Archaeological excavations at Castle Sween, Knapdale, Argyll & Bute, 1989–90

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ABSTRACT

Excavations at Castle Sween, in Argyll & Bute, have thrown light on the history and use of the castle from its construction, c 1200, to the present day. A forge and kilns are evidence of industrial activity prior to 1650. Evidence for ranges of buildings within the courtyard amplifies previous descriptions of the castle. The excavations were funded by Historic Scotland (formerly SDD-HBM) who also supplied a grant towards the publication costs.

INTRODUCTION

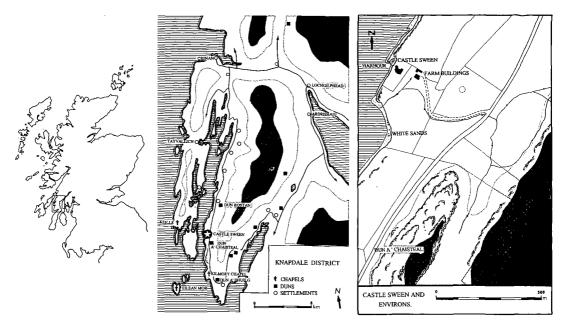
Castle Sween, a ruin in the care of Historic Scotland, stands on a low hill overlooking an inlet, Loch Sween, on the west side of Knapdale (NGR: NR 712 788, illus 1–3). Its history and architectural development have recently been reviewed thoroughly by the RCAHMS (1992, 245–59). The castle is there demonstrated to have five major building phases dating to c 1200, the early 13th century, c 1300, the 15th century, and the 16th–17th century (illus 3). The core work of c 1200 consists of a small quadrilateral enclosure castle. A rectangular wing was added to its west face in the early 13th century. This wing was rebuilt about 1300, and a circular tower with latrines on the ground floor was built on to the north-east corner of the enclosure in the 15th century. All these structures survive well, with walls standing to a considerable, if incomplete height. There is also evidence for the former existence of east and west ranges within the enclosure.

The Castle Hill (illus 2) is a rocky, stepped outcrop, which itself comprises the interface between two distinctive rocks: hornblende schist and calcareous phyllite. The numerous bays and inlets along the west coast of Loch Sween feature natural terraces, those around Castle Sween offering extensive scope for occupation, be it settlement or cultivation. Today the tiered ranks of caravans adjacent to the castle pay testament to the continued attractions of this spot.

There is, however, no upstanding evidence of contemporary structures outwith the castle walls. The township of Castle Sween is recorded in 1693, when it possessed five tenants and a mill, and in 1685 Neil McNeill of Castle Sween is recorded as having been robbed of cattle to the value of £33 (Fraser 1964, 51). Pieces of millstones have been recovered from 14th-century contexts within the castle, and it is reasonable to assume that a mill was then in existence on the burn to the east, now silted and overgrown.

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ILLUS 1 Location Map. (Based on the Ordnance Survey map © Crown Copyright)

The castle dominates the entrance to Loch Sween, and conceivably it formed part of a network of strategic seaboard fortresses, under the sway of the MacSweens, maintaining control of important sea lanes, from Kintyre to the mainland. Its immediate importance as a maritime centre was enhanced by its proximity to a gently shelving sandy shore, suitable for the beaching of galleys. A natural inlet, artificially improved to form a small harbour, is of indeterminate date, although it is likely to have been in use until relatively recently. There is no reason to doubt that it would have been exploited during the occupation of the castle, its proximity to the west tower probably allowing the hoisting of material from a boat at high tide. A crude breakwater has been constructed at some stage and the presence of a quantity of bloomery slag (used as ballast) amongst the shingle may suggest the presence of boats in more recent times.

The castle takes its name from Suibhne, the ancestor of the MacSweens, who lived in the late 12th and early 13th century, and Suibhne himself may be supposed to have been the builder of the enclosure castle. Sometime in the second half of the 13th century, Knapdale passed into the possession of the Stewart Earls of Menteith and, although the details remain obscure, MacSween influence declined as the power of the Stewarts was extended in the area. Sir John Menteith held Castle Sween in 1310, when Edward II of England granted John MacSween and his brothers their ancestral lands of Knapdale. This may have led to the 'tryst of a fleet against Castle Sween' recorded in a poem in the Book of the Dean of Lismore, which in turn probably resulted in the alterations to the castle at its north-west corner. After the death of Sir John Menteith in 1323 the Lordship of Arran and Knapdale passed successively to his son and grandson. In 1376, half of Knapdale, including the castle, was added to the possessions of the MacDonald Lords of the Isles, granted by Robert II to his son-in-law (John I, Lord of the Isles). After the first forfeiture of John II, Lord of the Isles in 1475, the castle was given into the custody of the Earls of Argyll and it remained with the Campbells until recent times. The castle is thought to have been captured and burnt by Alasdair MacColla (Montrose's lieutenant) in 1647 (RCAHMS 1992, 259).



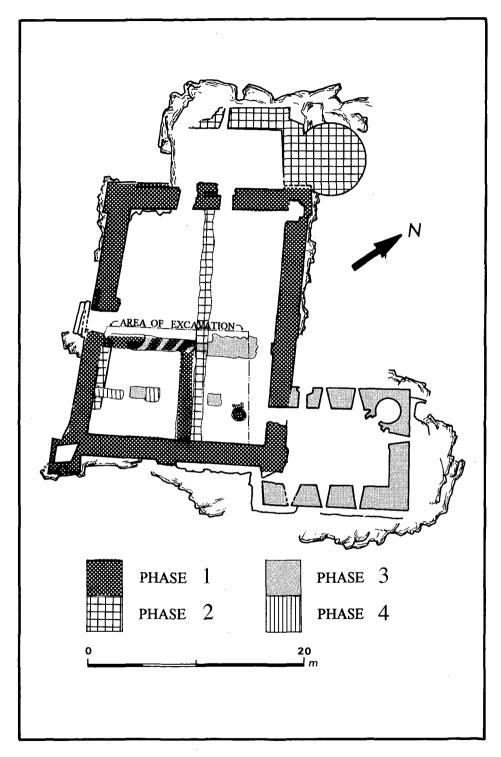
View of Castle Sween from the north-west

THE EXCAVATIONS

The excavations were undertaken in conjunction with a major programme of consolidation which began in the mid-1980s. They were intended to assist Historic Scotland (formerly SDD-HBM) in formulating plans for landscaping and laying out the interior of the courtyard of the castle for visitors. As part of that process, it was necessary to identify the deepest archaeological deposits within the courtyard. Most of the archaeological input was concentrated towards the east side of the courtyard (Area I), where deep stratified deposits were discovered. Elsewhere in the courtyard exposures of bedrock militated against deep archaeological deposits, although there appears to be build up towards the north of the area. The latter, though not apparently as deep as on the east of the site, should be acknowledged as archaeologically sensitive. A small second trench (Area II) was excavated towards the centre of the courtyard enclosure, confirming that the interior originally featured expanses of weathered bedrock as a surface. The following report concentrates exclusively on the findings of Area I and, specifically, the sequence of industrial structures dating from the 13th to the 17th century.

Five main phases of activity were recognized in the excavations as follows: 12th – mid-13th century; late 13th – early 14th century; early 14th – 16th century; 16th – mid-17th century; and mid-17th – 20th century.

These five phases of stratified deposits and structural remains do not correspond exactly with the four phases of upstanding structural remains described by the RCAHMS (1992, 245-59), where an architectural account of the castle is given in greater detail.



ILLUS 3 Principal phases of occupation and rebuilding

PHASE 1: 12TH - MID-13TH CENTURY (ILLUS 4)

Levelling and water supply

The most conspicuous structural evidence of the earliest medieval occupation of the site is the stone curtain wall of the enclosure castle. The earliest archaeological deposits found in association with it were successive dumps of sands and gravels, used for levelling the interior.

A deep deposit of clean white sand (F131) was located towards the north-east corner of the curtain wall enclosure. This sand was up to 1 m deep, appeared to have been quarried from the neighbouring bay, and probably extended along the entire inner face of the east curtain. The limits of the fortress were laid out and built directly onto bedrock, the interior then being filled in with sands and gravels of which F131 is the deepest and earliest deposit.

The dumped sands encountered at the lowest levels in Area I ranged in colour from an almost white, fine-grained variety, towards the north of the trench, to darker, browner deposits south of wall F014 (the south wall of the Phase 2 north range). The range in colour and coarseness doubtless reflects various quarry sources, but also the contamination from occupation within the compound over its long history. Significantly, Phase 1 and 2 features (with the possible exception of the well) were found to cut or overlie the sandy dumps directly with hardly any evidence of solid, metalled or paved areas, apparently indicating that the surface within the early castle was simply sand and bedrock. Moreover, the limited extent of occupation contamination on the sands (as distinct from the effects of the later industrial complexes) suggests that use of the eastern half of the enclosure was limited. A localized deposit of undisturbed natural till (F239) was identified at the base of the Phase 2 robbed wall trench (F128). This showed no sign of any occupation surface, suggesting that the Phase 1 curtain wall was not built over an earlier structure.

Within Area I the earliest structure revealed was the stone-lined well. This feature had recently been consolidated, emptied and covered with a metal grille, which unfortunately destroyed some of the evidence for the relationship between the well-shaft construction and the sandy levelling. This is problematic because the shaft appears to predate the sandy dumps. The absence of any cut against the sand could be seen as evidence that the shaft was built first and the sand back-filled around it. Perhaps there was already a well or spring in use prior to the castle's construction.

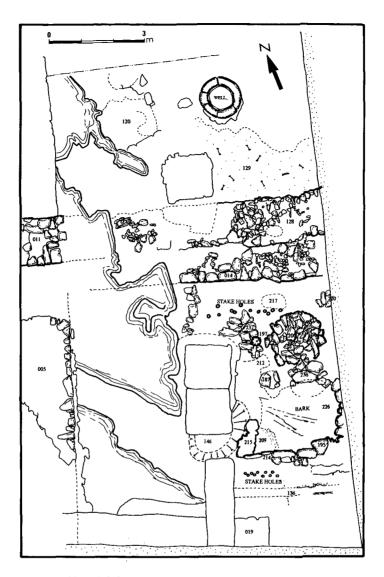
An early east range?

Area I is effectively divided north/south by the robbed remains of Phase 2 wall F128, immediately south of which was an expanse of wall, or wall footings (F014), truncated by F128 and thus apparently predating the associated north range. Structurally wall F014 is crudely built of random rubble, partially mortar and earth bonded. It is, however, fairly likely that the mortar, which is localized at the surviving south face of the wall, represents repair, as both the fill of wall F128 and the remains of wall F014 saw extensive reuse during Phase 4. Only the south face of the wall survived, the north edge having been obscured by wall F128, but wall F014 could have been up to 2.5 m wide, appreciably more than wall F128, albeit of rather less sophisticated construction. Wall F014 had no foundation trench, the masonry being merely laid over the redeposited levelling sands in the F130 series. Only one or two courses of the south face survived, formed by unworked but fairly regular blocks retaining a core of jumbled smaller stones, mostly large beach pebbles.

Such a rubble wall could have formed part of a substantial building within the courtyard, a building which was largely robbed away and succeeded by the Phase 2 north range. Extensive restoration of surviving masonry and the short extent of wall F014 prevents accurate interpretation.

Hearth

Lying towards the extreme north-west of Area I a hearth (F120) was found. It predated the levelling in advance of the Phase 2 north range. This feature was of simple construction. Its position, utilizing a recess in the bedrock. and the general spread of debris around it, suggested domestic usage, although within what building is unclear. Structurally the hearth was unspectacular, being roughly rectangular (1 m by 1.42 m) and delimited by a few



ILLUS 4 Phase 1 & 2 structures

pitched stones to the north. Long use had resulted in the discolouring of the sand and bedrock. To the north of the hearth and running out under the north section of Area I were several spreads of burnt deposits (F121), apparently the rake-out from the fire.

Phase I dating evidence

Dating evidence for any of Phase 1 is rather limited. It is dependent on the architectural assessment of the date of the original enclosure castle and the stratigraphical relationship of the Phase 1 deposits with succeeding ones. In these circumstances Phase 1 activity can be assigned to the 13th century. This date would be appropriate for a sherd of pottery recovered from F222, one of the primary levelling deposits.

PHASE 2: LATE 13TH-EARLY 14TH CENTURY (ILLUS 4 & 5)

The north range

Prior to the recent excavations, various sections of masonry exposed within the curtain wall by clearance work were consolidated, unfortunately obscuring crucial relationships which might have thrown more light on the complex sequence of buildings within the courtyard from Phases 2-4. The structural evidence for the north range, therefore, consists of: a surviving fragment of wall (F011); the upper part of its east gable where it projects above the curtain wall head; and a section of robbed wall (F128).

Wall F011 amounted to no more than a short stump of masonry aligned east/west, which was later incorporated into wall F010 (to form the west wall of the Phase 3 east range). Wall F011 had been roughly cut back to an overall length of only 1.3 m, and the wall fabric, where visible, consisted of flat stones at the base, laid directly onto the bedrock, rising an average of four courses (0.7 m) and bonded with distinctive fine-grained white mortar.

Visible in the inner parapet of the east wall walk is the upper section of the east gable of a major stone building with a pitched roof, aligned east/west (see RCAHMS 1992, 252). The presence and general extent of this range had already been convincingly assessed prior to the excavations, but with the discovery of wall trench F128 its line and date were confirmed.

The wall trench F128 proved to be deep and straight-sided, cutting through Phase 1 levelling sands (F130 etc.) and following the same alignment as wall F011. The trench was 6.42 m long and an average of 1.3 m wide; its fill, however, reflected two obvious phases. First, the cutting had acted as a foundation trench for a substantial stone wall which may have stood in excess of 8 m high and, second, as an awkward void, left once the wall had been robbed out, and which had to be backfilled. Illus 6 shows the limits of the primary cut down to bedrock and its initial fill, essentially a couple of very large boulders set in compacted clay and sand, used to level the bottom of the trench prior to wall construction proper. At a later date the trench was backfilled with a mix of angular rocks in a patchy matrix of clay and mortar. This deposit, though containing voids, was strikingly solid, demonstrating the thorough preparation for the Phase 3 east range, necessary on such unstable ground.

Significantly, despite the great size of the south wall, running for at least 10 m and standing to a height in excess of 8 m, it was not bonded or tusked into the face of the curtain wall. It was only at roof level that the fabric of the north range was built over that of the Phase 1 enclosure. This fact also allowed for the almost complete removal of the north range without substantially affecting the earlier wall lines, thus minimizing the effect of drastic replanning within the courtyard.

Outside the north range were some isolated patches of metalling (F125, F111, F235 & F030) and household refuse (F127 & F119). With an extensive scatter of animal bone, charcoal and shell. The animal bone, particularly from F119, was quite distinctive in comparison with the rest of the bone assemblage, being very clean and dry. This may have been the result of boiling the bones or due to the scouring effect of lime-rich water leaking through the mortar dumps above, onto the buried scatter. Neither surfaces F127 or F119 were very deep, and they do not appear to represent intense or lengthy occupation within the limits of the north range.

Industrial building

Two metres south of Phase 1 wall F014, and generally east of Phase 3 and 4 masonry F015 and F016, were the truncated remains of an industrial structure. Despite later intrusions, extensive evidence survived of both the form and structure of the building, the range of features within it, their active use and their abandonment. This structure stood alongside the north range. The building itself was of timber construction and may either have been open or have had a porch on its west side. The north and south walls were tied into the face of the east curtain and were represented by numerous stake-holes. Both north and south walls ran for only 3.8 m before disappearing as they hit either exposed bedrock or later masonry, but both appear to reflect the interwoven fabric of wattle walling, with the stakes lying in a zigzag pattern, the holes only 0.1–0.15 m apart. It is also clear that these walls were not loadbearing, the roof being supported by offset uprights with crossbeams ultimately tied back into the east curtain wall face.

The evidence for this was most obvious in the north wall, where two well-defined post settings (F220 & F217) were found with packers and stone bottom, lying just outside the wattle wall, and aligned with two crude recesses in the east curtain face. The uppermost of these recesses stood 5 m above the interior ground surface of the building suggesting a minimum roof height in excess of 3 m. The south wall appears to have had some sort of slot (F136) in addition to the offset uprights and wattle construction, which may have held a sleeper beam, or more likely acted as an eavesdrip. The two-tiered aspect of the timber frame as suggested by the recesses within the east curtain appears therefore to indicate a building with wattle infill, aligned east/west and probably with a pitched roof, generally parallel to, and 1.85 m south of the north range. The entrance was probably from the west and there would have been no upper floor due to the intense heat from the hearths (below). This factor also probably necessitated the fairly lofty construction and possible open west wall.

The forge

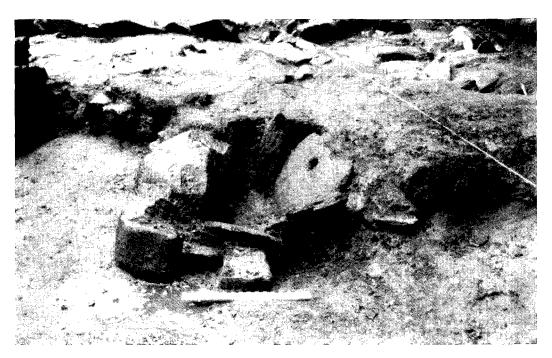
Within this timber-framed building extensive evidence of a complex industrial process was revealed below the levelling dumps laid in advance of the Phase 3 east range. The Phase 4 kilns, however, had cut into the Phase 2 interior, leaving five 'islands' of surviving deposits within the north and south ends of the building. The focus for the activities within the structure consisted of four variously heat-affected simple stone structures, lying towards the north-east of the building. Two of the group appear to have been forging hearths (F236 & F237), the third formed a roughly circular pad or hard standing (F200) where a bellows for operating the two hearths might have been sited, with the fourth a small stone-lined pit (F187) (illus 5). Two other features are identified as the remains of a box for quenching forgings in water (F215) and a pit for supporting an anvil block (F146).

Hard-standing F200 This simple structure was buried by a succession of fine ashy, crusty deposits (F113 & F142) with an overall depth of 0.2 m, deepest towards the middle of stone setting F200. Their similarity and the way they were gradually built up, each successive dump spreading out over a wider area, suggests they were the last of a series of raked-out deposits from the adjacent hearths. This material was latterly allowed to accumulate and was compacted into floor deposits, each characteristically having a crusty surface or lens over soft ash. These levels proved to be rich in finds ranging from silver coins to iron blades. The range and quality of the objects is striking, especially given the small area they came from. It is probable that the finds do not reflect the primary use of the structure but rather some late activity fairly close to its abandonment.

Stone setting F200 itself consisted of angular random blocks of various stone types, set in orange-coloured sand to create a rough slabbed surface, roughly circular, c 1.25 m in diameter. A recycled broken quern was found in its fabric (SF 48). F200 had not been heated and the only accumulations originated nearby, but not over it. The most likely interpretation is that it was a hard standing designed to support the bellows used with the two adjacent hearths.

Hearths F236 and F237 F200 lay between two hearths, F236 and F237, the former due south of F200 and sealed by an ashy spread (F208). It was truncated to the south by kiln A (Phase 4). The surviving remains comprised four large schist slabs, set in dirty grey sand, bounded by more irregular blocks to the west, all of which showed signs of intense heat-cracking and splintering on the stones. It covered an area 0.9 m east/west and at least 1.2 m north/south. Hearth F237 lay west of F200 and was less regular than F236, although constructed of similar stones. It too had been damaged by a later intrusion (F150, the construction trench for Phase 3 pillar base F015) and showed a similar degree of heat towards the centre. It survived over an area 1.1 m east/west by 1.3 m north/south and was clay bonded rather than set in sand. In addition, hearth F237 was complemented by a well-defined pit (F197) within which there was a small stake hole towards one side. The pit measured 0.15 m north/south by 0.2 m east/west and was 0.19 m deep, with hardened, crusty inner faces, suggesting that it and its stake saw use alongside the hearth.

Pit F187 (illus 5) Immediately west of hearth F236 was a small pit, little more than a small, squared stone setting within which heated material was deposited. Three of the edges of this feature were defined by pitched flat stones (two of which were fragments of a quern, SF 45) creating slightly battered sides around a basal interior of 0.34 m by 0.2 m. In addition, two small stake-holes (F203 & F204) were found, cut against the floor of the pit and lying towards the south side of the feature. They were angled broadly parallel with the battered sides of the pit. The feature itself contained a series of deposits (F188) sealed by a capping of hard white ash and charcoal, which in turn sealed pale creamy yellow-brown clay. The main fill was a deposit of charcoal over a white ashy layer. The floor of the feature (F206) proved to be a fired clay surface impregnated with ash and charcoal flecks. This was the uppermost few centimetres of a substantial clay-rich deposit (F228), which appears to have absorbed heat generated within the



Tillus 5 Crucible F187 from south

pit. Below the clay was a series of sands and grey clay deposits (F229), showing little or no sign of burning or heat action. This appears to have formed the bedding for the stone sides of the pit.

Immediately north of the pit was a shallow scoop (F212) truncated by Phase 4 kiln activity (F184). It was basically straight sided (0.3 m north/south by 0.27 m east/west) and was infilled with a series of tipped sandy and ashy deposits (F211). The latter were very similar to the accumulated ashy material over hard standing F200, and so pit F212 was arguably an open feature, possibly lined, the lining of which was robbed out before back filling. As with F200, material was allowed to accumulate over an increasingly wider area and thus found its way into adjacent pits and hollows. Only a small fragment of primary floor survived in the vicinity of the hearths. This deposit (F208), representing the working floor of the area, consisted of finely laid successive layers of heated sand around the edges of hard standing F200.

The 'box' Towards the southern limits of the forge a short section of a pitched flat stone alignment was revealed, running east/west, interpreted as the remains of a box for quenching forgings in water. Despite later truncation by Phase 4 activity this feature appeared to delimit a series of distinctive deposits integral to the use of the forge. Structurally, the most distinctive element was a large pitched slab (F215) laid against a bank of stone and clay (F195) within which a series of deposits had accumulated. The latter were ultimately sealed by a dump of greenishyellow clay (F213) which heralded the conversion of the area to the Phase 3 east range. There were in all three deposits, or series of deposits around slab F215: a dump of creamy white-coloured lime-rich material (F209), to the west of which was a spread of bark (F226). The latter might represent either fuel or, more interestingly, partially burnt timbers. The way the material was deposited was suggestive of sizeable and relatively straight spars or posts, the upper surfaces of which were destroyed in situ. Partially sealing dumped lime F209 was the last in the series of spreads associated with the use of the complex, a dump of sandy clay (F225) some 0.8 m deep.

Pit F146 The last main element in the forge complex was the pit F146, a large, sub-rectangular, slightly tapering hole c 1.6 m square at its top. Stratigraphically it sits within the active life of the forge, backfilled immediately before Phase 3 building, and it is interpreted as the pit for supporting an anvil block. The upper fill comprised heavily burnt stones with clay and charcoal adhering (F182), possibly ripped out of the hearths when the forge was decommissioned. One of the stones appeared to be a millstone fragment (SF 47).

After the forge fell out of use domestic debris was allowed to accumulate over its floor. Several artefacts were found in these deposits. The range of objects, plus the scattered debris of the abandoned building, may imply a hasty and chaotic end for the forge.

Elsewhere, evidence of Phase 2 occupation is limited to isolated patches of metalling outside the forge and north range. These vary from cobbles (F235) to distinctive lime bedded pebbles (F125, 222), infilling cracks and crevices in the exposed bedrock to the west of Area 1, and in the area of the wall head stair (F019).

The best dating evidence for Phase 2 is provided by two coins recovered from F113, rake-out from the hearths spread over the hard standing (F200). The coins are an Edwardian sterling and a penny of John Balliol (SF 27 & F28), both assessed to have been lost by c 1330. Phase 3 is dated by a Robert III groat (SF 32), lost c 1430, from a cobbled surface (F073). None of the other finds from Phases 2 and 3 can be closely dated, but since the F113 rake-out is likely to represent an accumulation from the end of the forge's use we might suppose that these coins effectively date the interface between Phases 2 and 3.

PHASE 3: EARLY 14TH - 16TH CENTURY (ILLUS 8 &9)

The east range

The radical and abrupt change in use in the east area of the courtyard is reflected by the levelling of residual features, the robbing of redundant masonry and the retention of certain structures that could be recycled. The south wall of the Phase 2 north range was in part robbed out (F125) and partly retained (F011). The infilling of potentially destabilizing pits and trenches was systematic and thorough. Once the voids were infilled, levelling material was brought in, particularly to the north of Area I. In all, seven dumps of mortar and stone were laid over generally sandy deposits, while the compacted and concreted surfaces of the forge were retained. The extensive use of mortar in the process could well be an indication of finished floors, more than mere bottoming, indicative at the very least of more intensive occupation at ground-floor level in the east range than was evident in the Phase 2 north range.

Distinctive amongst the levelling to the north of the area was a considerable dump of loose cobbles at the extreme south of the new range (F073). This material spread back southwards from the residual traces of the south wall of the forge, sealing the stake-hole sequence and raising the general level in the persistently soggy area at the foot of the stairwell F019. A Robert III groat (SF 32), apparently lost c 1430, was found on the upper surface of the cobbles which acted as well drained hard standing in an obviously boggy area.

With the exception of reused walls F011 and possibly F005, the structural evidence for the east range consisted of two large mortared and squared stone blocks of masonry (F016 & F012, illus 9). The west wall of the range was defined by walls F005, F010 and F011: the two blocks lie along the central axis of the complex, 7.2 m apart (centre to centre). There is also a socket in the south curtain, a chase in the east one, and other features in the courtyard walls which indicate the extent of this wing (RCAHMS 1992, 252).

As with the rest of the visible wall fragments, the blocks were heavily repointed in the recent consolidation programme, so it proved impossible to compare the fabric of each and thus confirm they were contemporary. However, circumstantial evidence implies that they were indeed part of the same building programme. They were similar sizes, being c 1.28 sq m and 1.37 sq m (F012 & F016 respectively), and of similar form, being built of random rubble, over a well-defined foundation. In the case of F012 this consisted of a broad irregular platform of mortared rubble (F118) set in a shallow depression within Phase 1 levelling sands. F016 was in turn rafted over disturbed and weakened ground, specifically the backfilled forge pit F146, and although obscured by later Phase 4 intrusions, probably sat in a shallow scoop. Functionally the two stone blocks acted as pillar bases or plinths supporting the main domestic element of the range at first-floor level. Evidence for the latter is also provided by a ragged, deep chase cut into the inner face of the east curtain, running the full length of the wall. Two large and irregular holes in the north curtain wall bear witness to the fact that the east range and the north-east tower were linked at ground and first-floor level, and indeed that access into the tower from the courtyard was via the east range.

Within the surviving interior of the east range only a very few features survived that could be ascribed with any confidence to Phase 3. These consisted of two areas of paving, one robbed out, the other retained for later use in Phase 4. The former (F049) showed clearly as a rectangular dark intrusion, cut against the sands to

the west of plinth F012, measuring 1.14 m by 0.85 m. When excavated it proved to be the shallow bedding trench for robbed paving. The surviving fragment (F013) lay immediately south of plinth F012 and, despite the effects of weathering and exposure during the recent programme of consolidation, does appear to have been heated. However, this phenomenon is more likely to have occurred during the secondary use of the surface during Phase 4, rather than within the undercroft of the east range. Structurally F013 was comparable with the robust build of the Phase 3 works, being well laid, mortar bonded and rafted over the jagged fill of Phase 2 wall trench F128. The mortar types from both were similar, suggesting contemporaneity.

Wall F005 certainly saw use in the east range, despite being one of the oldest wall fragments within the courtyard. This was indicated by the fill of the drain (F044) which ran through the thickness of the wall in a distinctive dog-legged fashion. The inlet to the drain (on the east face of the wall) lay 2 m north of the outlet (in the west face of the wall), the two being linked by a straight channel running diagonally within the wall thickness. Waste water would then flow out of the courtyard via the main entrance in the south curtain wall. Within the fill of the drain, in the area of the drain inlet, was a strap handle fragment of later medieval date, indicating at the very least that the aperture was unblocked, if not fully operational, during Phase 3.

Two large post-holes (F102 & F082) appear to date from this period. They are cut against residual Phase 2 surfaces yet sealed by Phase 4 levels. Their position near the face of the east curtain and the proximity of what resembles dumped or unused mortar, may indicate that they were used to support scaffolding, evidence of repair work to the wall fabric, sometime before Phase 4.

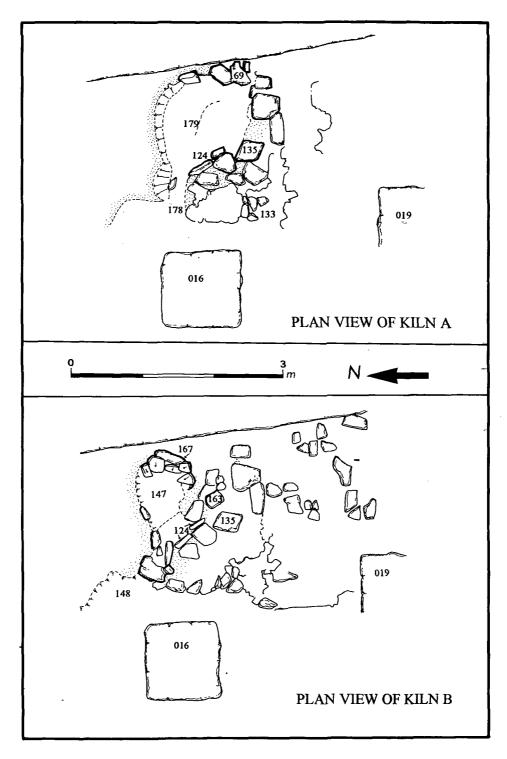
PHASE 4: 16TH - MID-17TH CENTURY (ILLUS 6, 7, 8 & 9)

The final period of occupation on the site, at least as reflected by the structures in the south-east area of the castle courtyard, is characterized by a succession of kilns (A-C), culminating in a complex of associated buildings. The available evidence tends to indicate that they were part of a short, busy period of late activity on the site, post-dating the robbing of the east range, and possibly even the use of the castle as a domestic residence. The destruction of the east range may be coupled with the plans, not necessarily carried through to completion (see RCAHMS 1992, 258), to insert vaulting in the ground floor of the north-east tower. This may have been to improve its defensive qualities, to make it more effective as a towerhouse. The courtyard would now have been an open area - a barmkin - devoid of residential buildings. The later history of the castle does suggest a role more as a secure holding point or storage depot, albeit for military purposes, than primarily a lordly residence. The north-east tower appears to date to the 15th century, and the remodelling with vaulting is thought to date to the 16th or early 17th century. Again, the finds from the excavations are not much help in establishing more precise dating. The interface between Phases 3 and 4 can only be placed as likely to be sometime in the 16th century.

Kiln A (illus 6)

This proved to be the earliest in the sequence of three similarly constructed ovens or kilns located towards the southern half of Area I. The structure was roughly bottle shaped in plan and was cut against the remains of the Phase 2 forge, immediately south of hearth F236. It was formed by the excavation of a rounded pit some 2.5 m in diameter and 0.28 m deep below the existing (Phase 3) ground surface. This hole was then lined on its east and south sides by rounded boulders set in clay (F135 & F169) and the area to the south (ie over the 'box' elements of the Phase 2 forge) was sealed with clay-bonded stonework (F133). It is clear that whereas the Phase 2 floors in the northern half of the forge were sufficiently high to absorb the cutting of the kiln bowl, to the south the levels were raised slightly, and consolidated. There was a narrow flue (F178) leading in from the W, lined with pitched flat stones as was the bowl (F179). The lining of the latter survived only as a short stretch (F124) some 0.07 m long. The flue was 0.8 m long by 0.28 m wide and led into a bowl 1.85 m in diameter. The area at the mouth of the kiln flue was heavily burnt.

While admittedly very little of the original lining of the kiln bowl survived in situ, there was very little sign of burning inside the structure, confirming that the heat source was not within the kiln and that what heat was transferred through the flue was not very intense. The interior of the bowl had a sandy floor, stained variously from black to light brown, but only patchily so. It was slightly mounded towards the centre of the bowl.



ILLUS 6 Kilns A & B



Kiln B from west ILLUS 7

Kiln B (illus 6 & 7)

The successor to kiln A was very similar to it, even reusing parts of the latter's fabric to create a kiln slightly smaller than A. The south side of the earlier bowl was infilled (with F163 & F135) to create a bowl some 1 m in diameter (F147) served by a slightly realigned flue. This flue (F148) was 0.86 m long by 0.14 m wide and was lined with flat stones and also capped with a millstone fragment (SF 39). More of the stone lining of the bowl survived in kiln B, as did more evidence of the heat source in terms of burnt fill (F160). A scatter of clay, ash and charcoal up to 0.5 m deep was found within the bowl, which in turn contained fragments of badly corroded bronze (SF 36). However, as in kiln A, there was little sign of heat action inside the bowl, the burnt sediment being more likely derived from the external fire than processes within the kiln.

Kiln C

Although similar in plan and context to kilns A and B, it was clear that the process reflected by kiln C was both more complex and intensive. This was implied by the intense heat plainly visible on the kiln fabric.

Kiln B was backfilled with a whole series of dumped deposits ranging from clean yellow-grey clay (F123) to sandy loam mixed with midden material and rocks (F114 & F132). The new kiln (F070) was located directly over the backfilled Phase 2 wall F128. It was, however, difficult to untangle the plan of kiln C owing to the massive heat on its surviving stonework. It had a low domed bowl up to 1.42 m in diameter with a pronounced pit where the flue entered the bowl area. This pit (F117) was sub-rectangular in plan, 0.42 m east/west by 0.32 m north/south with a depth of 0.24 m, and immediately west of the pit was a flue (0.85 m long) defined by a few (displaced) pitched stones and capstones. The upstanding fabric of the kiln amounted to a fragment of external face, a short section of crude masonry (F098), much heated and standing a couple of courses high. To the south of the bowl was a confused mass of heat-affected stonework, probably remains of the tumbled roof and sides. It is clear that kiln C was heated from within, possibly using pit 117 in some way with the flue as an air-intake control, which could then regulate the heat within by the use of bellows or by blocking.

One further possible structural detail of the kiln survived in the form of a slot-like depression (F093) within the side of the bowl. This hole appeared, to be integral to the structure and may either represent a robbed-out element or was used in some way to facilitate the control of heat or the retrieval of the product.

The south-east room

This small stone chamber was formed from residual elements of the Phase 3 east range, and from the plinth F016, against the north face of which another similar pad or plinth (F015) was placed. It post dates kilns A and B. Despite their apparent similarity plinths F015 and F016 were not originally both part of the Phase 3 occupation. F015 was clearly secondary to kilns A and B whereas F016 predated them. The most plausible explanation for these two plinths is that together they provided a useful surface in the kiln C process. However, this was short lived as, by the addition of wall F006, and the creation of a door and window, a complete west wall for a room in the south-east corner of the castle compound was formed. The building was completed by a north wall (F008). All the stages identified appear to show a progressive and rather piecemeal building programme, most likely in response to the needs of kiln C. Wall F008 was of very poor construction, particularly in comparison to the massive bulk of plinths F015 and F016, and consisted of clay/soil bonded crude masonry only 0.6 m wide.

The interior of the south-east room, at least during the later phases of its use, was characterized by a hardpacked, heat-affected floor, or more specifically a series of scorched and burnt surfaces against which a mass of pits and depressions were cut. Whereas some of these were non structural, being stone holes etc, many of them were either post pits or shallow bowls or crucibles. It is also likely that all the features were not visible at the same time. The contents of the seven bowls which can confidently be identified do not betray, superficially at any rate, their original use, in as much as the fills were mainly redeposited debris from the immediate vicinity. This material was very mixed and contained charcoal, heated clay deposits, sand, clean clays and stones. Only one of these features proved to be more than a rather amorphous lozenge shaped shallow depression, possibly because it had seen little or no use. The pit in question (F091) was a complex feature with a small rounded bowl (0.22 m diam) linked to a larger pit (0.57 m diam) by a shallow narrow slot. The group was completed by two small stake-holes near the larger bowl, either side of the narrow channel. The layout of this pit group suggests some sort of casting operation.

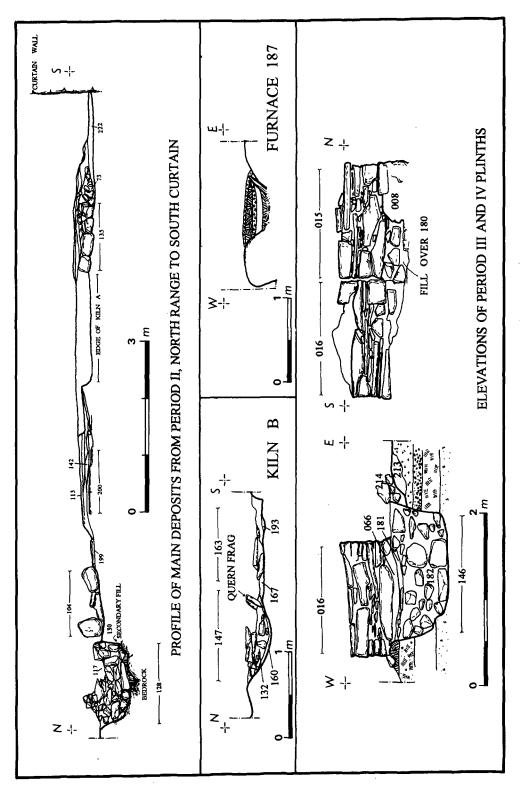
The mass of floor deposits within this chamber proved to be extremely difficult to define. However it is clear that kiln C was in operation at the same time as the use of the south-east room, creating a spread of intensely heat-affected material in its immediate vicinity.

Vestigial laid surfaces were found between the key elements in the kiln C complex. These were probably two-phased, the earliest being a small threshold or platform immediately south of the kiln area (F199) consisting of three large, flat slabs covering an area 0.85 m by 0.57 m. This was later absorbed into a much more extensive surface, almost exclusively made of recycled roofing slates (F031), which formed crude paving between the south-east room and kiln C.

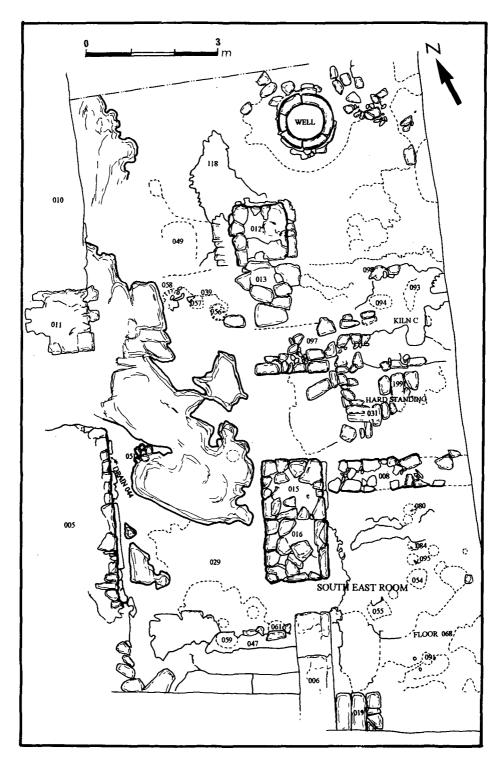
As in the demise of the Phase 2 forge, a wide variety of artefacts was retrieved from the floors themselves and the surfaces immediately sealing them. However, in this case it is likely that some of the objects relate to the occupation of the south-east room. Others no doubt belong with the scatter of debris left after the final occupants of the site had departed.

The timber shed

The third element in the kiln C complex appears to have been a timber shed or lean-to structure to the west of the south-east room. Its presence was identified reasonably confidently through two groups of posts within crude



Elevations & profiles of Phase 2-4 structures ILLUS 8



ILLUS 9 Phase 3 & 4 features

slots, cut against Phase 2 and 3 levelling material. The south wall or southern limit of the structure was defined by a group of three posts lying to the north of the south curtain wall, within a crudely enlarged natural fissure in the bedrock (F047). The posts (F059, F060 & F061) were simply formed by packers rather than individual holes. This post construction technique was echoed by a second slot (F039) with three associated posts (F059, F057 & F056), lying 7.4 m north of slot F047. The chronology of these features is admittedly imprecise, and whether or not they formed part of the kiln/south-east room group is less uncertain.

The dating evidence for Phase 4 activity is rather limited. There is a Charles I turner (SF 13) from F035, associated with the use of kiln C, and it would seem reasonable to suppose that the end of Phase 4, marking the abandonment of the castle, took place in the mid-17th century as a direct consequence of Alasdair Mac-Colla's alleged visit to the place. It might be supposed that all three kilns date to the first half of the 17th century and followed on from a period when this area of the castle was open to the skies as part of a courtyard or barmkin.

PHASE 5: MID-17TH CENTURY - 20TH CENTURY

Since the record made in the late 19th century by MacGibbon & Ross (1889, 58-63), considerable work on the monument has been completed over an extended period. Clearance and consolidation work have occurred on several occasions since the 1930s, culminating in the total repointing of the castle in the mid-1980s. As a result, a variety of intrusions, dumps, turf lines, trenches, fence post-holes and scaffolding post-holes, dating from the recent past, were encountered in Area I. The later status of the site as an 'Ancient Monument' has inevitably affected the archaeological deposits associated with the very last period of occupation. The massively overgrown state of the site when visited by MacGibbon & Ross suggests at the very least that much of the interior of the enclosure was cleared earlier this century, down to level horizons suitable for visitor access. All that survived from those disturbances was a broad spread of rubble-free debris inside and outwith the south-east room. The striking absence of rubble suggests that the site was used as a quarry source from an early period after its abandonment, and the rubble is probably to be found in the 18th- and 19th-century farm buildings and walls nearby.

ARTEFACTS RECOVERED IN 1989–95

COINS

Nicholas M McO Holmes

English (not illustrated)

1 Edward I-II, silver penny of Canterbury, class 10cf (1305 10); 16 mm (vertical), 0.46 g, die axis 11.0. Obv: + ED[W]ARAN[GLDNSh]YB; crowned bust facing. Rev: CIVI/[TAS]CAN/T[OR]; single long cross with 3 pellets in each angle. About one-third of coin missing, to left of bust; surfaces corroded; no more than fairly worn; probably lost by c 1330. SF27 F113 Phase 2, late use and abandonment of the forge.

Scottish (not illustrated)

2 John Balliol, 1st coinage (rough issue) silver penny of Berwick(?) (1292-6); 19 mm (vertical), 0.59 g, die axis c 7.5.

Obv: [+]OIh[A]NNE[SDEIG]R[A]; crowned bust to left with sceptre.

Rev: [+]RE/[XSC]/[OTO]/[RV]M; single long cross with a six pointed mullet in each angle. Reverse off centre; all legend area from 7.5 to 10.5 (obverse) missing; much surface corrosion, giving 'silver plated' effect; probably fairly worn; probably lost by c 1330. SF28 F113 Phase 2, late use and abandonment of the forge.



Illus 10 Excavation of Phase 4 features from south

- 3 Robert III, light coinage silver groat of Edinburgh (c 1400-6); surviving dimensions 20.5 x 22.5 mm, 0.80 g, die axis c 5.5. Obv: +ROBER; crowned bust facing in 8-arc tressure. Rev: +Dn[SP] [T]ECTOR [] [] VILL AEDI nBV RGh; single long cross with 3 pellets in each angle; edge much damaged; some surface corrosion; some flattening; only moderate wear on reverse, and possibly on obverse also; probably lost by c 1430. SF32 F073 Phase 3, cobbled surface.
- 4 Charles I, 2nd issue copper turner (1632-9); 15 x 16 mm, 0.58 g, die axis uncertain. Obv: illegible; crowned [C]IIR. Rev: illegible. Edge damaged at c 8.0 - 10.5 (obverse); much corrosion; degree of wear uncertain; length of circulation uncertain – possibly into last quarter of 17th century, but could have been much less. SF13 F035 Phase 4, kiln C.

SMALL FINDS

All the finds are listed here except for a few fragments of copper alloy sheet, and several pieces of iron. These had, at most, been superficially cleaned, but from the evidence of X-rays appeared to be broken nails and rivets. The metalwork was in a very poor condition prior to being treated. Most of the copper alloy pieces were totally mineralized, with only the larger pieces preserving any metal core. The iron was all heavily corroded, and many pieces were spalling and developing deep cracks. Some objects had lost all or part of their original surfaces as a result of postexcavation deterioration.

Copper alloy (illus 11)

The context suggests an early 14th-century date. Earlier researchers like Laing (1975) assumed that many copper alloy stick pins dated to the period from the sixth to the 10th century. In recent years some have been recovered in Scotland from secure medieval contexts, for example in Aberdeen (Murray 1982, illus 107 no 56), Perth (Holdsworth 1987, illus 60, nos 12, 13) and Cullykhan, Banffshire (Greig & Greig 1990, illus 5, no 340). The closest parallel to this pin is one from the Outer Isles in the National Museums of Scotland. It has dimples covering the head and upper portion of its shaft (Close-Brooks & Maxwell 1975, fig 2, no 979).

1 Stick pin with faceted head decorated with dimples. The conservation report notes traces of possible tinning on its surface. SF 42; F191; Phase 2, late use and abandonment of the forge.

Stick pins are common in Scotland and Ireland but seem to be missing from the large corpus of medieval dress fastenings published from excavations in England. This situation may reflect a difference in clothing. It is well known that plaids were regularly worn by many Scots, particularly Highlanders, into the 18th century. Stick pins would have been ideal for fastening the loose weave material used for plaids, and although ring brooches were traditionally used by women for this purpose we have it on the authority of Martin Martin, a native of Skye, that men used 'bodkins' of bone or wood (Martin 1934, 247).

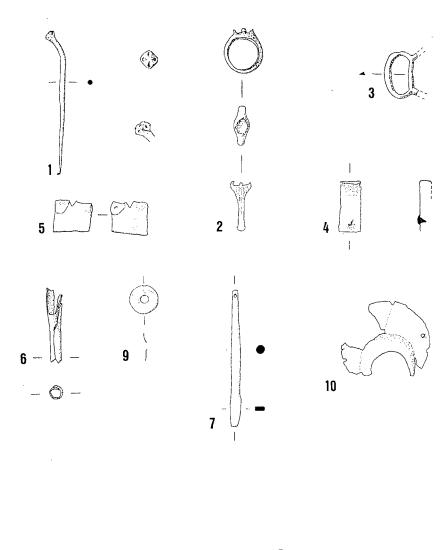
- 2 Finger ring with punched decoration on its shoulders. The oval bezel has four claws to hold a gem (now missing). SF 10; F046; Phase 4, kiln C, end of use.
- Double oval buckle (incomplete). SF 11; F027; Phase 4, kiln C, end of use. 3
- Strap end with iron rivet. F007; Phase 4, kiln C, debris.
- Strap end (with one flap folded back the wrong way). SF 34; F068; Phase 4, kiln C, debris.
- 6 Lace chape. F078; Phase 5.
- 7 Harp peg. 14th/15th century. SF 20; F064; Phase 4, kiln C, end of use.

This is only the fourth harp peg which has been recovered from excavations in Scotland, the other three being from the ongoing excavations by the National Museums of Scotland at Finlaggan, Islay, the socalled centre of the Lordship of the Isles (Caldwell, forthcoming). They are similar in shape to the Castle Sween peg, one being for use with a smaller instrument. The form of the Castle Sween peg is similar to other stray finds from Ireland, for example a site at Shannon Airport, County Clare, and from Clontuskert Priory, County Galway (Rynne 1964, 268, fig 11:39; Fanning 1976, 128, fig 10:252). It is also similar to the pegs on the Queen Mary Harp in the National Museums of Scotland, an outstanding piece of West Highland craftsmanship of the mid-15th century. Its pegs have engraved geometric designs on the tops of their heads. The later (c 1500) West Highland Lamont Harp, in the same collection, has pegs with spatulate ends like all the others mentioned so far, but with a quatrefoil cross section.

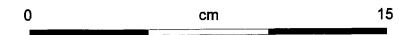
Triangular frame harps, or clarsachs, are likely to have been invented in Scotland, and were important in the Middle Ages, especially in the Highlands, for making music and accompanying poetry. The Lords of the Isles had their own hereditary harpers, the MacGille Sheanaich family, who had lands in Kintyre (Bannerman 1991).

8 Harp string? (not illustrated). SF 37; F145; Phase 2, late use and abandonment of the forge.

This consists of four lengths of wire, three about 100 mm long, the fourth about 60 mm. The







ILLUS 11 Copper & lead alloy objects

thickness is difficult to give with any accuracy since the pieces are all badly affected by corrosion, but it would have been about 1 mm or less. The pieces are curved as if the complete string had been wound in a hoop.

- Washer. F085; Phase 4, kiln C, industrial pits.
- 10 Mounting. SF 36; F126; Phase 4, kiln B fill.

Lead alloy (illus 11)

11 Peg? SF 35; F068; Phase 4, kiln C debris.

Iron (illus 12–14)

- 12 Piece of armour. F004; Phase 4, kiln C abandonment.
- 13 Quillons, or cross-guard of a dagger? F003; Phase 5.
- 14 Dagger blade. SF 16; F064; Phase 4, kiln C, end of use.

The simple bar-like form of SF13 suggests a 14th-century date. In form it is like the cross-guard of a sword. Most daggers in Scotland from the 15th century onwards appear to have had backed blades. It was, of course, the variety known as ballock knives which developed into the dirks commonly carried by Highlanders until 1745.

15 Spearhead with leaf-shaped blade with mid-rib and rounded shoulders. The socket contains mineralized remains of its wooden shaft, held in place by a nail hammered through a small hole for that purpose. SF40; F145; Phase 2, late use and abandonment of the forge.

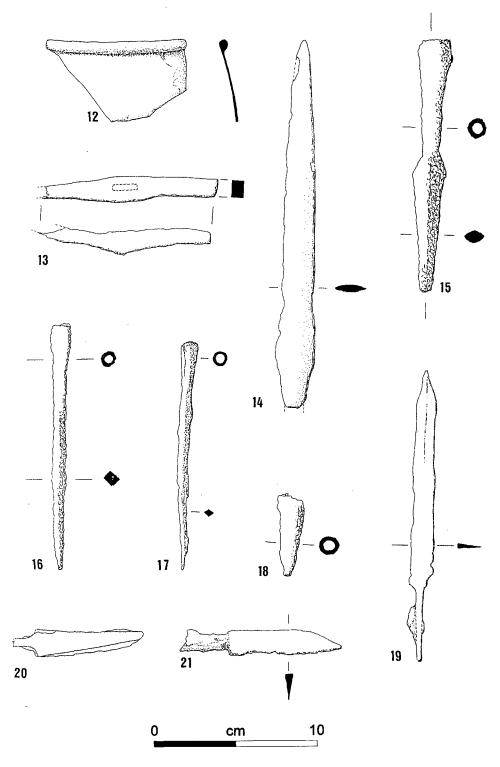
This spearhead is not dissimilar to one from a late 13th- or 14th-century context in the Perth High Street excavations (Caldwell 1981, 256, fig 136). The latter is rather longer and has a flatter blade, but a 13th- or 14th-century date would be appropriate for the Castle Sween spearhead. The representation of a spear on the grave slab of John Drummond at Inchmahome Priory in Perthshire, c 1360, also bears comparison (Caldwell 1981, fig 137). The representation of John Drummond on this slab is not unlike that of some of the armour-clad figures on West Highland monuments of the 14th-to the 16th century, but the typical form of spearhead is more lozenge shaped.

16 Spearhead with spike blade. The socket contains mineralized remains of its wooden shaft. F132; Phase 4, kiln B backfill.

Spears with spike blades were developed in the 14th century as a response to plate armour. In Scotland there are similar spearheads from Urquhart Castle on Loch Ness (Samson 1983, no 31) and Cramalt Tower, Selkirkshire (Maxwell-Irving 1982, 425, no 1).

17 Arrowhead with spike blade. The socket contains mineralized remains of its wooden shaft. F022; Phase 4, kiln C debris.

There are several so-called armour-piercing arrowheads of this type from Urquhart Castle (Samson 1983, nos 18 & 29). They are distinguishable from spearheads with spike blades by the narrower diameter of their sockets.



ILLUS 12 Iron objects

- 18 Arrowhead, containing mineralized wood. F132; Phase 4, kiln B backfill.
- 19 Knife with whittle tang, still with traces of its wooden hilt adhering to it. Surface indications on the blade suggest it is edged with steel, SF 8; F023; Phase 4, kiln C abandonment.
- Knife with whittle tang. SF 23; F068; Phase 4, kiln C debris. 20
- Knife with whittle tang with remains of its wooden hilt. F139. 21
- 22 Blade from a pair of shears. SF 37; F162; Phase 4, kiln B fill.
- 23 Metal worker's chisel? It has mineralized wood adhering to its surfaces. F007; Phase 4, kiln C debris.
- 24 Metal worker's chisel? F007; Phase 4, kiln C debris.
- 25 Spoon-headed bit. F068; Phase 4, kiln C debris.
- 26 Fish-hook with barb and spatulate end. F064; Phase 4, kiln C, end of use.

From Scotland there are similar fish hooks from medieval contexts in Eyemouth, Berwickshire (Dixon 1986, 34), St Andrews Castle, Fife (Lewis, this volume), and the National Museums' excavations at Finlaggan on Islay.

27 Jew's harp? (incomplete). F064; Phase 4, kiln C, end of use.

There are two medieval Jews' harps from the excavations at Achanduin Castle, a house of the Bishops of Argyll on Lismore (Turner, forthcoming), and one from the National Museums' excavations at Finlaggan on Islay (Caldwell, forthcoming).

- 28 Snafle-bit. F068; Phase 4, kiln C debris.
- 29 Part of a horse's mouth-piece? SF17; F064; Phase 4, kiln C, end of use.
- 30 Swivel ring. F132; Phase 4, kiln B backfill.
- 31 Link from a chain. SF 18; F064; Phase 4, kiln C, end of use.
- 32 Part of a lock case, copper plated. F027.
- 33-4 Nails. SF 7; F023; F064; Phase 4, kiln C abandonment.

Nine nails from phases IV and V were identified from X-rays and conserved. The two illustrated here are reasonably representative of them.

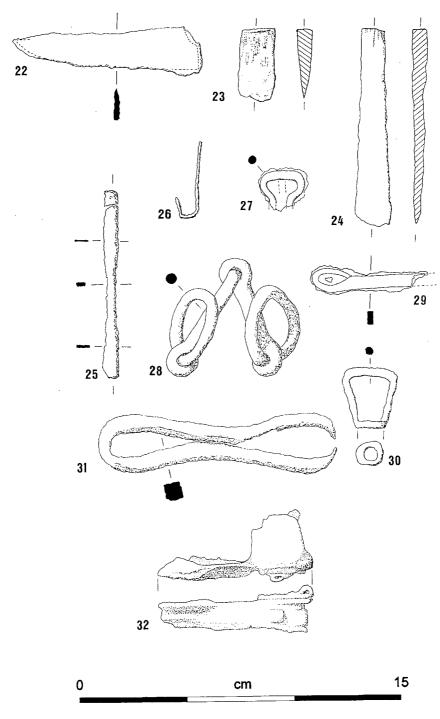
- 35 Staple. SF 6; F023; Phase 4, kiln C abandonment.
- 36 Rivet. F080; Phase 4, kiln C. (There are two others from F077 and F038.)
- 37 Screw-mounting. F004; Phase 4, kiln C abandonment.
- 38 Ring-mounting. F073; Phase 4, south-east room.
- 39 Key for barrel padlock. F068; Phase 4, kiln C debris.
- 40 Mounting with two rivets, possibly part of a hinge strap. F042.
- 41 Mounting, pierced with a slit, F049; Phase 3, wall-robbed plinth.
- 42 Door or shutter fastener? F008; Phase 4, south-east room.
- 43 Section of bar. F161; Phase 1, levelling.
- 44 Mounting, or binding. F022

Bone (illus 15)

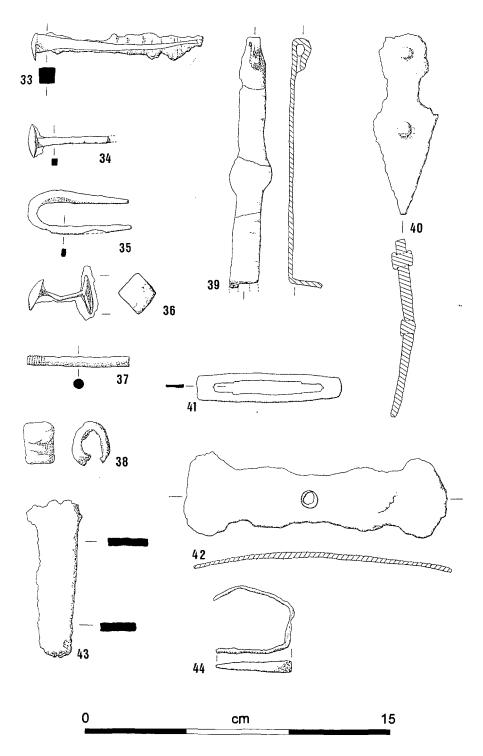
45 Fish bone - dorsal spine. SF 14; F027; Phase 4, kiln C, end of use.

This shows no sign of having been worked but was listed as a small find when discovered on the assumption that it was a dress pin. It would certainly have served well for that purpose.

46 Dress pin. SF 44; F125; Phase 2, external surface.



ILLUS 13 Iron objects



ILLUS 14 Iron objects

Pins with perforated heads like this are well known from Iron Age and Dark Age sites in Britain and Ireland. They have sometimes been identified as needles for netting but their broad heads would have made them rather clumsy implements for such a task. For a discussion see MacGregor (1975, 71). There are two similar shaped pins from late 14th-century contexts in Perth (Holdsworth 1987, 151, nos 156 & 157).

47 Button with four perforations. SF 2; F023; Phase 4, Kiln C abandonment.

Buttons of this type are common from the late 18th century onwards but very few have been identified as belonging to an earlier period. The context in which this one was discovered is dated to the mid-17th century. It may be compared to a button, found with bone button-making waste, in a post-medieval soil level over a yard at the Hospital of St Mary of Ospringe, Kent (Smith 1980, fig 31, no 5).

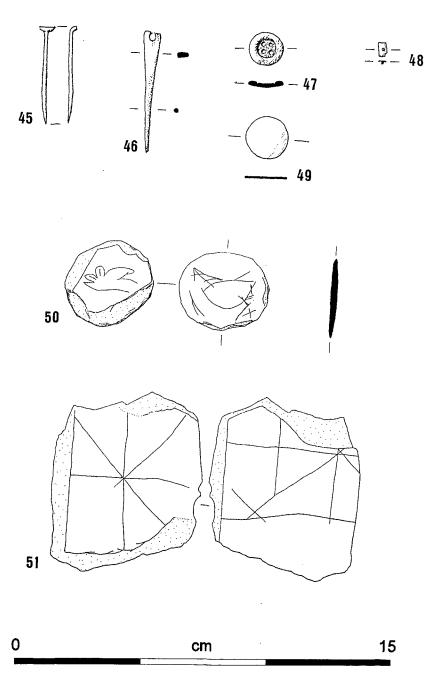
48 Mount with copper alloy rivet. F068/511; Phase 4, kiln C debris.

Stone (illus 15–17)

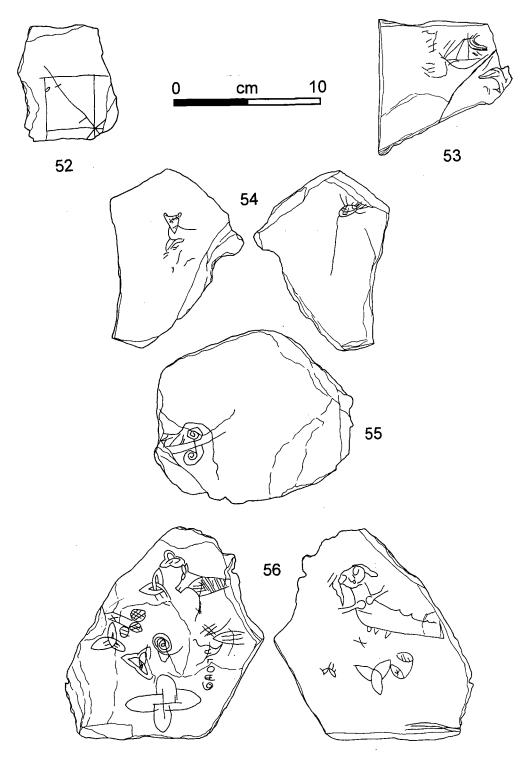
- Counter, made of slate. SF 4; F023; Phase 4, kiln C abandonment. (There is another identical counter from the same context; also one with a diameter of 39 mm. From F064 there is one with a diameter of
- Counter with scratched design, made of slate. SF 9; F004; Phase 4, Kiln C abandonment. 50
- 51 Inscribed slate, probably part of a gaming board, with a chequered lay out on one side and a board for nine men's morris on the other. SF 1; F023; Phase 4, Kiln C abandonment.
- 52 Inscribed slate, probably part of a gaming board with a chequered lay-out. F004; Phase 4, Kiln C abandon-
- 53 Inscribed slate, a galley with a monster bottom right (?) F004; Phase 4, Kiln C abandonment.
- 54 Inscribed slate, with a flower on one side and part of an animal on the other (?) F004; Phase 4, Kiln C abandonment.
- 55 Inscribed slate with plant scroll design. F004; Phase 4, Kiln C abandonment.
- 56 Inscribed slate with a mermaid (?) and triquetras on one side, and on the other some lettering, a dog or wolf, triquetras and an interlaced quatrefoil. The remains of a nail hole on one broken edge may be taken as evidence that this slate was used originally as roofing. F047; Phase 4, Kiln C.
- Fragment of roofing slate with nail hole. [not illustrated] F073; Phase 4, Kiln C. 57
- Gun flint of milky white flint. [not illustrated] F140; Phase 3 levelling. 58
- 59 Upper stone from a rotary quern, two thirds complete. It is made from a garnetiferous mica-schist. SF 45; F187 Phase 2, furnace.
- Lower stone from a rotary quern, two-thirds complete, made of garnetiferous mica-schist. SF 48; F200; 60 Phase 2, hearth in forge.
- 61 Piece of a millstone, the grinding surface with radial grooves. It is made of garnetiferous mica-schist. SF 39; F178; Phase 4, Kiln A flue.
- 62 Piece of a millstone? Made of garnetiferous mica-schist. SF 47; F182; Phase 2 forge.

OTHER ARTEFACTS FROM CASTLE SWEEN

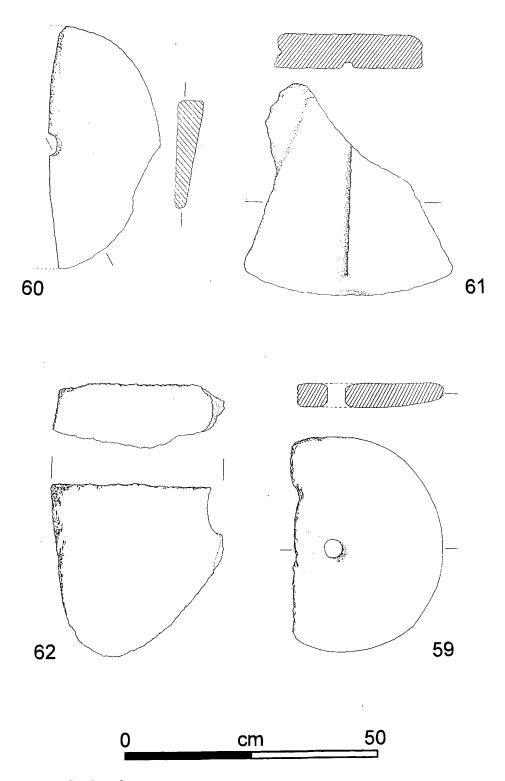
The following items from Castle Sween are in the collections of the National Museums of Scotland and were apparently recovered from clearance work at the castle earlier this century. There are also some sherds of Scottish medieval pottery (HX 755–7).



Bone & stone objects Illus 15



ILLUS 16 Incised slate objects



ILLUS 17 Quern fragments

Copper alloy (illus 18)

- 63 Ring brooch with flat hoop, the two ends riveted together at the cut-out for the pin (now missing). The front has been decorated all round with a black letter inscription, or perhaps a design in imitation of lettering, as on some 16th-century Highland brooches, like a copper alloy one from excavations at Achanduin Castle on Lismore, and nine in the National Museums of Scotland, two of which are of silver. Regrettably the design on this brooch is too worn for interpretation. It is likely to date to the 15th or 16th century. HX 238.
- 64 Part of a ring brooch engraved on the front with an interlace design composed of three double strands with the spaces in between hatched. 16th-17th century. HX 237.
- 65 Ring brooch, the two ends of its broad flat hoop riveted together. Both outer and inner edge are decoratively serrated and on the front it is engraved with a star pattern. It lacks its pin. HX 236.

Star patterns are a common device on Highland brooches of the 16th and 17th centuries. A similar but smaller copper alloy brooch with a star of six points, found near Stornoway, is in the National Museums of Scotland (NGA 254).

Iron (illus 18 & 19)

- 66-8 Knives with whittle tangs. HX 769, HX 770, HX 764.
- 69 Part of a sickle blade. HX 766.
- 70 Part of a pruning knife. HX 763.
- 71 Spoon-headed bit. HX 239.
- 72-3 Awls. HX 240, HX 771.
- 74 Nail. HX 767.
- 75 Fragment from a lock. HX 768.
- 76-7 Keys. HX 761, HX 760.
- 78-9 Strap-hinges. HX 758, HX 759.
- 80 Part of a D-shaped buckle. HX 762.

Stone

81 Gun stone, made of sandstone (not illustrated). Diam 65 mm. HX 754.

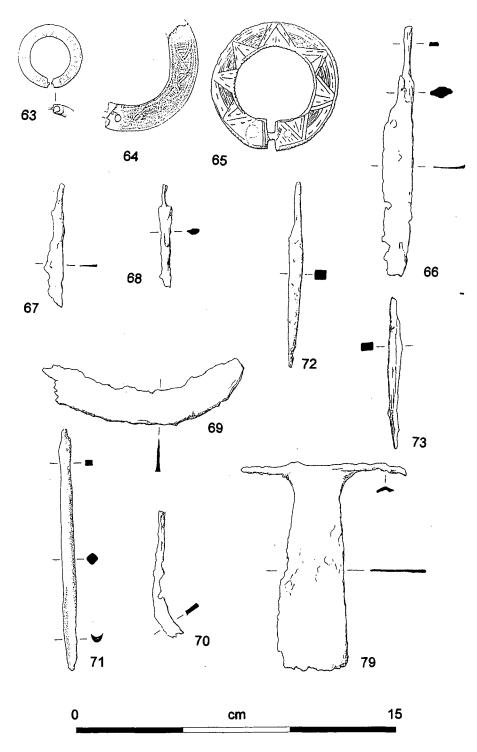
THE CERAMICS (not illustrated)

D Caldwell & H Stewart

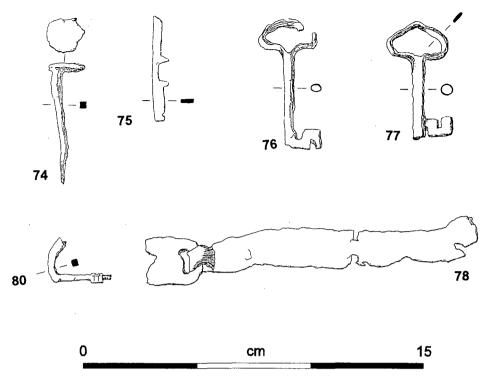
A modest collection of sherds, mostly of medieval date, was recovered from the excavation. There were 186 in all, mostly body sherds, with a total weight of 3.1 kg. There was not enough material to make a reliable estimate of vessel numbers.

Hand-made pot

There were seven sherds of hand-made pottery, all from Phase 4 deposits. Given that the tradition of hand-making pottery survived in some parts of the West Highlands and Islands until recent times, and the excavations at the residence of the MacDonald Lords of the Isles at Finlaggan on Islay have produced considerable quantities of such pottery (Caldwell, forthcoming), there is no need to assume that any of these pieces is residual from prehistoric times. All are probably of local manufacture.



Copper alloy & iron objects ILLUS 18



ILLUS 19 Iron objects

- 82 Body sherd of hand-made vessel. The body is 11 mm thick, soft and black with a hackly fracture, containing quantities of badly sorted quartz and flakes of mica. The surfaces are covered with grass or straw impressions. F046; Phase 4.
- Three body sherds similar to the last but only 6–8 mm thick. The surfaces have been wiped down, removing traces of grass impressions. The exterior surfaces are sooted. F032; Phase 4.
- Rim fragment of a small globular bowl (?) with squat, slightly out-turned rim. It is hard, black and smooth, and is decorated on the exterior and on the top of the rim with annulets impressed in the clay before firing. The fabric is hackly in fracture and contains quantities of badly sorted quartz and flakes of mica. F035; SF 12 Phase 4.
- Part of a rod handle, about 15 mm in diameter, in a smooth, soft, light yellowish brown (Munsell Soil Color 10YR 6/4) fabric with a fine texture. It contains quantities of badly sorted quartz and flakes of mica. F004; Phase 4.
- Small body sherd, 7 mm thick, in a smooth, soft fabric with sparse, large rock inclusions including quartz and flakes of mica. The exterior surface is yellowish red (5YR 5/6); the interior is brown (10YR 5/3). F068; Phase 4.

Light gritty wares

There are 47 sherds in this group. The vessels, probably mostly jugs with some cooking-pots, were well potted, the former glazed on their exterior. There is a considerable colour range in the sherds, including white, yellow, pink and grey, and some have grey reduced cores. They typically have up to 5% inclusions – rock fragments including quartz and iron ore. The inclusions often give the fabric

a pimply surface. The fabric is hard with a fine fracture. All these sherds are probably from the Scottish Lowlands. There is one sherd from Phase 1 (F222), three from Phase 2, nine from Phase 3, and 22 from Phase 4.

- 87 Jug rim, glazed on exterior. F132.
- 88 Cooking-pot rim, F073.
- 89 Body sherd, glazed, and with an applied decorative strip. F003.
- 90 Small horizontal glazed rod handle. F040.

Red gritty wares

- (i) Thirty-five sherds of a pink (5YR 7/4) or light red (2.5YR 6/6) fabric, often with a reduced dark grey core, and containing 5% or less of inclusions - sub-rounded grains of quartz up to 0.3mm across, small pieces of iron and mica. It is hard and smooth with an irregular fracture, Scottish Lowlands. All the sherds are from Phase 4, apart for one from Phase 5 (F003).
- 91 Rim sherds of a jug, glazed on the exterior. F027 & F004; Phase 4.
- (ii) Nine sherds of a red (2.5YR 5/6) or reddish yellow (5YR 6/8) hard, fine fabric containing 10% inclusions, especially sub-rounded grains of quartz, but also iron, other rock fragments up to 0.5mm across, and mica. Probably only two vessels are represented, the one a jug (no 91), the other a vessel glazed inside. This ware is possibly of Irish origin. The fabric is not unlike pottery from the kiln site at Downpatrick. All the sherds are from phase 4 deposits (F004 & F064).
- 92 Rim sherds of a jug, glazed and with incised decoration. F064; Phase 4.
- (iii) One sherd of a hard, reddish yellow (7.5YR 6/8) ware with a soapy feel and fine fracture containing less than 5% of rounded rock pieces less than 0.3mm across, plus flakes of mica. English or Irish?
- 93 Rim sherd of a lid (?) with patchy glaze, incised and ring-and-dot decoration. F208; Phase 2.

Smooth wares

- (i) Two sherds of a soft, smooth ware with a fine fracture containing less than 5% inclusions sparse rock fragments and small (up to 0.2 mm across) sub-rounded grains of quartz. The sherds are thick walled and clumsy, glazed on the exterior, and reduced dark grey, tending to an outer surface of reddish yellow (5YR 7/ 6). Scottish Lowlands – Ayrshire? Both sherds are from Phase 4 deposits (F007 & F068)
- (ii) Thirteen sherds of a reddish yellow (5YR 6/6) ware with a grey core. It is hard and smooth with a fine fracture containing practically no inclusions. Scottish Lowlands. All the sherds are from Phase 4.
- (iii) One small sherd of a reddish yellow (5YR 6/6) ware. The fabric is hard and smooth with a smooth fracture with sparse small pieces of iron and flakes of mica. The Forth Valley - compare pottery from the kiln site at Throsk.
- 94 Rim sherd of a jug glazed on the exterior. F064; Phase 4.

Reduced gritty ware

Sixty-nine sherds of a soft, smooth, dark grey fabric with a fine fracture containing up to 10% small (0.2mm or less) sub-rounded grains of quartz. Many of the sherds appear thick and clumsy. Scottish Lowlands. One of the sherds is from Phase 3 (F036), 62 fom Phase 4, and one from Phase 5 (F076).

- 95 Rim sherd of a jug, glazed on the exterior. F027.
- 96 Body sherd, glazed, with combed decoration.

Modern ceramic

Two sherds forming the base and complete profile of a white china bowl covered with blue sponged decoration. Scottish, late 19th – early 20th century. F002 & F023 Phase 5.

Tobacco pipe

98 Fragment of stem. F004 Phase 4.

Although almost all the pottery appears to be of medieval type the bulk is from Phase 4 (16th – mid 17th-century) deposits. How many of them are residual from earlier times or were still in use in the 16th, or indeed even the 17th century is a problem which is not going to be solved from this assemblage alone. The sherd of type 4 (iii) ware, identified as being of Throsk type, is yet more evidence for the wide distribution of this type of pottery in the 17th and early 18th century (Caldwell & Dean 1992, 30-2).

The only pottery from Phases 1 and 2 (12th – early 14th century) are six sherds of light gritty & piece of a lid (fabric type 3 (iii)) which may be an English or Irish import. Sherds from Phase 3 (early 14th – 16th century) include nine light gritty and one reduced gritty examples.

THE BOTANICAL REMAINS

T G Holden

A total of 18 bulk samples each of two litres volume was taken for flotation and wet-sieving.

Results

Most samples were dominated by a relatively small grained species of oat (commonly 0.4–0.5 mm long). It is generally not possible to identify these with certainty in the absence of other floral parts. Where whole florets occur, however, Avena fatua L (common wild oat) and A ludoviciana Durieu (Winter wild oat) can be identified since these possess a distinctive 'sucker mouth' abscission surface at the base of the spikelet (NB only the basal floret in A. ludoviciana possesses this feature (Hubbard 1980; Renfrew 1973; Zohary & Hopf 1988). This was absent from all of the florets recovered from the Castle Sween samples. Together with the relatively large quantities of grain recovered, the morphology suggests that the oats were of a cultivated species. There are two possible species that could be present in this part of the world, A sativa L (common white oat) and A strigosa Schreb (bristle/small oat). In view of the small size of the grains, however, it would seem more likely that it is the smaller bristle oat that is represented here. Only one larger grain, from Sample 20, was considered more likely to be the common white oat. In addition to the charred oat from the site two grains of mineralised grains were also recovered.

Fewer examples of wheat and barley were recovered and in no cases were remains of chaff present. The wheat grains recovered were generally consistent with Triticum aestivo-compactum (bread/club wheat) but such is the morphological overlap between this and T spelta L (spelt wheat) that only extreme forms can be separated if based upon the grains alone.

The barley grains were, for the most part, poorly preserved and most did not possess characteristics which would enable naked to be distinguished from hulled varieties with certainty. In spite of this it appears that both were present albeit in small amounts. Both asymmetrical and symmetrical forms were present indicating that at least some of the grains were of a 6 row variety. The overall quantities of grains were not sufficient for comment to be made regarding the relative proportions of the different species.

Rye was positively identified from only one sample (two grains) although two other possible grains were present from other samples. These could not be separated from wheat or oats with certainty.

The non-cereal component was very poorly represented. Hazel shell was present in seven of the samples presenting the possibility that this was of at least some economic value during the active life of the site. Apart from this, 'weed' seeds were only present in one's and two's and from a small proportion of the samples. Those present were compatible with a waste ground or agricultural flora.

Discussion

The quantities of cereal remains recovered from this site are not large enough to comment upon the relative quantities of the different species present. They do, however, document the use of all four of the major cereal species (wheat, rye, oats and barley) during the medieval period, some time after AD 1262, although it is not possible to demonstrate that these were being grown locally.

The composition of the charred plant remains across the three phases of the site maintain a remarkable consistency. Oats and hazel predominate throughout with a scattering of lesser quantities of barley, wheat and 'weed' seeds. This pattern is noted not just from negative features such as drains, kiln features and beam slots but also from occupation/industrial surfaces and spreads of material. It has already been noted that there is a spread of what appears to be domestic refuse across the site and that this may derive from the reworking of earlier deposits. The uniformity of the composition of the charred plant remains across the site would be totally compatible with this theory and is probably the best explanation of the results put forward.

While not being of any particular significance in themselves the two mineralised oat grains (samples 32 and 71) point to a depositional environment which was rich in soluble salts soon after the period in which the grains were deposited. This type of mineral replacement is typical of environments rich in calcium phosphate associated with high quantities of organic waste especially that of faecal origin. The two oat grains were recovered from the bowl of a kiln and occupation deposit which are not generally the type of deposit from which mineralised material derives. It is likely that these did not mineralise in situ which again points to the reworking of earlier deposits.

In view of the homogeneity of the plant assemblages there is little value in trying to correlate their composition with the feature type. It is, however, tempting to suggest that there might be a link between the large number of fungal sclerotia (fruiting bodies produced by soil living fungi) in sample 87 and the bad drainage in that corner produced by close proximity to a garderobe. In spite of this, the charred plant remains obviously derive from one, or a number, of charring events and some profit might be gained by treating the sum of all of the plant remains as a single assemblage.

In the assemblage as a whole oats dominate. These are small grained and have, apart from occasional exceptions, been dehusked, ie the enclosing lemma and palea have been removed. This process would probably have required the use of heat to parch the grains but Holden (1979 citing Coffman 1961) does record the use of a naked oat variety (now extinct) in the medieval period in Britain. The other cereals present, barley, wheat and rye are also represented only by their grains and weed seeds are generally absent. There is therefore no evidence for on-site processing of cereals. Neither is there any evidence for drying or bulk storage of the grain since, with oats and hulled barley, these processes would probably have been carried out with the grain in the hulled form - this would have been evident in the archaeobotanical record. All of the data therefore point to the burning and subsequent disposal of a quantity of cleaned grain such as might have been stored in small amounts associated with food preparation ready for human consumption. This interpretation is again in keeping with earlier suggestions that much of the organic material over the site is associated with spreads of domestic refuse. No connection can be demonstrated between the charred plant remains and the industrial features on the site.

CHARCOAL

Coralie M Mills

A selection of samples, from Phases 2 to 4, were sieved and sorted. While all 18 samples contained some wood charcoal, this was highly fragmented and present in relatively small amounts in all but one rich sample. This pattern, together with the general spread of domestic rubbish across the site, suggests that many of the deposits contained reworked material, probably from earlier middens. The scope of this report is therefore limited to a detailed investigation of the single rich sample, and a survey of a few further samples to obtain a general picture of the tree species used at the site. The sample processing techniques used are very gentle and would not increase the degree of fragmentation. Charcoal fragments were observed under a low power binocular microscope and identified with the aid of the keys published in Schweingruber (1978).

Results

Only Sample 41 (Feature 162, Phase 4) contained a large quantity of reasonably unfragmented charcoal, and ten pieces, selected at random, were identified from this sample. A further six samples produced more than 10 g of charcoal, and these were also examined. In these samples most of the charcoal was of very small size and only a few fragments from each sample were sufficiently large to be identified.

Five tree species are represented at the site, with alder and birch being most frequently observed. Hazel, ash and oak are also present. In all but one of the examined fragments, there was little curvature of the annual rings, indicating that the charcoal derived from reasonably mature trees rather than small diameter roundwood. The exception to this was a fragment of birch charcoal from Sample 27 which exhibited marked curvature of the rings and is either from small roundwood or from the centre of a larger tree. The largest charcoal fragments were recorded from Sample 41, with typical maximum dimensions ranging between 15 mm and 30 mm. The largest fragments in the other six samples rarely reached the lower end of this range; the large fragments in these were atypical with most charcoal being very small and thus unidentifiable.

Mineralized wood was retrieved from Sample 2. This, however, proved too distorted and too heavily mineralized to be identifiable. The ash charcoal fragments from Sample 27 also appeared distorted and seemed to have a mineral component. The processes which produced their appearance are unknown but it seems most likely that the wood was partially mineralized before it became burnt.

Discussion

The single sample (41) which, on the basis of the condition of the charcoal, is likely to represent an in situ deposit contains a mixture of alder and birch charcoal. This sample derives from the fill of a probable stokehole for Kiln B. The results show that in Phase 4, an industrial phase at the site, mature alder and birch timber was being used for fuel. The charcoal could have resulted from the burning of just two or three lengths of such timber. It cannot be determined whether this charcoal represents burning of timber cut especially for fuel, the deliberate re-use of structural timber or the use of driftwood. The lack of exotic species in the Castle Sween assemblage as a whole, however, suggests the latter is less likely.

In the case of the other six samples examined, the possibility of reworking of deposits, as

TABLE 1 Distribution of minimum numbers of individuals (MNI)

Phase	Cattle	Horse	Sheep/ Goat	Pig	Dog	Red Deer	Roe Deer	Rat	Rabbit
1	1	_	1	_		_	_	_	_
2	2	1	2	1	1	-	-		_
3	2	_	2	3	-	1	l	_	
4	6	1	3	2	2	1	1	1	1
5	2	_	1	1	_	_	_	_	1

indicated by the highly fragmented nature of the charcoal and the general spread of domestic rubbish, means that the contents of the fills do not necessarily relate to activity during that phase.

FAUNAL REMAINS

Finbar McCormick

The sample of animal bones from Castle Sween is very small and provides little information about the diet or livestock economy of the inhabitants. It is clear, however, that beef accounted for the great bulk of the meat consumed on the site. The small samples from the individual phases are of little value but if the data is combined, a few, valid observations can be made.

Pig generally played a less important role than either cattle or sheep/goat, the exception being during Phase 3 (early 14th - 16th century). This low incidence of pigs can also be noted at other Scottish castles. Table 4 demonstrates this by comparing the total fragment distribution from combined medieval and post-medieval contexts.

In other castles, such as Breachacha Castle, Coll (Harcourt 1970, 178), the minor role of pig is also demonstrated. Pigs also generally play a minor role in urban sites of the period. The incidence of pig at Castle Sween is amongst the highest noted in sites listed in Table 4. This may be due to the dominance of oak, which provided mast for pigs, rather than pine forest in that area (Birks 1978, 120). This, however, does not account for the high incidence of pig at Scrabster Castle, near Thurso, as woodland disappeared from Caithness soon after 3000 BP (*ibid* 130).

The dogs present tended to be of small and medium size. Two complete femora were present in Phase 4 (16th – mid-17th century). These produced estimated shoulder heights of 31.9 cm and 51.2 cm at the shoulder (after Harcourt 1974, 154). The former is about the same height as a terrier while the latter was about the height of a poodle (after Wagner 1930). These comparisons are strictly on the basis of the dog's height and tell nothing of the type of dog represented.

TABLE 2 Distribution of numbers of fragments

Phase	Cattle	Horse	Sheep/ Goat	Pig	Dog	Red Deer	Roe Deer	Rat	Rabbit
1	1	_	1	_	_	1	_	_	
2	56	2	12	10	-	2	_	-	_
3	80	_	8	22		5	1	_	_
4	161	2	79	38	6	5	1	3	3
5	26	_	11	4	_	-	_	-	1

TABLE 3 Distribution of fragments of bird, fish and shell

Common name	Latin name	Phases				
		2	3	4	5	
Fowl	Gallus gallus	3	_	10	2	
Duck	Anas spec.	_	-	1	-	
Jackdaw?	Corvus spec.	-	_	1	2	
Goose	cf Anser anser	_	-	2	_	
Dove/pigeon	Columbidae spec.	_	_	1	_	
Barn owl?	cf Tyto alba	_	-	_	2	
Grouse	Lagopus lagopus	_	_	_	1	
Conger	Conger conger	-	_	1	_	
Cod	Gadus morhua	_	2	1	_	
Oyster	Ostrea edulis	1	2	24	1	
Common winkle	Littorina littorea	_	4	38	-	
Common limpet	Patella vulgata	-	_	8	_	
Edible scallop	Pecten maximus	2	_	1	-	
Purpura	Nucalla lapillus	_	_	1	-	
Cockle	Cardium edulae	-	_	1	_	

TABLE 4 Percentage of animal bone fragments distribution from Scottish castle sites

	Cattle	Sheep/Goat	Pig	No.
Castle Sween	63.5	24.5	12.0	510
Balgonie Castle (1)	35.0	58.7	6.4	409
Cruggleton Castle (2)	49.8	46.9	3.3	3200
Scrabster Castle (3)	46.6	36.9	16.6	464
Castlehill of Strachan (4)	54.3	42.9	2.9	35
Freswick Castle (5)	33.3	56.9	9.8	51
Scalloway Castle (6)	53.2	41.0	5.8	139
Edinburgh Castle (F330, F381) (7)	49.1	43.3	7.6	1662
Smailholm Tower (8)	17.5	80.9	1.6	744

[Table 4 - after (1) Smith & Hodgson (forthcoming), (2) Barnetson (1985), (3) Noddle (forthcoming), (4) Smith & Hodgson (1984), (5) Batey et al (1984), (6) Smith & Hodgson (1983), (7) McCormick 1997 and (8) Barnetson (1988)].

Wild game played a small but persistent role in the diet of the castle. The presence of rabbit, and absence of hare, might suggest that rabbit were not hunted in the wild but kept in a semi domesticated state in warrens, perhaps on one of the small islands at the mouth of the bay.

The shells present represent both the exploitation of a sandy shoreline (oysters and scallops) and of a rocky coast (winkles and limpets), both of which environments occur within Loch Sween. The presence of Purpura Nucella lapillus in Phase 4 is interesting as they are not generally exploited as food. The mollusc is, however, used for the production of dye. A group of Early Christian huts interpreted by the excavator as a 'factory of purple dye' (Henry 1952, 173) has been found at Inishkea off the west coast of Ireland. The example from Castle Sween, however, is not broken in the characteristic way noted on the Irish examples and is probably a casual ocurrence on the site.

It is not possible to ascertain if coastal castles such as Castle Sween played any role in the development of the inland trade of marine produce during the medieval period, a trade that does not seem to have been present during the Dark Ages. Oyster shells are, for instance, present at Coull Castle, Aberdeenshire, some 45 km inland (Simpson 1924, 92), while haddock and cod were present at Smailholm Tower, Roxburghshire, about 40 km from the coast (Barnetson 1988, fiche 3 G.1). Medium/large cod were present at Castle Sween and suggest offshore fishing while a rather large conger present in Phase 4, with an estimated gutted weight of 2.7 kg, also suggests offshore fishing.

Comprehensive reports on all faunal remains from Castle Sween have been deposited with the archive of the project records at the National Monuments Record of Scotland.

DISCUSSION

The excavations have shed considerable light on the changes of use within the curtain wall enclosure and uncovered evidence of day-to-day life in the castle. All this is despite substantial site clearance and limited stratigraphy. By the end of this short archaeological programme certain episodes in the history of the castle were highlighted, most notably the demolition of the north range and forge (the end of Phase 2); the preparations for building the Phase 3 east range, probably in the mid-14th century; and finally, the ultimate abandonment of the site in the middle of the 17th century. Each of these is characterized by stratigraphic horizons which were mainly industrial in character, but which yielded a rich array of associated artefacts, some linked with industrial processes, and others of a more general, domestic character. The impression conveyed is one of short bursts of intensive activity close to periods of radical rebuilding, interspersed with periods of relative inactivity.

Repair and consolidation work on the upstanding walls has made accurate interpretations of the relative phasing of the north and east ranges, and their relationship with the forge and later kiln complexes, difficult. A late 13th- or early 14th-century date for a north range, standing alongside, and with possible direct access to the west tower, is most likely. The forge lay to the south of the north range, between the latter and the wallhead stair. The forge was in use in the early 14th century and both it and the north range were totally removed by the time the east range was built, presumably not long afterwards.

Less certain is the evidence for the Phase 1 east range. However, the presence of the south-east garderobe at first-floor level, apparently contemporary with the construction of the curtain wall, provides some architectural support for the archaeological findings, in particular the fragments of walls F014 and F005.

The use of the forge may reflect the alleged role of the castle as a strongpoint in the Wars of Independence. The general upgrading of the castle during the period when the Lords of the Isles exercised control over it is noteworthy. This took the form of building both the north-east tower (traditionally the work of Alexander MacMillan of Knap) and the east range. These structures would have greatly improved the castle as a residence capable of offering shelter, periodically, to a great lord and his retinue.

The remodelling of the castle under the Campbells in Phase 4 would have had the effect of reducing its status and facilities. The courtyard reverted to use as a service area, culminating in the insertion of kilns for metalworking in the 17th century.

It is also worth commenting here on the almost complete survival of the 13th-century enclosure castle. In contrast to so many other early castles this has been due not to its encapsulation within later extensions but rather to the fact that the initial design was never substantially altered. The accepted view that this is the earliest surviving stone castle in Scotland is necessarily dependent on negative evidence elsewhere. Admittedly, the original castle takes in all the summit of the hill and its quadrilateral outline could thus be seen as more a result of the available space rather than of a conscious decision to build square rather than round. Nevertheless, it is probably preferable to believe that a squarish castle was the required design. The RCAHMS (1992, 19-20) has noted that rectangular courtyard plans are more commonly associated with Episcopal residences in 12th-century England and that there are no obvious parallels in Ireland from where influences might reasonably be assumed to emanate. The Commission further suggests that Castle Sween should be seen as a local variant of the circular shell keep as illustrated by the early castle at Rothesay. Whatever the case, the early Castle Sween was undoubtedly a fitting status symbol to be the centre of a large lordship in Knapdale controlled by Suibhne in the early 13th century. Presumably he intended it to be a residence as well as a fortress. The lack of evidence for any permanent buildings within the enclosure prior to the late 13th century may be the result of an unfinished or interrupted building programme,

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