decorated with rose leaves and scroll stem is typical of the decorative style of the first third of the 16th century (Hurst, 1974) and is found in Pit 202. The other sherds are found in Phases 4, 5, 6 and 7.

FABRIC 43 *Werra Sgraffito Decorated Slipware* (Fig. 11, no. 103)
Two sherds of a dish in this ware were recovered from a pit in Phase 7. The fabric is a distinctive light red brick colour containing tiny white quartz and larger pink quartz of medium size. There is also some mica and the occasional very small limestone inclusion. The external surface is unglazed but the internal surface is decorated with white slip designs which appear pale green under a clear lead glaze.

103 Two sherds from the central motif of a dish. The central design incorporates the figure of a man. The leg, garter and trouser are outlined in sgraffito and the trouser detailed in sgraffito cross-hatching. The trouser is picked out in green, as is often found on these plates. The garter is yellow, whilst the remainder of the design of floral leaves and the leg is pale green. Surrounding the central design are circular bands of pale green slip trail and a large swirling motif in pale green highlighted by a dark brown slip background. (192).

This ware was propuced in the late 16th and early 17th centuries in the vicinity of the Werra river near Kassel, Germany, at several centres including Wanfried-an-der-Werra.

Post Medieval English and Scottish Wares

FABRIC 44 *Stenhouse and Throsk pottery* (Fig. 11, no. 104)

A storage jar and a few sherds are found in this post-medieval Scottish pottery type. Large quantities of the same fabric were found in fieldwalking over the Throsk area, near the River Forth, Stirlingshire. No kiln structures have been found but there are documentary accounts for a tile and pottery works at Throsk in the post-medieval period (Caldwell and Dean, 1981). Work on the material is currently being undertaken at the National Museum of Antiquities of Scotland. However, a similar smooth red fabric is also found to be common at the Stenhouse kiln site, in the same area. Future work might ascertain which of these sites the Lindisfarne pottery belongs to. The pottery type is thought to be typical of the Scottish post-medieval industry and can be dated broadly from the late 16th to the early 18th century.

The fabric is very fine and smooth containing only the occasional fine pink or glassy quartz grit and red iron ore. The colour is always an oxidized pink/light red (near 2.5YR 6/8) and a few sherds have buff external margins. The sherds are quite thick and always very hard. The large storage jar has a thick iron glaze over the rim and on the interior surface of the base. Another base has a lead glaze on the interior which varies from an orangey-yellow to light green.

104 Large storage jar. This vessel was broken into twenty-one sherds, scattered in Phase 6 and Phase 7; diam. 14 cms (20, 46).

Other sherds from this pottery type are found in Phases 4, 6 and 7.

FABRIC 45 *Local Post-Medieval Earthenware* (Fig. 11, no. 105)

Seven sherds in a finely quartz grained oxidized fabric are probably a local post-medieval pottery type. The fabric is hard and well fired containing abundant very fine quartz and the occasional moderate sized red iron grain. The fabric is light red throughout (nearest 10YR 6/5 or 5/6) and surfaces can be either fully or partially lead glazed varying from a ruddy brown to a dark green colour. Four sherds are from Phase 6, one is from Phase 4, and two from Phase 7. Three vessels are represented, a base from a small globular vessel and a small strap handle probably from a jug.

105 Rim from a bowl, glazed externally; diam. 12 cms (185).

FABRIC 46 *Cistercian Ware* (Fig. 11, nos. 106–8)
A small number of Cistercian Ware vessels occur at Lindisfarne. The fabric varies from a fairly soft brick-red earthenware to a highly fired hard brownish-purple fabric. Some examples are decorated; one with applied pellets of white slip, another with slip applied as part of a, possibly anthropomorphic, design. Examples of cups and beakers are found.

106 Rim and handle of a cup. Soft red earthenware fabric glazed on the internal surface extending over the lip of the rim and partially on the external surface and handle. Possibly Brears Type 9 or 10 (Brears, 1971); diam. 14 cms (211).

107 Base of posset pot, possibly Brears Type 2. Sherd broken just above vertically applied strap handle. Partially glazed on external surface. Hard red earthenware fabric; diam. *c.* 6 cms (196).

108 Body sherd in hard dark purplish fabric with shoulder carination and applied pellets of slip as decoration. Possibly from a pedestal cup, Brears Type 8. (46).

The sherds are found in Phases 4, 5, 6 and 7. Cistercian ware is believed to be introduced into the North of England in the late 15th and early 16th century (Brears, 1971).

FABRIC 47 *English Yellow Ware*
This fabric would seem to be in the same tradition as the Midlands Yellow Ware, but since only four minute sherds were found it is difficult to ascribe them to a form or to state categorically that they are Midlands Yellow Ware.

One sherd of smoother fabric was found in Phase 5. The other three coarser sherds were found in Phases 5, 6 and 7. The production of Midlands Yellow Ware begins in the mid-to late 16th century and was quite widespread by the 17th century (Brears, 1971). The late contexts in which this fabric is found at Lindisfarne suggest that the sherds are of 16th or 17th century date.

FABRIC 48 *English Tin Glaze*
A small number of vessels are found in English Tin-Glazed Earthenware. Five vessels are in this hard pink/buff, finely quartz-tempered fabric with a small amount of red iron ore.

There are several stages of the tin-glaze tradition represented in the sherds. The early 17th century examples have a pale greyish white tin glaze with mid- and dark blue cobalt and manganese purple decoration. Lead glaze on the underside dates one vessel to the first half of the 17th century, found in the bottom of Pit 200.

FABRIC 49 *Scottish? Slipware*
Thirty-two sherds of a very distinctive type of slipware, found at Lindisfarne, are paralleled at other sites in the Borders Region, i.e. at Kelso (Crowdy, pers. comm.)

and at Edlingham Castle (Bown, forthcoming), yet do not appear to be arriving in the area from any of the known English Slipware industries. The fabric is very finely quartz tempered with fine red iron ore and mica visible throughout the clay matrix. Surfaces are particularly smooth where not glazed and distinctively a pinkish yellow/red colour (5YR 7/6). Of the eleven estimated vessels present all are fairly thick walled plates or shallow open vessels with thick relatively randomly patterned slip-trail decoration on the internal surface. One example has slip applied in squares and a green glaze strikingly like the Stenhouse/Throsk material, though slipwares were not produced at the Stenhouse/Throsk kiln site (Caldwell and Dean, 1981). The smoothed unglazed surfaces of this slipware are in particular reminiscent of the Stenhouse/Throsk material. Of the four sherds in Phase 5 two are from the floor of Building A. Of the three sherds in Phase 6 one is from the fill of Pit 200. A further twenty-two sherds are from Phase 7.

FABRIC 50 *Scottish? Slipware*
Four body sherds occur in a fabric very similar to Fabric 49 but have a continuous dark slip on the internal surface and splashes of green lead glaze. The fabric is as fine as Fabric 48 and of similar colour. Two sherds are from Phase 5 and two from Phase 6.

FABRIC 51 *English, probably Metropolitan Redware and Slipware*
One vessel in Metropolitan Slipware is a typical form of shallow plate with large everted rim. Fabric colour is a brick red (near 10YR 6/8). Six other body sherds are of the Metropolitan Redware type with orange/brown or chestnut brown glaze on both surfaces. The sherds are all from Phase 6 or 7.

FABRIC 52 *English Slipware*
A third slipware type is possibly of later English origin, being a smooth, finely quartz tempered light red fabric (near 10YR 6/8). The glaze is more orange in colour than the other slipwares found at Lindisfarne and the fabric characterised by its hard thinly walled sherds. Three sherds of the same slip-decorated plate are from the floor of Building B. The other six sherds are from Phases 6 and 7.

FABRIC 53 *Staffordshire Type Slipware* (Fig. 11, no. 109)
A small porringer, is found in a cream/pinkish buff fabric with clear yellow glaze and red slip-trail decoration. The white bodied slipwares are probably earlier than the last quarter of the 17th century, i.e. earlier than the majority of Staffordshire slipwares (Kelly, 1975).

109 Small porringer. Pinkish buff-firing fabric is tempered with fine quartz grains and abundant red iron ore. The fabric is fairly soft. The red slip (2.5YR 5/8) is applied in semicircular motifs around the body and in stripes around the rim. All the sherds from this vessel came from Phases 6 and 7; diam. 14 cms (22, 9).

FABRIC 54 *Lead Glazed Blackwares*
One sherd of an earlier type of lead glazed blackware was found in Phase 7. The sherd is probably late 16th or early 17th century. Six sherds of this fully developed type were found in Phase 7 at Lindisfarne and are probably of later 17th or even 18th century date.

FABRIC 55 *Yellow Glazed White Ware*
Six sherds from three vessels are possibly a late tradition of the Midlands Yellow ware and are 18th century in date. One vessel is a press-moulded dish or bowl. All sherds are from the topsoil with the exception of one sherd in Phase 6.

FABRIC 56 *Staffordshire Press-Moulded Flatwares*
One vessel of buff coloured fabric has the characteristic white slip applied over a dark slip and combed to create a marbled effect. Two red earthenware vessels have only a whitecombed slip. This method of production is thought to have been introduced into Staffordshire later than the middle of the 17th century (Celoria and Kelly, 1973).

FABRIC 57 *English Lead Glazed Earthenware and Spongeware*
This is possibly a local tradition of the 19th or early 20th century, of hard red earthenware coated with a white slip and sometimes mottled with a brown slip. Plates and pancheons are found in this ware, in Phases 6 and 7 at Lindisfarne.

FABRICS 58–62
A small number of sherds in well-known post-medieval fabrics occur in Phase 7. These include: Staffordshire Type Brown Salt-Glazed Stoneware (Fab. 58), Staffordshire Type White Salt-Glazed Stoneware (Fab. 59). Black Iron-Glazed Earthenware (Fab. 60), English Porcelain (Fab. 61), English Stoneware (Fab. 62), and English Bone China.

BIOLOGICAL EVIDENCE

ANALYSIS OF SOIL SAMPLES

A. M. Donaldson and D. J. Rackham

Samples for biological analysis were collected from five different contexts and include material from several archaeological phases. The finds obtained from the processed samples are listed in Table I together with descriptions of the contexts involved. Soil conditions were such that organic material and material of biological origin such as shell did not survive well.

The samples were disaggregated in warm water and floating material washed over into a 0·5 mm mesh sieve. The washed sample was sieved through four sieves.

TABLE I. Table of finds from the soil samples

	PHASE 2	PHASE 3/4		PHASE 4			PHASE 5	
Context	176	139	139	232	232	232	224	225
Sample	1	1	2	1	2	3		
Weight	4·6 kg	8·6 kg	7·5 kg	5·3 kg	3·4 kg	4·4 kg	3·35 kg	3·15 kg
PLANTS (Fruits or seeds)								
Atriplex sp. (Orache) U			1					
Avena sp. (Oats) C	9	1						15
Brassica/Sinapsis sp. U		1						
Capsella bursa-pastoris (Shepherds purse) U		2						
Carex sp. (Sedge) U							2	
Carex sp. (Sedge) C				1		3		
Conium maculatum (Hemlock) U	3					9		
Hordeum sp. (Barley) C	8	3	3	3	3			
Hordeum/Triticum sp (Barley/Wheat)	4		3					
Hyocyamus niger (Henbane) U							3	
Pisum sativum (Pea) C						1		
Plantago lanceolata (Plantain) C				1				
Potentilla sp. (Cinquefoil) U							1	
Ranunculus flammula (Lesser Spearwort) U					1			
Rumex sp. (Docks) C			1	1				
Rumex sp. (Docks) U							2	
Sinapsis arvensis (Charlock) U		1						
Sonchus arvensis (Field Milk-thistle) U							1	
Triticum aestivum s.l. (Wheat) C	4	3	3	2	3	3	4	10
Urtica dioica (Nettle) U							3	
Urtica urens (Small Nettle) U		3						
(Other remains)								
Calluna vulgaris (Heather) C shoots					+	+		
ANIMALS								
Echinodermata—Sea Urchin				1				
Crustacea—?crab shell fragments				+	+			
MOLLUSCA—indet. shell fragments	+	+	+	+	+	+	+	+
Bivalve—indet.					1			
Topshell—indet.					2			
Cardium edule (Cockle)		+	+	+2	+	+		
Littorina littoralis (Flat Winkle)			1		1			
Littorina littorea (Periwinkle)		+++	++1	23	+14	+53		
Littorina saxatilis (Rough Winkle)		2	3	1	2			
Mytilus edulis (Common mussel)	+	+	+	+++	+++	+++	+	
Patella vulgata (Common Limpet)	+		+	+	+	+	+	
Pisces (see fish report)								
Identified fish bones	2	35			183		3	
Unidentified fish bones	19	200+			1303+		77+	
Aves indeterminate fragments	1	1		2		1		2
Eggshell fragments—probably chicken				+	+	+		
Mammalia—indeterminate fragments	+	+++	+++	++	+	++	+	+
Lagomorph—indet.			1					
Ovicaprid		1	2	1		1		
Small mammal—indet.			2	1				1
Lepus capensis (Brown Hare)							1	
Oycotolagus cuniculus (Rabbit)		1			2			
Sus sp. (Domestic pig)	1	1	1					
Coal		+	+			+		+
Ash/cinder				+	+	+	+	
Fossil Crinoids	+	+++	+++	+	+	+	+	+
Fossil Brachiopad		+						

U—uncarbonised plant material: C—carbonised plant material.
+—present (less than 50 fragments): ++—less than 150 fragments: +++—more than 150 fragments.

Context descriptions:
PHASE 2– 176—Medium brown, soft, clean sandy loam. Layer overlying naturally weathered surface.
PHASE 3/4 139—Dark grey brown sticky loam. Fill of cobble lined pit—? cess-pit?
PHASE 4 232—Dark brown shelly loam. Layer full of corroding mussel shells with some ash. Pit fill.
PHASE 5 224—Medium brown clayey loam. Upper fill of stone—lined, capped drain.
PHASE 5 225—Dark brown, very clayey loam. Lower fill of above stone—lined and capped drain.

The material retained in the two coarsest sieves (3·35 mm and 1·7 mm) was dried and hand-sorted. The fractions retained by the fine sieves (0·85 mm and 0·5 mm mesh) were untreated except samples 232(1) and 176(1), the dried residues of which were immersed in water and a second float collected in a 0·3 mm mesh sieve for sorting under the microscope, together with all material from the initial floats.

Although a wide range of biological remains were recovered from the soil samples, species identifications were generally only possible for the plant, mollusc and fish remains (see below). Furthermore, although there was considerable variation in the quality and type of material from each sample, the nature of the contexts does not permit any conclusions concerning variations between the phases. In addition to the biological remains, some of the samples contained coal and layer 232 contained cinders. The matrix of layer 139 contained large numbers of fossil crinoid segments and a brachiopod, other layers only a few crinoid segments. These fossils presumably had eroded out of the carboniferous limestone bedrock.

The most notable feature of the samples is the recovery of items either not recovered or not effectively recovered by excavation. The most important of these are the fish bones. Although many of those sorted from the samples are unidentifiable, the presence of five species (see below) including the herring and sprat illustrates what may have been missed by not using sieving as a general recovery technique. The samples from 232 were rich in fish remains and mussel shells and it is possible that this feature may represent the remains of some specific activity. The marked absence of mussel shells recovered during excavation (see Table II) is in contrast to the sample of 232 and may possibly be explained by failure to survive in the soil. The shells in Pit 232 were very corroded. The presence of large mussel beds around Holy Island and Budle Bay today would suggest that they would have been a ready and abundant source of food and possibly fish bait.

TABLE II. Invertebrates recovered during excavation

	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7
MOLLUSCA						
Buccinum undatum (Whelk)	1		4		3	1
Cardium edula (Cockle)					1	28
Littorina littorea (Periwinkle)	31	15	144	129	260	269
Mytilus edulis (Common Mussel)			7	1	1	2
Ostrea edulis (Oyster) Upper/lower v.	6/5	40/47	9/8	20/13	60/45	51/29
Patella vulgata (Common Limpet)	1	56	21	11	66	44
Pecten maximus (Great Scallop)	1					
Solenidae—razorfish						1
?					1	
Crustacea						
cf. *Cancer paqurus* (Edible crab)				1	1	2

The quantity of plant remains recovered is not sufficient to merit detailed

comparisons between the different samples or phases. There is however no positive evidence for context 139 being a cess-pit. The fact that both carbonised and uncarbonised plant material was found indicates at least two separate modes of origin. Carbonised cereal grains were found in all samples, probably the result of accidental burning during drying, cooking or storage. The single carbonised pea in 232 probably had a similar origin. Heather plants have a variety of domestic uses including flooring, bedding, thatching and fuel. The occasional seeds of ruderals and other open habitat species were presumably carbonised accidentally. The retrieval of uncarbonised seeds was somewhat unexpected as soil conditions did not seem conducive to organic preservation. While some seeds, e.g. those of Shepherd's Purse were very fresh looking and probably modern contaminants, others, the Hemlock, for example, were fairly abundant in certain contexts and exhibited signs of long-term degradation, suggesting their contemporaneity with the rest of the soil sample. Hemlock indicates damp conditions or open water, while henbane, nettles and docks indicate sandy or disturbed ground. Spearwort grows in marshes and other wet places like dune slacks. Other plants are weeds of arable or waste ground, or grow near the sea.

THE ANIMAL REMAINS

Enid Allison, Alison Locker, and D. J. Rackham

Introduction

The excavation produced quantities of animal bone from over two hundred contexts that represented a time span of over eight hundred years. These included mainly fish and mammal bones with a few bird bones, each of which is reported individually below.

The recovery of the majority of the sample was effected by trowelling and no sieving procedures were adopted on the site. A few samples were taken for biological analysis (see above) and the contents of these suggest (Table I and Table III) that had such techniques been used the samples discussed below may well have been appreciably different. The theoretical discrepancy would most seriously affect the fish and bird samples; the mammal collection is unlikely to have been appreciably changed except with regard to the smaller animals which have relatively little economic importance. The differential recovery of these three groups of bone is likely to obscure the relative economic importance of each and it may be presumed that the fish at least constituted an even more important food resource than the numbers of bones (see below) already suggest.

The bones have been catalogued in groups corresponding to the archaeological phases assigned by the excavator. The total collection numbered in excess of 10,000 bones—3,900 fish, 432 birds (see reports below) and 5,524 mammal bones and some 400+ fragments from the soil samples most of which were unidentifiable (see Table I).

TABLE III.

	Elasmo	Roker	Eel	Conger Eel	Herring	Sprat/Smelt	Salmon	Cod	Haddock	Whiting	Saithe	Ling	Hake	Tub Gurnard	Bass	Turbot	Plaice/Flounder	Halibut	Gadoid	Flatfish	Unident	Total	
Phase 2	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	2	H
	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	19	21	S
Phase 3	—	—	—	—	—	—	—	29	2	—	—	7	—	—	—	—	—	—	3	—	26	67	H
	—	3	1	—	8	6	—	—	4	10	—	—	—	—	—	—	—	—	—	3	200	235	S
Phase 4 (Post Med. pits and rubbish dumps 1550–1600	—	—	—	—	—	—	—	6	1	—	—	3	—	—	—	—	—	—	2	—	14	26	H
Phase 5	1	—	—	—	—	—	—	70	7	—	—	11	—	—	—	—	1	2	39	—	87	218	H
	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1	77	80	S
Phase 6	7	—	—	3	—	—	—	78	145	—	3	52	—	—	—	5	4	—	97	—	266	658	H
Phase 7	1	—	—	—	—	—	1	100	33	1	1	20	7	1	—	1	14	—	196	—	585	956	H
TOTAL	12	3	5	3	11	22	1	338	238	52	11	100	8	3	2	6	22	2	429	16	2616	3900	

H=Handpicked. S=Sieved. Totals include material from poorly stratified contexts, not listed separately by phase.

TABLE IV. Numbers of bird bones. Nomenclature follows Snow (1971)

Species		Phase 2	3	4	5	6	7
Great Crested Grebe	*Podiceps cristatus*	—	—	1	—	—	—
Shag	*Phalacrocorax aristotelis*	—	—	1	—	3	—
Cormorant	*Phalacrocorax carbo*	—	—	1	—	—	—
Goose cf. domestic	*Anser anser dom.*	1	19	9	19	30	34
Goose cf. Whitefront or Barnacle	*Anser albifrons/Branta leucopsis*	1	1	—	—	—	—
Goose cf. Barnacle	*Branta leucopsis*	—	—	—	1	—	1
Brent Goose	*Branta bernicla*	—	1	—	—	—	—
Mallard	*Anas platyrhynchos*	2	—	1	1	2	—
cf. Mallard	*Anas platyrhynchos*	—	—	—	1	—	1
Teal	*Anas crecca*	—	—	—	—	—	2
Duck sp.		—	—	1	—	—	—
Common Scoter	*Melanitta nigra*	—	—	3	—	—	—
Velvet Scoter	*Melanitta fusca*	—	—	—	—	1	1
Red-breasted Merganser	*Mergus serrator*	—	—	—	—	1	—
Red Grouse	*Lagopus lagopus*	—	—	—	—	—	1
Domestic Fowl	*Gallus gallus*	6	33	21	22	45	84
cf. Domestic Fowl		—	—	—	12	1	1
Crane	*Grus grus*	2	—	—	—	—	—
Curlew	*Numenius arquata*	—	—	—	—	1	1
Woodcock	*Scolopax rusticola*	—	—	?1	—	—	1
indet. Waders		—	—	1	—	—	3
Herring/Lesser Black-backed Gull	*Larus argentatus/fuscus*	—	—	1	1	1	1
Great Black-backed Gull	*Larus marinus*	—	—	—	—	2	2
Gull sp.	*Larus sp.*	—	—	—	—	—	2
Guillemot	*Uria aalge*	—	—	—	?1	—	—
Guillemot/Razorbill	*Uria aalge/Alca torda*	—	—	—	1	—	—
Little Auk	*Alle alle*	—	—	—	1	—	—
Dove sp.	*Columba sp.*	—	—	1	—	1	1
Jackdaw	*Corvus monedula*	—	—	—	—	1	4
Raven	*Corvus corax*	—	—	—	—	1	—
indet.		—	—	3	5	3	8

References: Snow, D. W. (1971), *The status of birds in Britain and Ireland.* Oxford, etc.

MAMMAL BONES

D. J. Rackham

Much of the material was very fragmented and 57·4 percent of the collection could not be identified to species or family level. This was catalogued in terms of size, and where it was possible to come to a decision was recorded as an ungulate, small or large.

In addition to the major domestic animals discussed below a number of other

species were identified, and two human bones which are likely to have been disturbed from the adjacent graveyard. Red, fallow, and roe deer bones occur in three phases (Table V) but in very small numbers. The large number of rabbit bones and the few finds of hare are presumably food remains and the rabbit first appears in the medieval phase (III), becoming more common in the later phases. The finds of seal and whale bones are to be expected on a site so close to the sea and in part dependent upon it for many resources. The few finds of whale bones are unlikely to reflect the true importance of the cetacea since little of the skeleton would find its way into the rubbish or occupation layers—the carcass would be stripped on the beach. Among the seal remains are bones assignable to the grey seal, the most common species in the area today—the nearby offshore Farne Islands are an important breeding ground for the species. Some of the bones are from pups probably only a few weeks old, that could have been exploited for their soft white fur as well as meat, and oil or blubber.

TABLE V. Numbers of fragments of each species within each phase.

Phase	U/S	II	III	IV	V	VI	VII
Horse		12	24	8	2	17	3
Cattle	8	36	236	125	39	274	126
Sheep and goat	10	21	139	110	42	378	183
Sheep	1	2	3	1		12	10
Goat							1
Pig		9	57	29	14	68	27
Dog			3	4		8	12
Cat		1	1	14		7	47
Red deer, *Cervus elaphus* L.			1			1	
Fallow deer, *Dama dama* L.						2	
Roe deer, *Capreolus capreolus* L.			1		2	1	
Fox, *Vulpes vulpes* L.			1		2	1	
Rabbit, *Oryctolagus cunniculus* L.			13	23	16	71	65
Hare, *Lepus capensis* L.	3			1	1	2	
Rat, *Rattus* sp.						1	1
Man					1	1	
Seal, cf. *Halichoerus grypus* Fab.				1		3	3
Seal, indeterminate						3	3
Whale, Cetacea indet.			3	1			
Large mammal	2	27	177	120	47	285	114
Large ungulate	9	44	200	73	43	279	112
Small ungulate	1	19	80	56	52	265	144
Indeterminate mammal	9	16	159	180	85	360	213
Total	43	187	1099	745	346	2040	1064

Domestic animals

Cat and dog bones occur in small numbers in most phases as do horse bones. Too few of the bones of the latter species were present for an estimate of the size of the

animals to be made. A single goat horn core was identified from the recent phase (VII)—there was no indication of this species being present in earlier phases and it is probable that most, if not all of the ovicaprid remains are sheep. Sheep were specifically identified from a number of skull and horn core fragments.

The number of bones in the sample is numerically small. This is confirmed by the low figure for the minimum number of individuals (MNI) in each phase (Table VI) and makes comparison of the phases using the MNI ill-considered. There is perhaps a general indication from the percentages of the fragments of the three main domestic species (Table VI) that there is a change in the ratio of these species, with sheep becoming more numerous in the last two phases, VI and VII, although among the unidentified remains, small ungulates predominate only in the latest phase.

TABLE VI. Table of the fragment numbers, percentage and MNI of cattle, sheep(+goat) and pig.

Phase	II			III			IV			V			VI			VII		
	F	%	MNI	F	%	MNI	F	%	MNI	F	%	MNI	F	%	MNI	F	%	MNI
Cattle	36	53	2	236	54·3	6	125	47·2	6	39	41	2	274	37·4	7	126	36·3	4
Sheep+Goat	23	34	3	142	32·6	7	111	41·9	9	42	44·2	4	390	53·2	14	194	55·9	8
Pig	9	13	2	57	13·1	3	29	10·9	3	14	14·7	2	68	9·3	5	27	7·8	3

The MNI was calculated by considering all the bones from each phase for part of bone, side and age and sex where determined.

The number of occurrences of each skeletal element of cattle and sheep is noted in Tables VII and VIII. There appears to be no distribution of elements that might suggest that the bone has a commercial origin, and apart from some of the smaller bones (sesamoids, carpals and tarsals) most parts of the skeleton are found in all the phases. The number of non-meat bearing elements—e.g. feet, may indicate that whole carcasses were available—not unexpected in a small community that was no doubt in part self-supporting. The ribs, vertebrae and pelves are the most commonly butchered parts and 68% of these are cattle, large ungulate or large mammal bones.

Tables IX and X illustrate the criteria for determining the age at death of the cattle and sheep in the sample. The tables are arranged in the approximate order in which fusion and eruption of the bones and teeth occur in the live animal. Few of the cattle bones are derived from juvenile animals, that is animals probably in their first 12 months of life when slaughtered. The early fusing group of limb bone epiphyses (distal humerus, proximal radius and phalanges and distal metacarpus and tibia) have a number showing the juvenile condition but the majority of these epiphyses have fused in all phases. More of the later fusing epiphyses (proximal ulna, femur, tibia and humerus and distal ulna, radius and femur) of the limb bones are unfused and although this indicates the slaughter of a number of sub-adult stock, again the majority of the bones in this group are fused suggesting that adult cattle formed the bulk of the animals slaughtered.

A similar pattern is apparent in the early fusing epiphyses and erupting teeth of

TABLE VII. The fragments of each element of cattle and large ungulate recovered from each phase.

	U/S	II		III		IV		V		VI		VII	
Skull	1	4	1	31		10		1		18		11	
Horn core		1		1		1		1		3			
Mandible	2	2		25		5				19		10	
Teeth, upper				8		12				14		7	
Teeth, lower				13		10				20		14	
Scapula		1	5	10	8	4	1	2	4	23	3	8	
Humerus	1			13		6		3		12		3	
Radius	1	3		11		9		3		11		3	
Ulna				4		5		1		9		3	
Carpals		2		4		5		3		4		5	
Metacarpus	1	1		19		8		3		8		6	
1st phalanx		1		8		13		1		14		5	
2nd phalanx		2		5		4		1		7		3	
3rd phalanx				7		3		1		5		3	
Sesamoid												1	
Pelvis	1	1		12		4		7		19		9	
Femur		1		14		5				17		4	
Patella		1		1		1				3		1	
Tibia	1	1		15		3		2		16		7	
Calcaneum				4		3		1		10		3	
Astragalus		1		6		4		1		5		4	
Centroquartal				1		2		3		4		1	
Metatarsus				15		4		2		13		11	
Rib	7	1	21		159		65		30		223		88
Cervical vertebra	1	8	3	7	9	2		1		11	5		2
Thoracic vertebra	1		5	2	12		2	1	5		18		13
Lumbar vertebra		2	4		12		6		3		29		9
Sacrum		1		2				1		4			
Caudal vertebra			1									1	
Metapodial		1				1				1			

The first column in each phase are cattle bones, the second are large ungulates.

the sheep sample (Table X). However in the later fusing epiphyses approximately 50% of the epiphyses are unfused indicating that a large part of the sample derives from sheep killed when sub-adult, with an equally large proportion of adult sheep being slaughtered. The sub-adult portion of the sheep sample is revealed in the number of bones and jaws that have one late-fusing epiphysis unfused and the early one fused—or the late erupting tooth unerupted while the earlier ones are in wear. In Phase VI six of the sheep radii have their proximal ends fused but their distal ends unfused, thereby falling within the sub-adult age class. Although it would be interesting to assess any possible variation in the slaughter pattern between the phases, the sample is unfortunately not large enough although there is some

TABLE VIII. The fragments of each element of sheep, goat and small ungulate recovered from each phase.

	U/S		II		III		IV		V		VI		VII	
Skull					2		3		1		9		24	
Horn core	1				1		1				10		2	
Mandible			2		11	1	5		1		26		4	
Teeth, upper jaw					6		15				21		14	
Teeth, lower jaw					4		5		1		24		7	
Scapula			3	3	8	4	9	3	3		30	13	15	8
Humerus	3		1		14		9		5		21		17	
Radius	1		3	1	21		6		4		33		15	
Ulna					4		5		1		9		3	
Carpals					1								1	
Metacarpus			2		8		3		4		21		8	
1st phalanx			1		4		5	1	3		6		7	
2nd phalanx											1		1	
Pelvis	1		1	1	13		10		7		53		12	
Femur	2		1	1	9		5		2		24		15	
Patella											1			
Tibia	2		1		20		14		5		39		19	
Calcaneum			1		1		2		1		10		4	
Astragalus					3		2		2		9		8	
Centroquartal							1							
Metatarsus			2		5		7		2		30		11	
Rib		1	1	15		65		42		39		202		110
Cervical vertebra					5		4	4		1	10	8	2	7
Thoracic vertebra			1	2		3		1		7		23		4
Lumbar vertebra					1	5	2	5		5		17		15
Sacrum			1	1							3	1		
Metapodial						1	1				1	1	2	

The first column in each phase are sheep and goat, the second small ungulates.

evidence for a higher proportion of lambs being slaughtered in Phases 2 and 3 than 4, 5 and 6.

I have made no numerical estimate of the meat contribution of the different species to the diet, but cattle in all periods must have supplied the bulk of the meat, with the importance of pig and sheep fluctuating, the latter becoming the second largest contributor in the last two phases of occupation.

MOLLUSCS AND CRUSTACEANS

D. J. Rackham

Apart from the molluscs already noted above, a number were collected during

TABLE IX. Bone epiphyseal fusion and tooth eruption data for the cattle and large ungulate remains.

	II		III		IV		V		VI		VII	
Unfused-fused	U	F	U	F	U	F	U	F	U	F	U	F
Deciduous teeth		1		4		6′				2		
Molar 1 (and indet. molars)				4		7′				4		5
Scapula tuberosity				1				1+		5		3
Innominate (fusion of main bones)	1	1		4					1	3		4
Humerus, dist. epiphysis			4	2	1	2′		1		8+	1	1
Radius, prox. epiphysis		1		3		3		2		6′		1
1st phalanx, prox. epi.		1		7	2	11+		1	2	11		5
2nd phalanx. prox. epi.		2		4		4	1			6	1	2
Incisors and canine						1				2		4+
Metacarpus, dist. epi.			3	6		3	1	1		3		
Tibia, dist. epi.				8		1		2	5	5+	1	4+
Molar 2			1	8		3				12		5
Premolar 2 (& indet. premolars)				5′		3						2
Premolar 3 erupted				3						4		2
Metatarsus, dist. epip.	1		1	6				2	2	6+	3	4
Calcaneum, prox. epi.			2	2		2		1	3	3	1	1
Premolar 4 erupted		1	1′	3		3				2		2
Ulna, prox. & dist. epi.			2	1	2				1	1		
Femur, prox. epi.			2	2	1	2			3	4		
Radius, dist. epi.		1	1	2		4		1	1′	4+		2
Femur, dist. epi.			1	5	1					5		2
Tibia, prox. epi.			1	4+	2					3+	1	
Humerus, prox. epi.			3	3	2′			1	1	1		
Molar 3 erupted				7		1				10		5
Ilial & ischial tuberosities				1			1					
Vertebral epiphyses	8′	6′	13	5+		4	4	2+	14	4+	7	7

+—denotes a bone whose epiphysis has only just fused, indicating one specimen in the subtotal.

′—denotes a bone or jaw mentioned twice in the table—i.e. one end fused, but the other unfused.

excavation; these are listed in Table II. The molluscs listed here are likely to have been used for both food and fish bait. Cockles and mussels are still common in beds on the sands around the island and it is likely that oysters were present in numbers until overharvesting reduced them to extinction or near extinction. Periwinkles and limpets are common, particularly upon the rocks around the south end of the island and these species are most likely to have been used for fish-bait. There is no appreciable difference in the numbers or species of mollusc shell between the phases. The variation in numbers indicated by the table is due largely to differences in the number of contexts assigned to each phase—Phases 6 and 7 were by far the largest volume of deposit and 3, 4 and 5 the next group; the remaining phases include only a few contexts.

TABLE X. Bone epiphyseal fusion and tooth eruption data for the sheep and goat and small ungulate remains.

	II		III		IV		V		VI		VII	
Unfused-fused	U	F	U	F	U	F	U	F	U	F	U	F
Deciduous teeth				4'''		5				8''''		4'
Molar 1 (and indet. molars)			1'	2		1			2''	7'		5'''
Scapula tuberosity		1		4		3		1		20	1	7
Innominate (fusion of main bones)				3		4	1	3		24		3
Humerus, dist. epi.			1	3		7		3'	1	14+[5]	1	10
Radius, prox. epi.	1	1'	3	5''		3			2	12+[6]	1	9+
1st phalanx, prox. epi.	1			4		7		3		6+	1	6+[2]
2nd phalanx. prox. epi.										1		1
Incisors and canine									1'	1'		2
Molar 2 erupted			1'	8''		6				22''	2''	10+
Metacarpus, dist. epi.	2			3	1			2	3	8	2	3
Tibia, dist. epi.			6	7	3	4	2	2	3	18+[3]	5	8+
Metatarsus, dist. epi.	1	1	1	3	4	1		1	6	10	3	2
Premolar 3 erupted				3					1	1+		3'
Ulna, prox. & dist. epi.			1	1		1		1	2	2	2	
Calcaneum, prox. epi.		1		1		1		1	1	9		4
Femur, prox. epi.	1	1	1	4	2	2+[2]			6	2	3	1
Radius, dist. epi.	1'		6''	4	1	1	1	2	12''''''	7	3'	2
Premolar 4 erupted				1		1				2	1'	2
Femur, dist. epi.			2	1	1			1	7	3+	3	4+
Tibia, prox. epi.			4'	3	2	2			4	2	1	
Humerus, prox. epi.			4	3	1	1+	2'		5'''''	3+	4	
Molar 3 erupted		1	2''	5		9			2''	19		2
Ilial & ischial tuberosities	1				1	1			1	1		
Vertebral epiphyses	3	1	9'	2'	7	2	4	2	18'''	20+[8]	15'	8'+

' or ' Denotes each bone in the subtotal which is recorded twice in the table, i.e. more than one tooth in a jaw or both ends of the bone present.

+ Indicates that a bone in the subtotal has only just fused, the number fulfilling this description is given after the plus symbol.

The most common finds in all phases are periwinkle, oyster and limpet shells, and mussel shells in the soil samples from context 232. Other finds are sporadic and the edible crab remains perhaps barely reflect the trade in crabs, a part of the commercial fishing of the island today.

It is possible that the few small shells recovered in the soil samples (see Table I), such as topshells and rough and flat winkle may have been introduced with seaweed, upon which they are commonly found. However their numbers are so small that introduction into the deposits could equally have been accidental.

THE FISH REMAINS

Allison Locker

A total of 3,900 fish bones was recovered, of which 2,077 were recovered by handpicking, and 1,823 from sieved samples. Had sieving not been carried out roker, eel, herring, sprat/smelt, and bass would not have been recovered.

The following species were identified; elasmobranchs (cartilaginous fish), roker (*Rajaclavata*), eel (*Anguilla anguilla*), conger eel (*Conger conger*), herring (*Clupea harengus*), sprat/smelt (*Sprattus sprattus/Osmerus esperlanus*), salmon (*Salmo salar*) cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), whiting (*Merlangius merlangus*), saithe (*Pollachius virens*), ling (*Molva molva*), hake (*Merluccius merlangus*), tub gurnard (*Trigla lucerna*), bass (*Dicentrarchus labrax*), turbot (*Scophthalmus maximus*), plaice/flounder (*Platichthys flesus/Pleuronectes platessa*), and halibut (*Hippoglossus hippoglossus*).

Table III indicates the number of bones for each species found in the different phases. The quantity of unidentifiable fragments emphasises both the degree of fragmentation fish bones are subject to because of their friable nature, and the subsequent difficulty of assigning some bones to species. Elasmobranch vertebral centra, when they do survive are not identifiable to species, but the presence of the distinctive "bucklers" of the roker suggest that at least some may belong to this species. The Gadoid group in the table refers to bones that are likely to be of the cod group, but largely due to fragmentation could not be identified positively.

Biology and Fishing Methods

The biology of these species suggests the exploitation of a number of habitats and a variety of fishing methods. Further details on the biology of individual species can be found in Wheeler (1978).

Line fishing from boats in deep water would have caught mature cod, ling and hake. Cod are found in depths of up to 600 metres schooling at least 30 to 80 m above the bottom. Ling are most common in depths of 300–400 metres, especially the mature specimens, and hake inhabit the middle and lower continental shelf at 165–550 m, living near the bottom. All three species show seasonal movement into shallower water; immature specimens are more likely to be found closer inshore.

In more moderate depths saithe are found in schools near the surface and in mid-water depths of 200–250 m, and haddock live close to the sea bed in depths of 40–300 m, feeding on bottom living animals. Before the development of trawls saithe would largely have been caught on lines and smaller specimens possibly in nets; haddock would have been caught on lines.

Netting in shallow waters would have caught both whiting and herring. Whiting are common in mid-water and on sandy and muddy bottoms between 30–100 m, and could also have been caught on lines. Herring are seasonally abundant in large schools near the surface, moving south from the Shetland Islands in early June. They provide a summer fishery off the coasts of Scotland and the North of England finally reaching the south coast of England (Wilson, 1973).

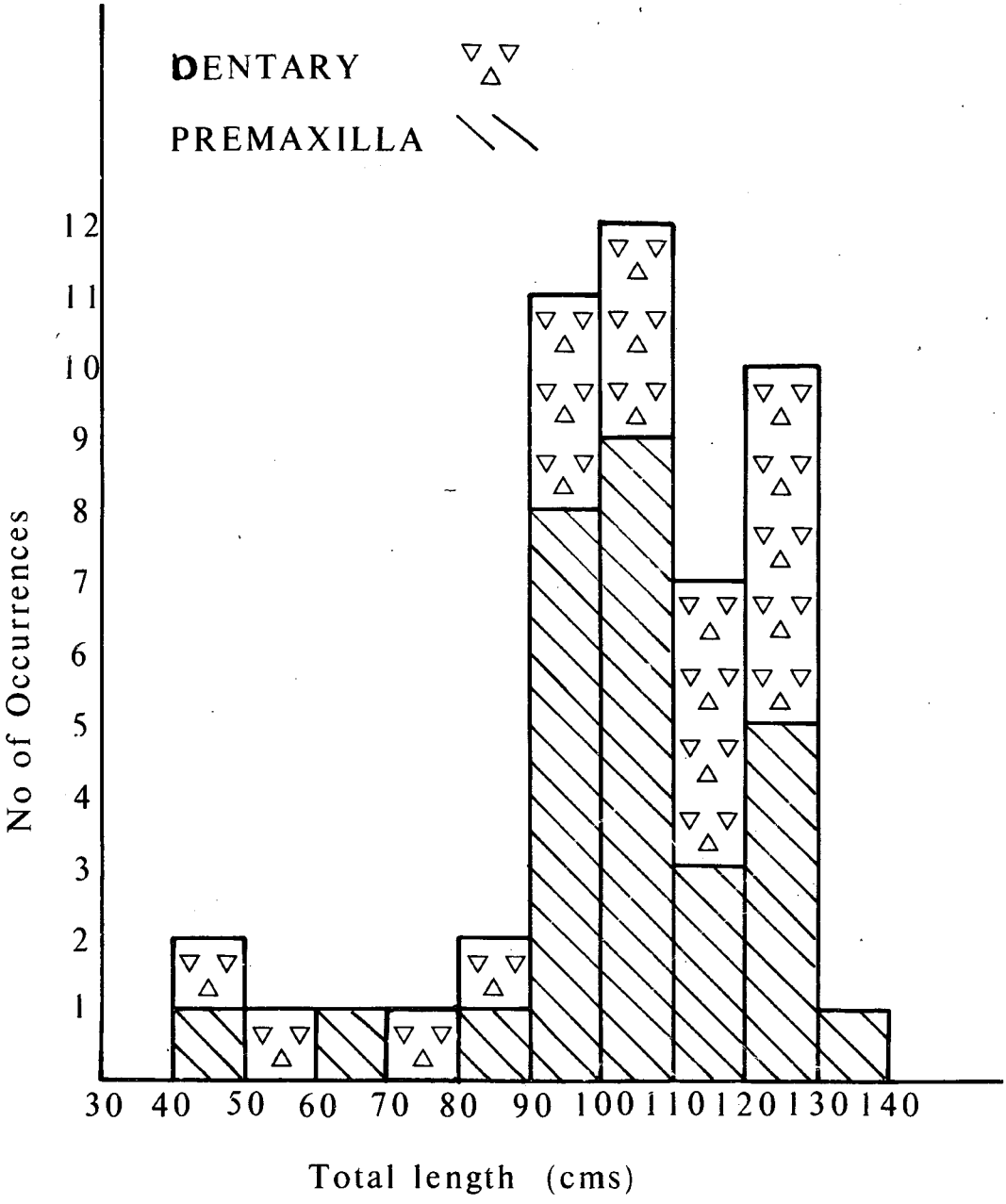

Fig. 12. Measurements of Cod Dentaries and premaxilla.

The flatfishes, plaice, flounder, turbot and halibut are all bottom dwellers at different depths, although the halibut does forage in midwater; this is the deepest of the flatfish identified living at 100–1,500 m. The turbot, only identified from Phases 6 and 7, is a large shallow water (0·80 m) flatfish, which today is scarce in the north, but common in the southern North Sea and English Channel. This fish may not have been caught locally unless its distribution has changed. Plaice are most common from 10–50 m favouring sandy bottoms. The flounder lives from the tideline up to 55 m, but differs from the plaice in that it can also live in freshwater, penetrating river mouths. All these flatfish can be caught on lines, and plaice and/or flounder could also have been caught in "kiddles" which were shoreline traps which caught the fish as they returned to deeper water after feeding on the shoreline at high tide (Wheeler, 1979). Another bottom dweller, the roker, the commonest ray in shallow water, especially 10–60 m, would also have been caught on the same lines as used for the flatfish. They are identified by their distinctive "bucklers", dermal denticles found mainly along the dorsal fins. The tub gurnard might be included in this group, as regards habitat. It is found commonly in 20–150 m, in small schools on mud and muddy-sand bottoms and may have been caught as part of hand line fishery from a small boat.

On rocky shores and offshore the conger eel can be caught on lines and also in traps, growing up to a length of 9 feet. Although it has lost popularity today, a single conger can provide a good quantity of flesh.

Moving to Estuarine conditions, both smelt and young sprats (which with young herring are whitebait), would be the object of a seasonal fishery using very fine nets. The single vertebral centrum of both salmon and eel is scant evidence of species that were both popular in the medieval and post-medieval periods. Both species spend parts of their life cycle in fresh and salt water; salmon spawn in freshwater, and eels breed in the mid Atlantic but return to freshwater to feed and grow.

Size, Processing and Butchery

Cod is the most commonly occurring species, found in all phases, with ling second in importance and only absent from Phase 2. The number of haddock bones are increased by two partial skeletons in Phase 6, 89 bones from one individual and 48 from another. It is possible that these were discarded as whole uneaten fish and not as food remains.

Measurements were taken whenever possible, especially on the dentaries. The bulk of these measurements are from Phases 5, 6 and 7. Examination of the bones in separate phases did not show any significant changes in the size of fish caught from the early to late periods; this was partly because there were few measurable bones in the early phases.

Most of the cod appear to be over 90 cms in length, using the dentary and premaxilla measurements of Wheeler and Jones (1976), and would have weighed over 6 kg gutted weight. These larger fish would be part of an inshore fishery, smaller individuals being found closer inshore (see Fig. 12). Comparison with

modern specimens suggest that many of the ling were of a similar size or larger than a fish weighing 10·67 kg. The saithe were comparable to a specimen of around 100 cms in length, which is slightly larger than the size they are usually captured today, 70–80 cms, their maximum length being 130 cms (Wheeler, 1978). Haddock were generally around 50 cms in length, and would approximate to a gutted weight of around 1 kg (Blacker, 1974). Many of the haddock cleithra were swollen, a pathological condition so common as to be considered normal (Wheeler, 1977).

Butchery was mainly visible on the larger fish, especially cod. As well as knife cuts on vertebral centra, small chop marks and knifecuts were present on the premaxillaries around the ascending foramen. This may be evidence of splitting the whole fish (or the removal of a large hook, (Colley, pers. comm.)), while knifecuts on the parasphenoid and basioccipital could be the result of throat slitting (which was practised in order to give whiter flesh), or beheading.

Salting and drying is likely to be associated with the fishery for cod, ling, saithe, haddock and hake. Before the advent of the steam ship in 1812 the slowness of transport meant that most fish had to be preserved in some way before they were marketed. The advent of steam coupled with the development of "long line" fishing introduced by the Dutch in about 1770 (Cutting, 1955), where lines were set along the sea bed with baited hooks at intervals, and used for cod, halibut and ling (Kennedy, 1954) must have intensified and made more efficient the deep water fisheries. Cutting (1955) also mentions that the monks of Tynemouth, Farne and Holy Islands used to send salted and smoked haddock caught locally to London by sea.

Conclusions

It appears that there was a significant deep water fishery operating from the vicinity of Lindisfarne in the medieval and post-medieval periods. Because of the island's proximity to the port of Berwick, such fish may have been purchased and eaten fresh. The gurnards, conger eel, and smaller flatfish may be the produce of small scale fishing operations from the island itself on a non-commercial basis; certainly their remains are present in very low numbers.

Other species present in low numbers were important food fish, and Defoe (1724–6) mentions salmon caught on the Tweed as one of the chief trades of Berwick. It was sent to Shields for curing and pickling before being sent to London. However it is only represented by a single vertebral centrum. Similarly eels were an important food source to those close to rivers and estuaries, and could also be stored in live-in ponds. But the fish identified suggest a general preference or dependence through all periods for the white fish or a deeper water fishery supplemented by local inshore activities using traps, fine nets and lines. The only species that may have been caught further down the coast is turbot, which Defoe records as being of three quarters of a hundred weight and being of exceeding fine flesh when new in Scarborough; turbot were also salted (Cutting, 1955).

THE BIRD BONES

Enid Allison

A total of 432 bird bones were recovered from the site. As is generally found on occupation sites, the majority of these belong to the domestic fowl and domestic goose. Where possible, measurements were taken on the bones of these species but the sample was too small to make presentation of the data worthwhile. It can, however, be obtained from the author on request.

The wild species represented are those which may be expected on Lindisfarne, sea birds being predominant. Crane is the least likely species to be encountered in the area nowadays as it is now only an occasional visitor to this country. It was much more common in the past, however, and its remains have been recovered from many archaeological sites so its occurrence here is not particularly unusual.

It is possible that all the species, with the probable exceptions of the raven, jackdaw and gulls, represent food debris but no definite conclusions can be reached on this as the number of bones involved is very small and some bones may merely be chance inclusions. No bones of small birds were recovered. This may be because sieving was not carried out on the site.

THE ECONOMY

D. J. Rackham

The wide range of marine resources exploited by the inhabitants of the site in all phases is still reflected by a part of the community on the island today. The collection of molluscs and crustaceans for food and probably bait for line fishing occurred in all phases and it is apparent from the fish remains (see above) that this was a major part of the island economy. Much of the fish, mussel and crab caught and collected today are for commercial markets, and with Berwick-upon-Tweed only a few miles north, it is probable that part of this aspect of the economy has always been commercial, not just for subsistence. The large area of tidal sands, mudflats and marsh on the landward side of the island, besides providing a habitat for the mussels and cockles, is a haven for large numbers of water fowl and wading birds. Although few individual finds of these birds were made (Table IV) a fairly wide range of species was recovered, most of which are still common in the area. A few bones of seabirds were found and although it is unlikely that these would have been caught or trapped, species such as the guillemot, razorbill and little auk are often blown to land by storms and gales and are easily captured when exhausted.

Whales from occasional strandings probably account for the bones in this sample. Such strandings are traditionally exploited by island communities where no claimant is present for the crown, bishop or other authority. Seals may well have been commercially exploited. Today the local seal populations are protected but

culls by commercial organisations still attempt to keep the numbers at a certain level. The hunting and clubbing of old and young seals during the breeding season on the nearby Farne Islands could well have been a significant seasonal commercial resource and apart from the meat and oil, the skins, particularly of the pups, would have been in demand in all periods.

The area of the island is small and much of it dunes, but the southern end has over a square kilometre of pastoral land. This area probably had sufficient stock carrying and arable capacity for the whole population of the island at least in the medieval and early post-medieval periods, but in more recent times the island has become less isolated, especially with the building of a causeway across the tidal flats which permits access by vehicle for a few hours each day, and the need for self-dependence is no longer important. It is not possible to say whether the cereals or cattle, pig and sheep bones represent island or mainland stock, but the former would seem to be most likely for all phases except the most recent. The slaughter of numbers of sub-adult sheep perhaps suggests that the flocks were more important for meat than wool, a pattern of husbandry possibly more likely on the island than the mainland.

Although a large variety of remains that give an insight into the economy of the site in all periods has been recovered, the information does not permit us to assess the relative importance of each and can only be considered in the general way discussed above.

ACKNOWLEDGEMENTS

We should like to thank R. Jones (Ancient Monuments Laboratory) for the processing of the mammal bone data on computer at the Ancient Monuments Laboratory and K. Pennick, R. Brunini and Mrs. C. Young for their assistance with the processing of the soil samples and other material. We should also like to thank Mr. A. Wheeler (British Museum, Natural History) for his help and comments, and the use of his reference material.

The Other Finds

TILE, BRICK AND FIRED CLAY

A very small amount of tile and brick were recovered (12 fragments). All were from Phases 6 and 7, with the exception of one tile fragment from Phase 4. It was not always possible to distinguish between forms; three fragments were certainly of brick and seven were floor tile. Two small chips could have been either.

In view of the very small quantity of material present it seems most unlikely that the brick and tile were used in a primary context on the site. They may have come from somewhere in the vicinity; the late medieval ovens in the priory are lined with brick and the priory would also provide an appropriate context for the tile. Both

brick and tile are almost certainly imports to the island. Although there is far too little material for any definitive statement, both are comparable to material from Newcastle upon Tyne (Harbottle and Ellison, 1981, 171–2).

The brick fabric has a close textured clay matrix with abundant clay pellets and ironstone. The thickness of only one fragment (6·1 cms [113]) could be established.

Two of the floor-tile fragments showed traces of surface glazing; the upper surfaces of other fragments were usually very worn, however. The glaze now appears as a dark, rather matt reddish-brown. The undersides had the characteristic "emery-board" surface caused by laying the unfired tiles on sand; and the sides had the usual bevelled edges. Tile thickness could be established in six cases, and ranged from 2·0–2·5 cms. One additional fragment, interestingly the only tile fragment from an earlier Phase 4 context (139), was much thinner than this, only 1·5 cms thick. It showed slight curvature and a very sharp bevel and could be a piece of roof furniture.

Tile fabrics were by no means uniform, but given the very small number and size of fragments, a detailed analysis is not justified. The largest piece had abundant and very large (*c.* 1 cm) ironstone inclusions; vegetal inclusions predominated in another fragment. More usually, the clay matrix was tempered with moderately abundant, medium quartz, sparse ironstone, calcareous material, and rare mica. In addition to the tile and brick, there was a handful of fragments of red fired clay, possibly from a hearth or furnace lining. Again these were all from post-medieval contexts, Phases 4, 5, 6 and 7. The fired clay consisted of soft, formless lumps, with much vegetal tempering; one fragment showed part of a possible hand impression. They were presumably the consequence of some industrial activity in the area.

*THE CLAY TOBACCO PIPES

David Higgins

The 1977 excavations recovered a total of 125 pieces of clay tobacco pipe (Table XI) covering the last three phases of site use. The presence of a single stem fragment in 92S must be considered as contamination. Many of the contexts with pipes contained only stems, but an indication of their dates has been given, showing that although site use continued until the 19th century, the emphasis lies in the 17th and 18th centuries. Although few pieces are more closely identifiable they are of some interest when considered properly as a tool for dating. The individual pieces have been dealt with below but the dating can be summarised as follows:

Phase 5 contained three contexts with pipes. The bowl in 134 indicates a date in the early 17th century. The other stem fragments found in this phase are consistent with this date, and suggests that Buildings A and B did not go completely out of use until the early 17th century. None of the pipes in Phase 6 are demonstrably later than *c.* 1750; and the earliest date is provided by the stamp in 107. This can be no later than 1739, and may well pre-date 1725, when Parsons (1964, 245) considers

* Author's note: this report was completed in 1980.

TABLE XI. Catalogue of pipes.

Context number	Bowl fragments	Stem fragments	Interpretation
1	–	8	17–19c.
2	6	7	Bowls *c.* 1850–1910, most of stem 17–18c. residual
5	–	16	Probably all 17c.
6	–	1	Late 18–19c.
8	–	2	17–18c.
9	1	2	John Thompson stamp, 17–18c., stem
18	–	10	17–18c.
22	2	24	Lozenge stamp (HW?), 17c. burnished stem, part of 17c. heel and bowl of *c.* 1640–60. Stem 17–18c.
29	–	2	17–18c.
31	3	7	Crown and MP marks, heel bowl of *c.* 1650–60, 17–18c. stem
36	1	–	18c. rosette mark
40/45	–	3	17–18c.
47	–	2	17–18c.
48	–	7	18c.
57	–	1	17c.
65	1	–	*c.* 1680 bowl fragment
67	–	3	17c.
83	–	3	17–18c.
92s	–	1	18–19c.
106	1	6	17c. bowl fragment, 17–18c. stem
107	–	1	PAR—stamp
113	–	1	17c.
125	–	1	Lozenge stamp
134	1	1	Bowl *c.* 1640–60, 17c. stem

this form of marking ceased. The evidence of garden usage continues until *c.* 1910 after which date pipes cease to develop and circulate as a recognisable archaeological artefact.

The pipes follow the general development outlined by Parsons (1964) although certain aspects, such as the origin of the lozenge stamps, are questioned. One piece, a 50 mm length of 17th-century stem from near the bowl, has an all over burnish. Although it is the only example of this finishing technique it indicates that quality pipes were in circulation. Quite a number of the pieces are burnt which possibly indicates domestic rubbish since broken pipes seem to have been thrown into the hearth. None of the bowls exhibit internal crosses. Apart from three fragments of large rounded 19th-century bowls in 2, a fragmentary 17th-century heel in 22 and a 17th-century bowl in 106 all other pieces have been illustrated.

ILLUSTRATIONS

Fig. 13:1 Common bowl type of *c.* 1850–1910 copying the new briar form (2).

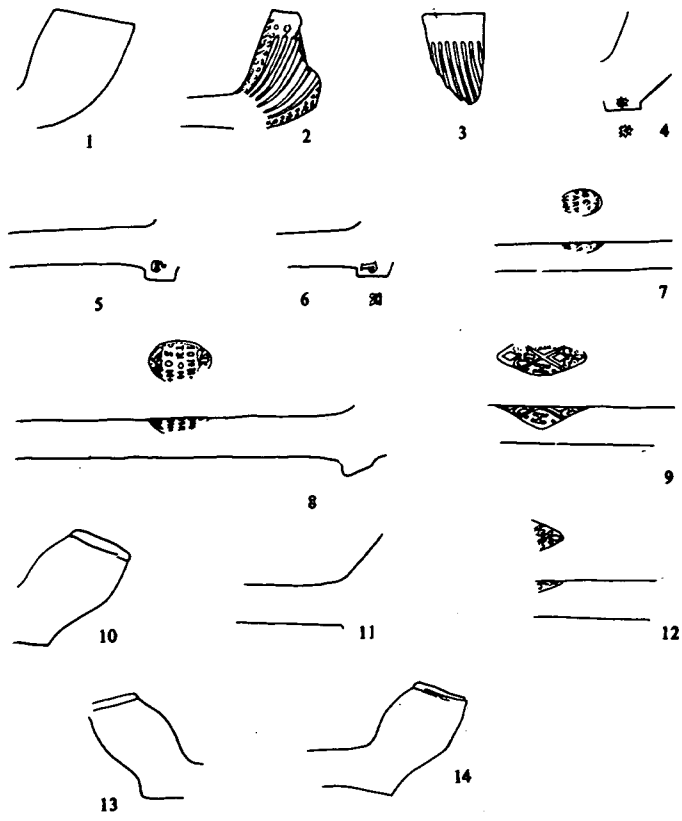

Fig. 13. The Clay Pipe.

Fig. 13:2 First half of 19th century, with rather coarse fluting, leaf and dot decoration. The spur, which would probably have been marked is missing (2).

Fig. 13:3 Later 19th century fluted fragment with much finer and more clearly defined decoration (2).

Fig. 13:4 *c.* 1710–40 moulded symbol mark. This is a typical London mark and may be the result of coastal trade, although there is a possible local precedent for it at West Whelpington (Belcher, 1970, Fig. 34, 10). Parsons (1964, 247) notes it as a north-eastern type (36).

Fig. 13:5 *c.* 1710–50. Another symbol mark found both in London and the north-east. There would have been a second crown on the reverse, now missing (31).

Fig. 13:6 *c.* 1710–40 marked MP. Although a standard form of marking in the 18th century this could belong to Michael Parke of Gateshead, working 1691–1737 (Parsons in Oswald, 1975, 169). If so it demonstrates the change from stamped marks to moulded initials which took place in the first quarter of the 18th century (31).

Fig. 13:7 Heavily burnt stamp making it hard to read but the surname seems to begin PAR–. It almost certainly belongs to one of the Parkes of Gateshead (Parsons in Oswald, 1975, 169/70), all of whom worked before 1739. Parke stamps are well known in the north-east being recorded from Durham (Carver, 1974, 148), Belling Law (Jobey, 1977, 25) and West Whelpington (Parsons, 1964, 248) (107).

Fig. 13:8 John Thompson stamp on a pipe which seems to have only a partially moulded spur. This maker is also well known in the north-east and was stamping pipes by 1680 (Parsons, 1964, 234). There were three makers of this name (Parsons in Oswald, 1975, 170) but the earliest, working *c.* 1663–90, seems most likely for this pipe. Belcher (1970, 275) also attributes a stamp to this maker. It is interesting that this stamp is very lightly impressed on the right hand side, a feature noted by Jarrett (1960, 239), and perhaps therefore diagnostic of the first John Thompson. Examples of similar marks have been found at Newcastle, Durham and West Whelpington (Jarrett, 1964, 258) (9).

Fig. 13:9 Quartered lozenge stamp with maker's initials. The stamp is not the normal way up, since the stem taper shows it faces away from the smoker. Although a number of similar marks are recorded there is some confusion over their interpretation. Parsons (1964, 240) considers they are a Yorkshire mark, but suggests a London origin based on a note by Oswald (1960, 50). This has led Belcher (1970, 276) to suggest Yorkshire and London makers for the West Whelpington pipes. Both of these alternatives seem extremely unlikely since the London marks are different in style and date and none of the papers on York or Hull pipes show any lozenge fleur-de-lys stamps. In fact of the pipes Belcher discusses nearly one third are of this type, which of itself should suggest a local production. The second initial in the Lindisfarne example is almost lost, but the angle of the line suggests a W. Oswald (1975, 77) illustrates an HW lozenge stamp from Newcastle. Parsons (in Oswald, 1975, 178) records a Henry Walker at Gateshead from 1674–99 who is the only HW so far recorded in the area and has ideal dates for this type of mark. It is therefore suggested that these pipes form a group belonging to the north-east, and that some may have been produced at Gateshead (22).

Fig. 13:10 Plain heel bowl in the London style of *c.* 1650–60 (31).

Fig. 13:11 Part of a later 17th-century bowl, *c.* 1680 (65).

Fig. 13:12 Part of a lozenge fleur-de-lys stamp. Although it is not possible to tell if this is the same as 9 it is worth noting that this stamp is also facing the bowl which starts 25 mm from the end of the stamp (125).

Fig. 13:13 Plain heel bowl in the London style of *c.* 1640–60 (22).

Fig. 13:14 Plain heel bowl in the London style of *c.* 1640–60 (134).

Copper Alloy

This report includes all objects which could be identified as to type.

Ringed pin (Fig. 15:1) The simple round-sectioned shank is complete, the ring fragmentary. The head is socketed to hold the loose ring, the ends of which

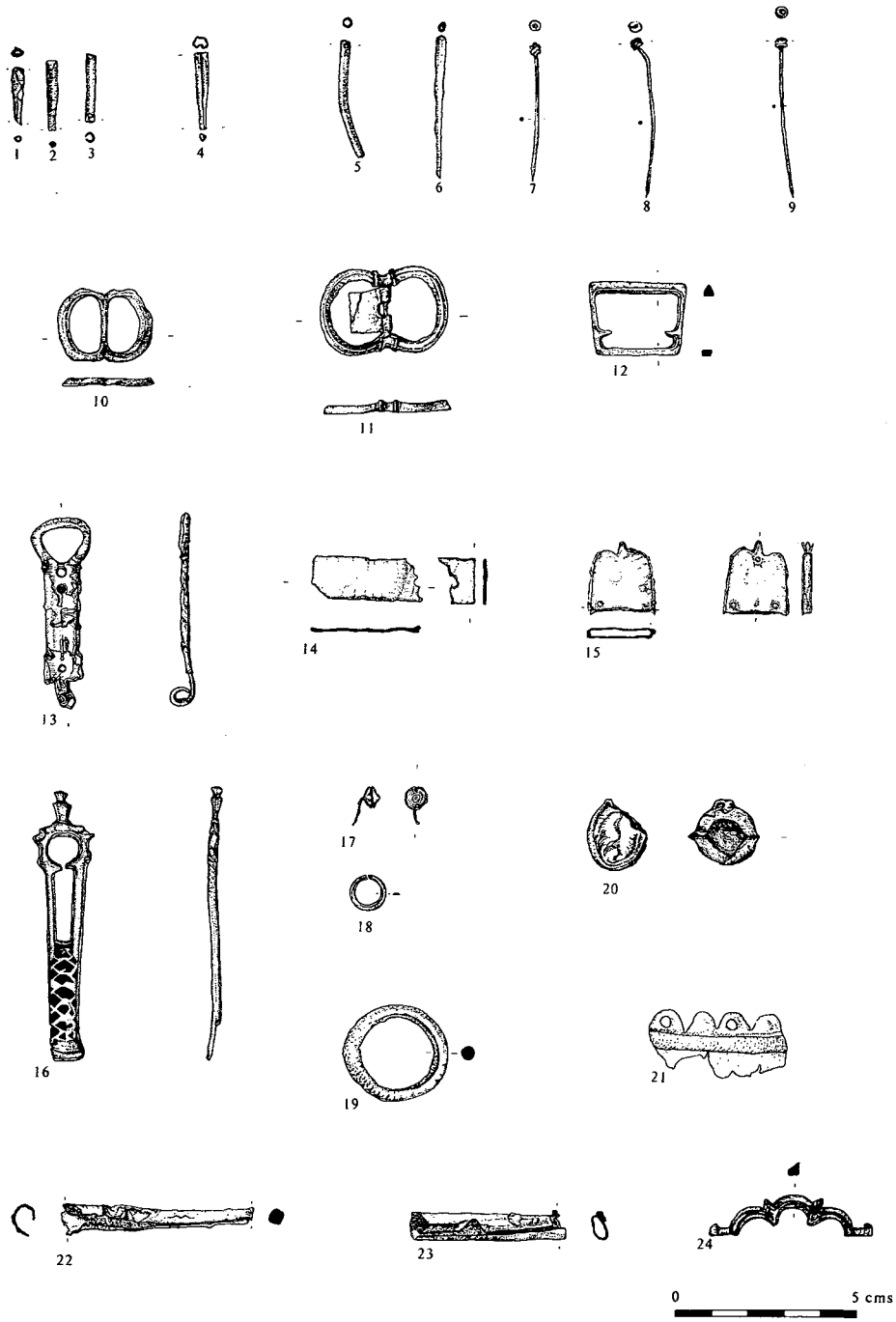

Fig. 14. Copper Alloy Finds.

taper to fit inside the ring. The pin head is undecorated and damaged but was probably of simple loop-headed or knob-hinged type (Fanning, 1983, 326, Type 2 or 3).

This pin type is commonly attributed to the Early Christian period in Ireland (*c.* 5th to 12th centuries). In Britain the pins are more usually found in Viking contexts of the late 10th and 11th centuries, for example, at Balladoole and Ballateare on the Isle of Man (Bersu and Wilson, 1966, 43, 62). The Lindisfarne pin was unfortunately residual in a later medieval pit. In view of the strong connections which the early monastery maintained with Ireland in the early period of its existence, it is preferable to attribute it to the pre-Viking period, rather than to the 10th and 11th centuries when the monastery was abandoned; but it is a secular item and could be dated to the later period. L: 8·6 cms (of shaft). Diam: 1·2 cms (of ring) (164/246).

Dress Fittings:

Lace Tags (Fig. 14:1–5) Fifteen examples from nine contexts, in Phases 3–7 were found. The complete examples measure between 1·8 cms and 3·2 cms, the majority measuring between 2·1 cms and 2·6 cms. Four tags have tiny (›0·2 cms) paired holes at the upper end (Fig. 14:5). One tag has diamond-patterned tooling (Fig. 14:4) as on an example from Northampton (Oakley and Webster, 1979, CU 288, 261, 263). Lace tags are among the commonest copper alloy artefacts found on medieval and post-medieval sites. The examples illustrated are representative of the types found on Lindisfarne. (Fig. 14:3 (35), Fig. 14:4 (92), Fig. 14:5 (46).

Pins (Fig. 14:7–9) Two types of pin were found, one with a coiled wire head, the second with a small flat head. There were only two examples of the latter (not illustrated), both from recent contexts. There were also four pins without surviving heads. The seven coiled-wire headed pins were all of Oakley Type H1 (Oakley and Webster, 1979, 260). These have a pointed shaft with an attached head, made of two twists of wire of the same thickness as the shaft, wrapped around the top. Pin lengths range from 3·1 cms to 5·6 cms. The pins were found only in post-medieval or recent contexts. A headless shaft (Fig. 14:6) may be from a pin but is more probably the end of a needle. Fig. 14:6 (35), Fig. 14:7 (50), Fig. 14:8 (35), Fig. 14:9 (200).

Buckles Four small buckles were found, two from recent, two from post-medieval contexts.

Small double buckle (Fig. 14:10) with D-shaped loops, cast in one piece. The reverse is flat, possibly with some traces of textile adhering. A parallel for the form is illustrated in Ward-Perkins (1940, pl. LXXVII, no. 8 "from London"). L: 2·55 cms. W: 2 cms (46).

Small double buckle (Fig. 14:11) cast in one piece, of slightly convex form. The central bar is a separate pin, with part of the buckle-plate surviving. The plate is a folded strip with a rectangular perforation for the tongue. The loops are D-shaped, and there are raised mouldings at each end of the central bar. L: 3·35 cms. W: 2·15 cms (max.) (24).

Trapezoidal buckle (Fig. 14:12) with internal projections for strap attachment. Medieval parallels can be cited for the form, e.g. at King's Lynn (Geddes and Carter, 1977, Fig. 130 no. 13) stratified to *c.* A.D. 1280–1380; and Southampton (Harvey, 1975, no. 1725, Fig. 240) stratified to *c.* A.D. 1300–1350. L: 2·1 cms. W: 1·95 cms (221).

Small buckle (Fig. 14:13) with buckle-plate cast in one piece. The loop is heart-shaped, and there are three small holes aligned down the centre of the plate, and narrow raised mouldings at the end, at the point of the loop. The front of the buckle preserves traces of gilding. A tang projects from the end of the plate, and is coiled over to form a loop on what is presumably the front of the buckle. The buckle appears to have been cast and subsequently re-worked A. Goodall (1981, 67; Fig. 66:1) illustrates a comparable piece from Grenstein, Norfolk "of uncertain date". This has a rounder loop, only two plate-perforations and a shorter, flat tang. The form seems to be rather more common in iron; I Goodall (1981, 67; Fig. 131 nos. 268–71) illustrates a number of examples. L: 4·35 cms. W: 1·55 cms (max.) (113).

Buckle plates: The remains of three possible buckle plates were found, all from Phase 6. Two are not illustrated (50, 81).

Flat rectangular plate (Fig. 14:4) of sheet metal with small, rectangular perforation. The plate is cut across at the holed end, presumably subsequent to its use as a buckle plate. L: 3·7 cms.

Strap Fittings

Small badge-shaped strap-end (Fig. 14:15) consisting of two thin flat sheets riveted together at the apex and upper corners. Traces of leather survive within. A similar strap-end was found at the Austin Friars, Leicester (Clay, 1981, Fig. 48 no. 29). L: 1·9 cms (max.). W: 1·6 cms (8).

Cast strap-end (Fig. 14:16) decorated with inlaid enamel in diamond-shaped fields, on one side only. The lower half of the strap-end is of moulded openwork design, with a knop projecting from the end in two stages. This piece is from a post-medieval context, and is probably of post-medieval date (John Cherry, pers. comm.). However, some quite elaborately decorated strap-ends, or belt-chapes, as they are sometimes described, are recorded from medieval contexts, or more frequently, depicted on effigies and brasses (Ward Perkins, 1940, Fig. 84). No close parallels for the form and decoration can be cited. L: 7·4 cms. W: 1·7 cms (185).

Other items possibly relating to dress:

Tiny convex stud (Fig. 14:7) with central conical projection. It appears to be attached to the convex backplate by means of a fine wire. The central space contains traces of leather. Studs of this type are known from both medieval and post-medieval contexts elsewhere, e.g. at Newcastle in a late 14th to early 15th century context (Harbottle and Ellison, 1981, 176, no. 451, Fig. 38) and at

Sandal Castle in a late 15th or early 16th century context. (A. Goodall, 1983, 135). However, they do not usually survive with the backplate attached, and are usually of simple dome form. This stud would presumably have been attached to a leather jerkin, or even a belt. It may be medieval but does not come from a well-sealed context. Diam: 1·3 cms (139).

Small flat ring (Fig. 14:18). This is possibly a chain-mail link; it is of flat section, with a sight gap. Diam: 1 cm. W: 0·15 cm (of ring) (173).

Circular bronze ring (Fig. 14:19) of irregular, flattened oval section. This is not a finger ring; it may be part of a simple buckle or brooch. Diam: 2·75 cms. W: 0·45 cm (or ring) (162).

Small rumbler bell (Fig. 14:20) of sheet metal, badly corroded. It is composed of two separate semi-spheres, and an attachment loop at the top. The corroded iron "pea" adheres internally. Small bells of this type were sometimes attached to clothing and are common finds in both medieval and post-medieval contexts; for example at Sandal Castle (A. Goodall, 1983, Fig. 1, no. 39) in a context of *c.* 1106/1130–*c.* 1240, at Southampton (Harvey, 1975, 255; Fig. 240, no. 1711, no. 1725) in early 13th and early 14th century contexts, and at Basing House (Moorhouse, 1971, 59, Fig. 25 no. 163) in an early post-medieval context. Circumference: 2 cms (max.) (222).

Not illustrated: a semi-sphere with a dumb-bell opening, possibly the lower half of a larger bell. This is probably of recent date. Diam: 3·9 cms (20).

Miscellaneous bindings, fittings and mounts

Bindings

Ornamental binding strip or hinge (Fig. 14:21), fragmentary. One side has a lobed edge; alternate lobes are pierced, presumably for rivets. L: 3·8 cms (90).

Tube of sheet bronze (Fig. 14:22), broken at one end. The other end is folded under to form a blunt point. The object is not unlike a lace-tag but is much larger. L: 5·2 cms (max.). Diam: 0–6 cm (max.) (139)

Tube of sheet bronze (Fig. 14:23) in fragmentary condition, held together by paired pins. It is slightly flattened. The pins are visible on one face only. L: 4·2 cms (max.). Diam: 0–6 cm (159).

Not illustrated: three further fragments, possibly of binding strips of curved or hemispherical section, were found in post-medieval contexts ([163] and [154]).

Small cast ornamental handle (Fig. 14:24) possibly of a small drawer. A close parallel for this item can be cited from the Oil Mill Lane site, Berwick-upon-Tweed (Hunter, 1982, Fig. 9). The Lindisfarne handle is from a recent context, and was thought to be a modern find; however, the handle from Berwick, which is slightly larger, has been dated to the late 14th century. L: 4·5 cms (35).

Also not illustrated: copper alloy washer (60), copper alloy staple (169), three fragments of cast metal, possibly vessel fragments (46, 113, 189) miscellaneous and unidentifiable fragments from various contexts, Phases 3–7.

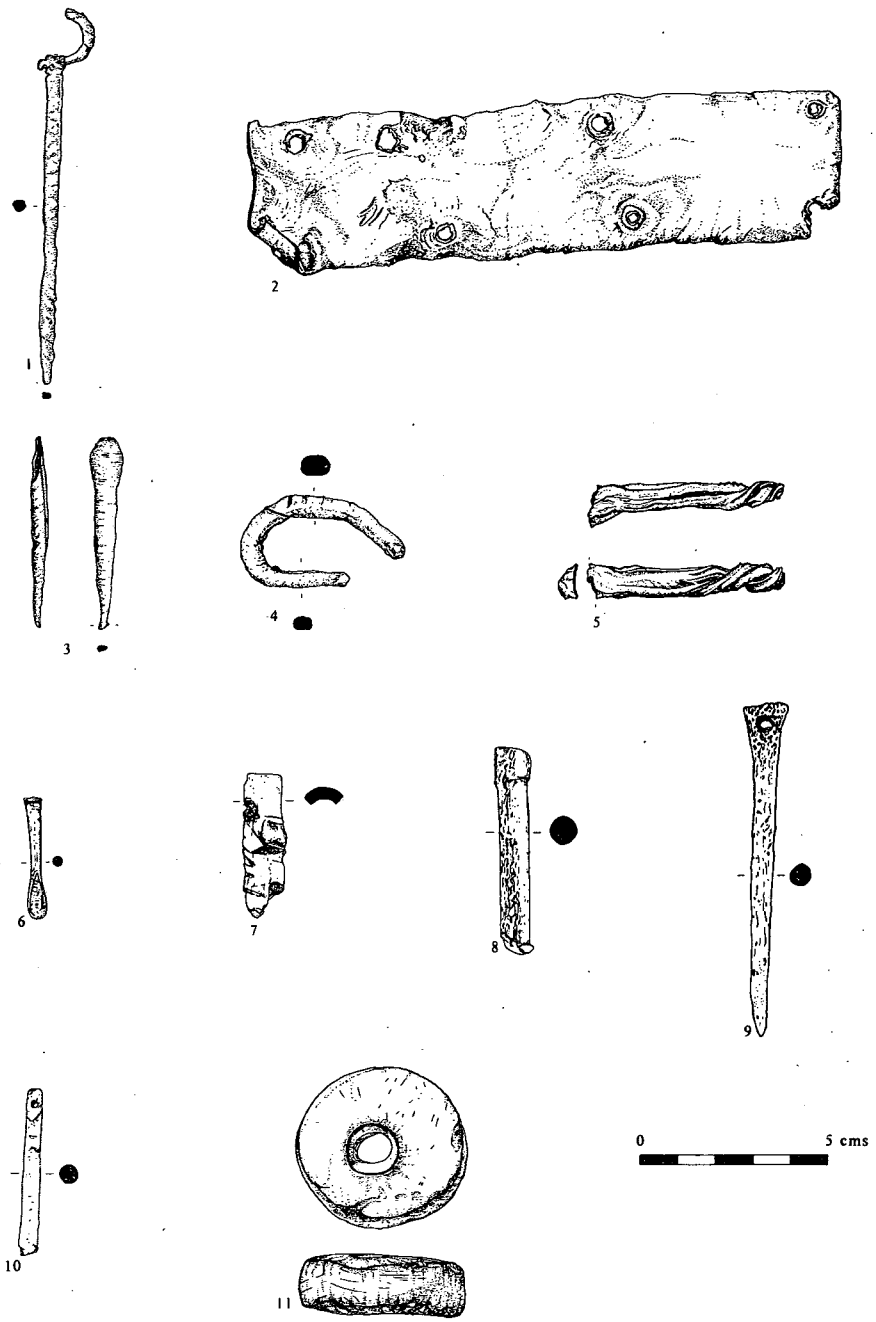

Fig. 15. 1: Copper Alloy, 2–5: Lead, 6–10: Worked Bone, 11: Chalk.

Lead Objects

Only a small number of lead artefacts were recovered, and the published list is the entire collection. They are from contexts in Phases 5, 6 and 7, but some at least are probably residual.

Strip of roofing-lead (Fig. 15:2), with four perforations along each side. Around the perforations, the upper surface preserves the impression of round-headed, square-sectioned nails. The perforations are irregularly paired except at the corners, and are not all of identical size, but this may be due to subsequent distortion of the piece. L: 15·6 cms. W: 4 cms (35).

Lead point (Fig. 15:3) square sectioned, with a flattened, curved end. The tip is slightly curved, and crushed. The object looks like some kind of tool, but in this material would seem improbable. L: 5·1 cms (43).

Curved lead rod (Fig. 15:4) oval in section, with sheared, pointed tip. The piece resembles a hook, but such a function seems unlikely in lead. Stress cracks occur below the apex of the hook, on the external surface. L: 4·1 cms. Diam: 0·5 cm (42).

Twisted window came (Fig. 15:5) much flattened and distorted but originally of rectangular section. It is presumably residual, and from the parish church or priory. L: 5·3 cms (22).

Not illustrated: amorphous melted sheet fragment (163).

Worked bone objects:

Only a very small quantity of worked bone was found, from Phases 4, 6 and 7. The published list is the complete collection.

Small spoon or ligula (Fig. 15:6) with narrow, ovoid bowl. The length of the shank is determined by the length of the original bone, which is probably from a domestic fowl. L: 8·5 cms (20).

Decorated handle fragment (Fig. 15:7). The decoration consists of two raised, faceted bands with diagonal cuts on one face. The mark of a rivet-hole, and a small fragment of rivet, are visible on the same face. L: 3·8 cms (46).

Handle (Fig. 15:7) of oval section, undecorated except for the expanded end, broken at the attachment, and partly damaged at the other end. The surface is abraded. L: 9 cms (46).

Pin or bodkin (Fig. 15:9) complete, with smooth polished surfaces. This type of implement is found in both pre-conquest (Wilson, 1983) and early post-conquest contexts (e.g. Harvey, 1975, 271) on many sites and is not closely datable, but could be an early type. L: 4·75 cms (46).

Needle (Fig. 15:10) with a small perforation, broken at both tip and head. A similar, though rather more complete example, comes from Wharram Percy (Andrews, 1975, Fig. 70, no. 35). L: 4·75 cms (46).

Chalk object

Spindle whorl (Fig. 15:11) possibly unfinished, with slightly convex surfaces; the central perforation is angled and not perfectly central to the disc. As chalk is

not local to the island, this piece must have been imported; the nearest possible source is the Yorkshire Wolds. Chalk spindle whorls are known from medieval contexts at Wharram Percy (Andrews, 1979, 125–6; a 14th or 15th century context) and elsewhere (e.g. Bedford, Baker, Baker, Hassal and Simco, 1979, 267). Many examples are ornamented although this one is plain. Diam: 5·1 cms (1).

Iron Objects

A total of 156 iron objects was recovered from the excavation. All of these were x-rayed but only a small number were then conserved. The iron was not usually in good condition, and the objects were mostly studied from x-rays; the illustrations are based on these except where objects have been conserved. The great majority of the ironwork (109 pieces) consisted of nails, or fragments of nails. The remaining items consisted of a number of unidentifiable lumps and fragments, some of which may simply have been concretions; and those objects which could be identified as to type, which are catalogued below. It is possible that a small number of objects identified as nail shanks in fact come from other types of artefact such as hinge pivots or staples but lack distinctive characteristics.

Nails

The types of medieval and post-medieval nail have been frequently illustrated, and none of the Lindisfarne examples have been drawn for publication. A full catalogue of all items is kept in the site archive. Most types are represented in the assemblage. Only one nail can be certainly identified as a clench-bolt (91) although a couple of fragmentary nails with large heads and broken shanks could have been clench nails. All nails are typically rectangular or square in shank section. Lengths of complete examples range from 9 cms to 2·4 cms. Heads, where present, are usually round or oval, flat or slightly raised. A number of headless nails, and horseshoe nails, are probably also present, but the poor state of preservation of the material makes detailed analysis impossible. Nails occur in all phases of the site, from Phase 2 onwards.

TOOLS

Knives and blades

Where an object is fragmentary it is not always possible to decide whether or not it is from a knife; some pieces (e.g. from 158 below) could be from shears or scissors. All certain knives are of the whittle-tang variety, and would have been inserted into handles of other materials. All come from post-medieval contexts, but could equally be of medieval date.

Whittle-tang knife blade (Fig. 16:1) with swage on upper edge. The cutting edge is too fragmentary to determine the shape of the blade. The blade has a v-shaped section. The tang has a rectangular section, and is broken off just beyond the end of the blade. L: 9 cms (22).

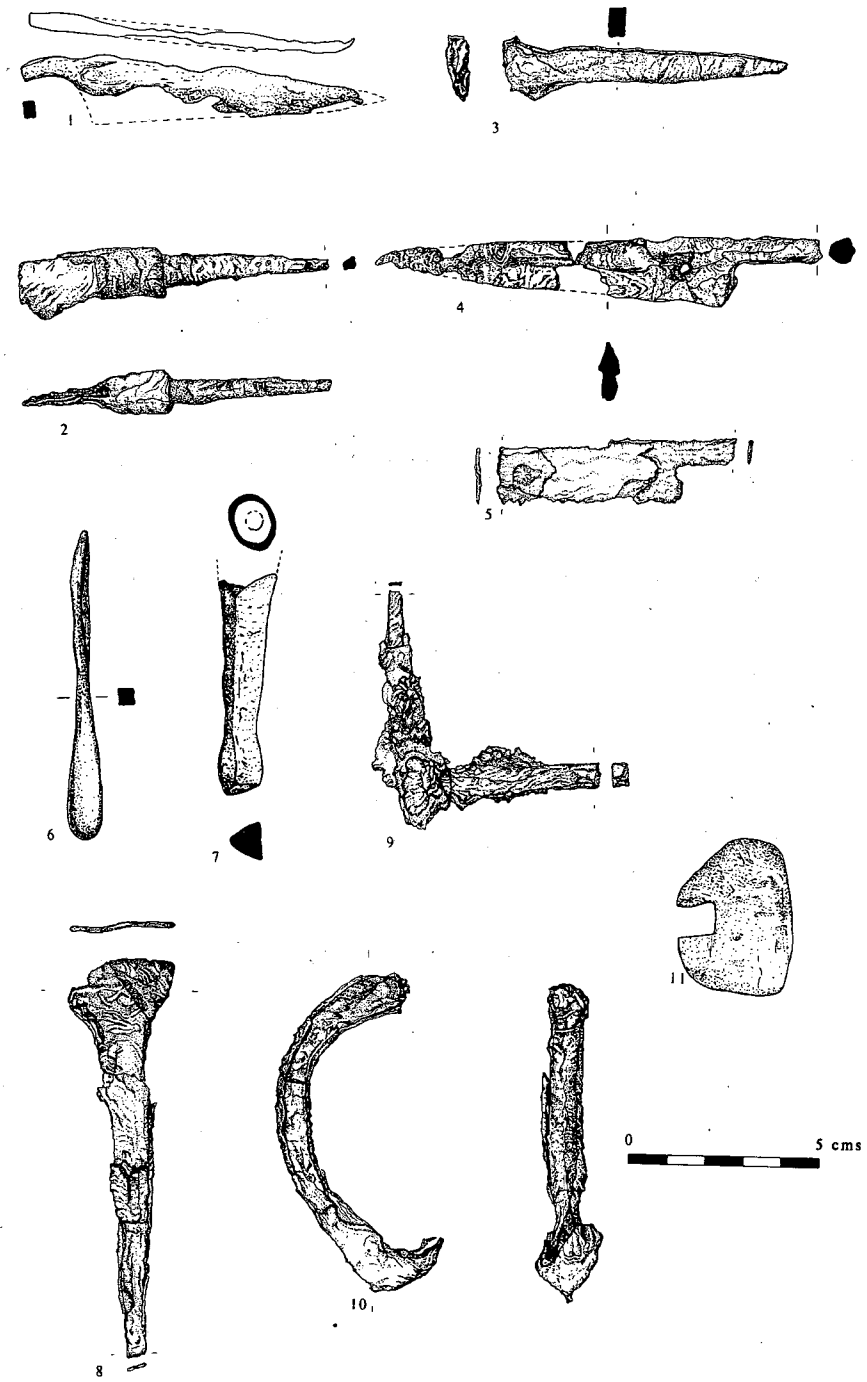

Fig. 16. Ironwork.

Whittle-tang (Fig. 16:2) with fragment of knife blade attached; the junction between the knife and tang is reinforced with a collar of round section, tapered towards the blade. L: 8·3 cms. L: 4·4 cms (of tang) (40).

Whittle-tang (Fig. 16:3) broken off at the point where the tang starts to expand to form the blade. The tang is of rectangular section. L: 7·4 cms (172).

Blade, probably from a pair of scissors (Fig. 16:4) the tang is of rounded section. The complete form of the blade is discernible in x-ray, although the tang is broken. The blade is a narrow, triangular point, pierced 1·1 cms from the broad end by a small (0·3 cm diam.) rivet-hole, presumably for the pivot. L: 10·1 cms (total). W: 2 cms (of blade, max.) (231).

Fragment of saw-toothed blade (Fig. 16:5), with a saw-toothed edge, and a flat fragment of tang, broken at both ends. L: 6·1 cms. W: 1·3 cms (of blade). W: 0·7 cm (of tang) (185).

Not illustrated: three possible blade fragments (113, 142, 158).

Other Tools

Socketed, pointed implement ?tracer (Fig. 16:6) with round socket and solid triangular point, broken at top. This is presumably an engraving tool of some kind. L: 8·8 cms. Diam: 1·4 cms (of socket) (8).

Spoon bit (Fig. 16:7) of I. Goodall Type 1 (1980, 27) with a terminal tending towards the tapering rather than the lanceolate form. This example is at the small end of the size range. Both of these factors make it a rather uncommon type. L: 9 cms (139).

Tool (Fig. 16:8) of uncertain function, almost complete. The implement consists of a long pointed tang, with an expanded, broad, probably curved fine chisel edge, damaged on one side. It is possibly a leather or woodworking tool but no close parallels can be cited. L: 9·3 cms. W: 3·3 cms (estimated, of blade) (169).

Door/Structural Fittings

Hinge pivot (Fig. 16:9) complete but much corroded, with rectangular section. L: 5·5 cms (pointed side), 5 cms (blunt side) (162).

Not illustrated: broken hinge pivot (143).

Staple (Fig. 16:10) curved rectangular-sectioned rod, bent and flattened at one end. This may be a bent and broken rectangular staple with a curved back. Goodall has interpreted a number of similar pieces as staples (I. Goodall, 1980, 1, 102–3). L: *c.* 12 cms (estim.) (231).

Plate fragment (Fig. 16:11) with broken, rectangular perforation. This could possibly be part of a hinge, but is too fragmentary for a certain interpretation. L: 4·7 cms. W: 3·5 cms (139).

Locks and Keys

Key (Fig. 17:1) with broken bow and complete but much corroded stem and bit. It is of Goodall Type H (1980, 1, 151) with a solid stem and hollow tip, and is almost certainly of post-medieval date. L: 5·4 cms (5).

Not illustrated: corroded bolt of barrel padlock (223).

Bindings

Curved strip (Fig. 17:2) broken at both ends, with axially placed hole for rivet attachment. L: 5 cms. W: 2 cms (max.) (162).

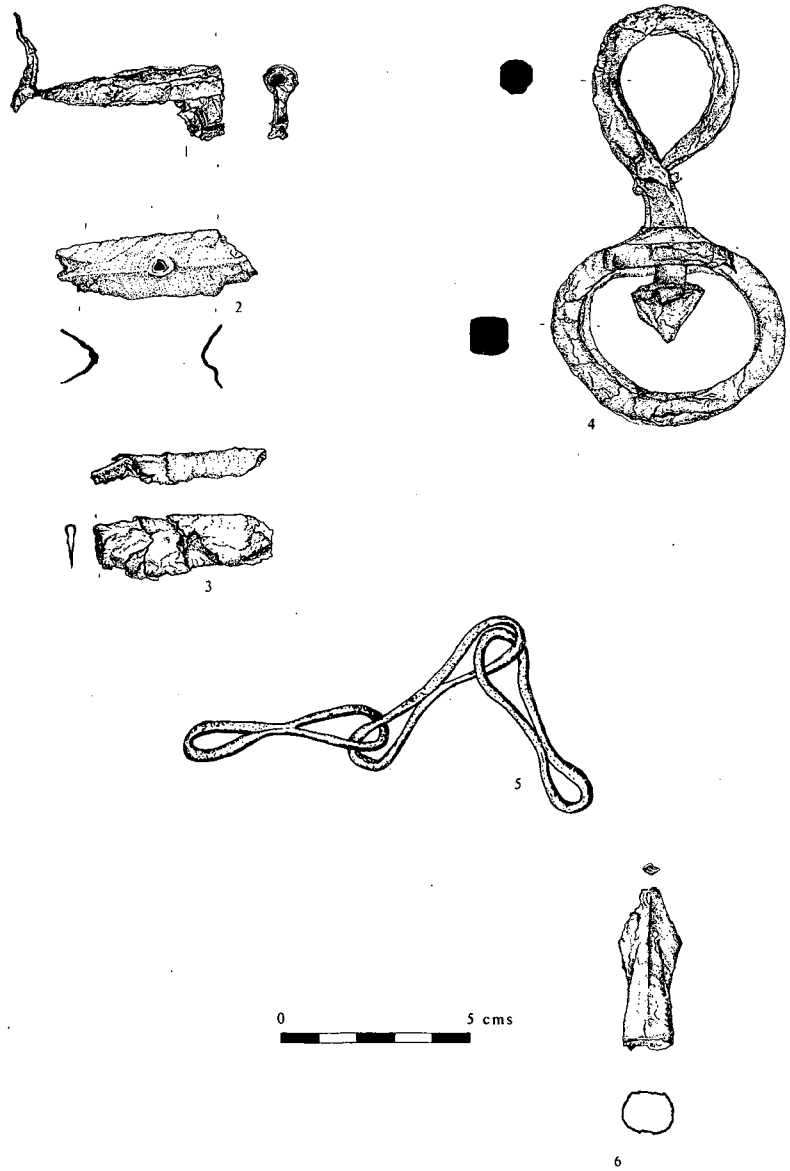

Fig. 17. Ironwork.

Folded strip (Fig. 17:3) much corroded, broken at both ends, one possible rivet hole on side. L: 4·7 cms. W: 1·2 cms (235).

Other Finds

Swivel-hook and ring (Fig. 17:4) complete. A comparable example was found at Goltho, Lincolnshire in a late Saxon to late 14th or early 15th century context (I. Goodall, 1975, 87). L: 11 cms. W: 6·1 cms (236).

Chain fragments (Fig. 17:5). These chain links were much fragmented, but at least three conjoined links were apparent. They were of the usual medieval figure-eight type. L: 5·6 cms (of individual links) (222).

Socketed Arrowhead (Fig. 17:6) with round, hollow shank and lozenge-shaped point. London Museum Type 9 (Ward Perkins, 1940, 66–7). A group of comparable examples from York was found in contexts of the early 13th century (Addyman and Priestley, 1977, 139). Arrowheads of this type are generally dated to the 13th and 14th century. L: 4 cms. Diam: 1·2 cms (of socket) (182).

The Coins (not illustrated) identified by Marion Archibald (British Museum).
Three coins were found but none was useful for dating purposes; the Anglo-Saxon coin occurred residually in a medieval pit.

1. *LSF 77 (234)*
   Eadberht of Northumbria, 737–757/8
   Penny (so-called "sceatta")
   Obv: .EA ð BERhTVΓ around small cross pattée in centre; no inner circle.
   Rev: Animal to right; no additional motifs in field.
   Wt: 0·36 g Die axis: ↗ (if: ⌐ ·◇).
   Ref: Booth type A (Booth, 1984).
   Dies: The reverse die is so worn that it cannot be identified. The obverse die is also worn but more detail survives and it does not match any of these in Booth's *corpus*. It would appear to be an unrecorded obverse die.
   This coin is the most northerly recorded find of any of the Northumbrian coins of animal type and the only one from north of the Tyne. Even allowing for the effect of corrosion, this coin appears to have been worn when deposited. It is unlikely however to have survived the decline in silver content of the Northumbrian coinage, and so was probably deposited before *c.* 790 at the latest.
2. *LSF 77 (5)*
   Contemporary forgery of a halfpenny of George III dated 1775.
   Wt: 6·55 g.
   These forgeries were produced in very large quantities at the end of the 18th century. They give themselves away by their style which, although it is a good attempt to copy the originals, is just not that of the official issues. Also their weight is low compared to the genuine pieces. In the present case, the die-axis follows the prototypes in being, as normal, inverted.

3. *LSF 77 (5)*
SCOTLAND
Charles I, 1625–49.
Twopence ("turner") of Third Issue 1642, 1644 or 1650 (date illegible here).
Obv: Cr crowned.
Rev: Large leaved thistle.
Wt: 1·73 g (heavily corroded).
Ref: (Stewart, 1967).

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