Excavations at Smailholm Tower, Roxburghshire

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'Then rise those crags, that mountain'd tower Which charm'd my fancy's wakening hour' Sir Walter Scott, Marmion

SUMMARY

The following is a report on an archaeological investigation carried out between 1979 and 1981 within and around the barmkin, or courtyard, attached to the medieval towerhouse. Excavation was unable to determine more precisely the date of construction of the towerhouse, but it did demonstrate that the original residence of the Pringle laird was altogether more complex than the surviving ruined tower would have us believe. The somewhat cramped and restricted accommodation within the towerhouse had been augmented by a second residential unit, interpreted as a hall and chamber, standing adjacent to the towerhouse in the west courtyard. Another free-standing building, also in the west courtyard, was shown to have been a service office housing the kitchen. The east courtyard seems always to have been open ground, perhaps a garden. In the later 17th century, following the acquisition of the estate by the Scotts of Harden, substantial alterations were made to the place before the exposed summit was finally abandoned as a lordly residence early in the 18th century.

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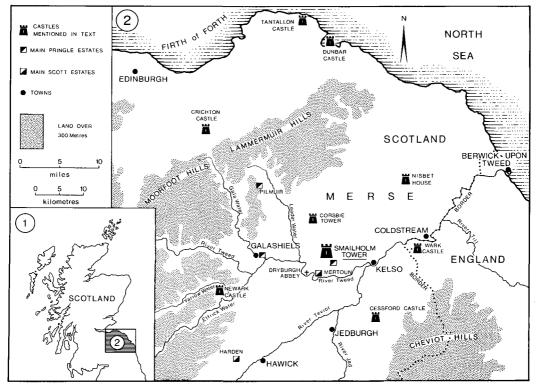
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INTRODUCTION

Smailholm Tower (NGR NT 637 346; OD 209 m) is situated some 5 miles (8 km) west of Kelso and just 10 miles (16 km) from the Border with England, that is the River Tweed at Carham, a short distance up-river from Coldstream (illus 1). Despite its humble residential status, the tower is a dominant feature in the rolling landscape of the Merse, perched as it is atop one of a series of igneous rocky ridges of olivine-dolerite that intrude into a stratum of Upper Old Red Sandstone age (illus 2). This craggy appearance that characterizes the western part of the former parish, the ancient barony, of Smailholm led to the estate, of which Smailholm Tower was the mains, or home farm, being called Smailholm-craig in the 16th and 17th centuries.

Smailholm Tower is without question one of the most evocative sights on the Scottish Border, its stark form redolent of reiving, steel bonnets and the depredations that were so much a part of life



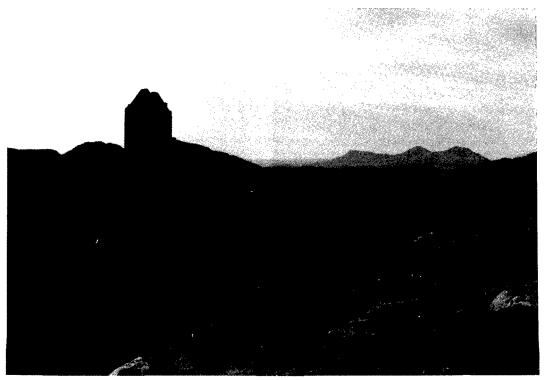
ILLUS 1 Location of Smailholm Tower in the Border country.

on the Border in the later middle ages. Sir Walter Scott, in his dotage, freely acknowledged the debt he owed to the sight of the ruined tower of his ancestors, which fired his imagination when, as 'a wee, sick laddie', he was brought to Sandyknowe farmhouse, Smailholm Tower's replacement as residence, in 1773 to recover from illness. And we in turn are indebted to Sir Walter for being instrumental in saving the towerhouse from further 'dilapidations' in 1799 (Lockhart 1906, 93). Indeed, there are tell-tale signs of early repairs to the ruined fabric of both towerhouse and barmkin which may plausibly be ascribed to Sir Walter Scott's timely intervention.

The ruins became the responsibility of the then Ministry of Works (now the Historic Buildings and Monuments Directorate) in 1951 and emergency repairs were immediately carried out. In 1975 a comprehensive programme of masonry consolidation was begun and between 1979 and 1981 archaeological investigations were carried out over the entire area of the barmkin enclosure under the direction of the writers using staff and a 'volunteer' workforce. It is with that excavation that this report chiefly deals. However, during the course of the work, the opportunity was taken to survey the rough pasture ground around the tower, where other elements pertaining to the farm complex were visible, and that survey is included here. In addition, fresh observations relating to the history and architecture of Smailholm Tower are incorporated.

HISTORICAL AND ARCHITECTURAL SUMMARY

The story of Smailholm Tower takes us from the 15th century through to just beyond the Union of the Parliaments of Scotland and England in 1707. The place is associated with two notable Border families – the Pringles (or Hoppringills) up to the year 1645; thereafter the Scotts of Harden, the



ILLUS 2 Smailholm Tower and 'the Craigs' from the north-east (Eildon Hills in the distance)

ancestors of Sir Walter Scott. Both were significant families in the Border country in their day, reasonably prosperous landholders not without good connections and a deal of influence in their locality. Neither family, though, was of importance on a national scale. In short, both were well-to-do local families.

Nothing was discovered during the excavations to indicate a human presence on the rocky craig prior to the erection of the towerhouse by one of the Pringle surname sometime during the course of the 15th century. The history of the Pringles of Smailholm has been well treated elsewhere (Pringle 1933, 89–122). The family were certainly in possession of the estate, among others, before 1459 when a Robert Pringle obtained sasine following his brother George's death (*Exch Rolls*, IX, 667). How long before then they had been lairds we cannot now say. No authority can be found for the statement by Sime (1896, 63) that one Robert Pringle of Whitsome obtained a charter from Archibald the Grim, third earl of Douglas, of the dominical lands of Smailholm in 1408, and in view of the fact that the said Archibald had been dead fully eight years we must regard this statement, and indeed others by him (see below p 237), with suspicion. That the Black Douglases were closely connected with the lands, though, is beyond doubt, for a charter of 1451 (*Reg Mag Sig*, II, no 475) confirmed the then earl of Douglas, William, in his extensive estates, including the whole barony of Smailholm.

It may be that the Pringles, erstwhile squires of the earls of Douglas (*ibid*, II, no 106), had been tenants in a part of this barony of Smailholm, holding of their lord, the earl of Douglas, prior to the latter's downfall in 1455 and the forfeiture of their estates. It seems equally reasonable to assume that, following the annexing by the Crown of the barony in 1455, the Pringle tenant, George, was confirmed in possession of his portion, that is the western and craggier part of the parish, variously referred to as the West Mains of Smailholm or Smailholm-craig. Having formerly loyally served his Douglas master (Pringle 1933, 92–6), George Pringle now faithfully served his king, both as tenant and as master ranger, or factor, of the Tweed Ward in the royal forest of Ettrick (*Exch Rolls*, VI, 225). And following his death by 1459, his brother Robert took possession of the Smailholm estate as well as taking on the post of master ranger in 'the Forest'.

Quite when the towerhouse was built is still an unresolved matter. The first mention of a towerhouse comes in the year 1536 when John Pringle obtained sasine of the western part of the dominical lands of Smailholm together with its tower ('occidentalis partis terrarum dominicalium de Smalem . . . unacum turre de Smalem') following his father Andrew's death (*ibid*, XVI, 607). The Roxburghshire Inventory (RCAMS 1956, 416–17) dates the tower to the early 16th century on unstated but doubtless general architectural grounds, a date adhered to by subsequent writers (Dixon 1976, I, 205, II, GIV/14; Lindsay 1986, 425). But it has to be said that the tower's uncomplicated rectangular form, unenriched by architectural detail, makes it singularly difficult to date on architectural grounds alone, a point made by MacGibbon and Ross (1887, II, 35–8) in their masterly survey of Scotland's castles. It is to be regretted that the archaeological investigation failed to shed more light on this matter of a construction date.

It could as easily be argued that the towerhouse was erected in the 15th century, plausibly as a direct consequence of the Pringle laird being given good, sound title to the estate after 1455. Certainly it is from that date onward that this main line of the Pringle surname consistently adopted the title 'of Smailholm', emphasizing the importance the family attached to that estate above their others. But there may be good reason for thinking that the tower was built shortly before the downfall of the Douglases. The marked similarity in all but size and scale between Smailholm Tower and the towerhouse-residence of the earls of Douglas at Newark Castle, on the Yarrow Water some 14 miles (20 km) west of Smailholm and built about 1400, has been pointed out elsewhere (Tabraham 1987, 299, fig 2) and it may be that Pringle was building in imitation of his master, albeit in a more humble, less ambitious and less costly manner. The decorative motif on the chamfer stop on the left side of the

hall fireplace may just be a clue. Cautiously described in the *Roxburghshire Inventory* (RCAMS 1956, 417) as a 'foliaceous patera', it could be interpreted more precisely as a heart, the principal armorial device of the earls of Douglas, of whom the Pringles had been squires. This being so, it would be exceedingly difficult to sustain the case for a post-1455 date, let alone a post-1500 one, for the Pringles of Smailholm now held their lands directly of the Crown. The Red Douglas earls of Angus, who retained the heart as the central element in their armorial insignia, had no proprietorial or tenurial link with either the Pringles or Smailholm, although the fourth earl had been appointed warden of the East and Middle Marches in 1455 and was probably instrumental in advancing George Pringle to his prestigious post as master ranger in the Ettrick Forest. Whatever else the chamfer stop may be, it would seem not to be a depiction of the Pringles' own arms – three escallop shells (Laing 1866, 136).

The only other diagnostic feature in the towerhouse, the gunhole of 'inverted-keyhole' type sited directly over the entrance doorway, is of no real help in resolving the dating problem. The type is found in England in the second half of the 14th century (O'Neil 1960, 6–21) and is certainly a feature of Scottish fortification from about 1450, where it appears in the Black Douglases' artillery work at Threave Castle, Kirkcudbrightshire (Tabraham & Good 1981, 55–72), through to the middle of the following century when it is generally replaced by the 'wide-mouthed' gunhole that most probably made its first appearance in Scotland at the blockhouse in Dunbar Castle, East Lothian, before 1523 (MacIvor 1981, 104–19).

The standing remains of Smailholm Tower have been described elsewhere (RCAMS 1956, 416–17; Tabraham 1985, 7–10) and only the briefest outline is needed here in order to explain the very close relationship between the surviving architecture and the archaeological record.

The principal feature is the towerhouse itself, which measures overall 12 m by 9.5 m over walls a little over 2 m thick. It stands 20 m high and houses five storeys of accommodation, entered by a doorway at ground level through the south wall. There are no surviving accounts or inventories which would confirm the uses to which the various spaces were put, but the general arrangement seems clear enough. The lowest two floors comprised a ground-floor cellar and loft, both contained beneath a stone barrel vault and devoid of features other than a door and window. A small hatch in the vault communicates directly with the third storey, clearly the laird's main room, his hall. It has been a reasonably well-appointed chamber, contrasting with the somewhat lack-lustre appearance throughout the remainder of the house. There is a good-sized fireplace, three windows with stone-bench-seats, two small wall-cupboards and a latrine closet in the north-east corner. The fourth storey is similarly arranged though marginally smaller in scale and would have served as the laird's private chamber. The topmost storey was subsequently greatly altered and little can now be discerned as to its original appearance. All the floors were reached by a single, narrow spiral stair rising up through the full height of the building in the south-east corner.

The towerhouse was almost completely enveloped by a masonry wall forming a barmkin, or courtyard, around the tower. Prior to the excavations little but the ruined section of wall along the west side, housing the only gateway, was visible. The north wall of the towerhouse itself formed the limit of the enclosure along the central stretch of the north boundary, thereby astutely letting the latrines in the third and fourth storeys of the tower debouch their soil outwith the confines of the enclosure. There were clearly two courts of unequal size, the larger to the west and a smaller one on the east of the towerhouse with a narrow area of ground along the south side in the immediate vicinity of the entrance doorway. The analysis of this barmkin area forms the main part of this report and is dealt with in detail below.

It was perfectly clear prior to excavation that there had been roofed structures in the west court at least, for here was a stump of masonry protruding through the grass and a roof-raggle about a third of the way up the west elevation of the towerhouse (illus 3). Scott (1817, II, 149) mentions a ruined



ILLUS 3 The towerhouse from the south-west (early 20th century). The roof raggle is clearly visible a third of the way up the west gable, as is the oval gunhole near the top

chapel 'without the tower-court' but Sime (1896, 64) writes more specifically of Cromwell's soldiers in 1650 'destroying the chapel on the north-west side of the gate', that is in the same location as the surviving stump of masonry. The authority for this statement is not given and none has been found by the writers to substantiate it. Scott (1817, II, 151) records 'a few vague traditions' of a siege by the English and that tradition is in part correct for in 1640 Smailholm Tower, then temporarily occupied by Sir Andrew Ker of Greenhead and an armed band of Covenanters, was unsuccessfully besieged by a detachment of musketeers from Lord Ker's Royalist regiment (Cal State Papers, 534). It seems that Sime, not for the first time, is in error certainly as to the date and personality. However, the tradition of a chapel may perhaps be explained by a misinterpretation of the function of an elaborate feature, possibly a wall-cupboard, that was formerly incorporated into the north wall of the building that last occupied the north-west corner of the barmkin and which was discovered during the excavations (below, p 246). The cupboard, if that is what it was, bears several consecration crosses suggesting that it may once have been a credence, or table beside an altar. Indeed, the piece may have been taken from the nearby ruined abbey of Dryburgh for reuse at Smailholm purely as a decorative feature in the house erected by the Scotts in the middle of the 17th century. A similar misguided tradition existed until quite recently about the laird's hall within Orchardton Tower, Kirkcudbrightshire, having been the chapel, again stemming from a misunderstanding of the function of the elaborate aumbry-cum-washbasin there (RCAMS 1914, 58, fig 55).

That the towerhouse itself had undergone substantial alteration during the course of its occupation has been appreciated for some time. The changes were confined to the topmost storey, although quite when the work was carried out is not clear. The *Roxburghshire Inventory* (RCAMS 1956, 417) proposes a pretty wide date-band of the 16th or 17th century, preferring the latter. Since then, there has been a thorough consolidation of the masonry of the towerhouse and a review of the evidence is perhaps in order.

Firstly, if it was clear before it is patently obvious now that almost the entire top storey, from floor to ceiling, is a rebuilding. The predominant use of red sandstone as the building stone contrasts markedly with its almost complete absence from the wall mass beneath where, apart from a few small pinnings, its use is confined to the freestone dressings for quoins and rybats. It must still remain in doubt precisely how much of the drip-table and parapet-walk, if any of it, belongs to the original building. What is now clear, however, is that the gunhole of 'oval wide-mouthed' type high up in the west gable (illus 3) belongs to the rebuilding and not to the original fabric. Gunholes of this type are by and large dated to the 16th century following their appearance in Scotland in the 1510s (see above p 235), although they do continue to be incorporated into buildings as late as the early 17th century. Nisbet House, Berwickshire, for example, was built about 1630 and is bristling with gunholes, some of them, like that at Smailholm, having cut-away sills enabling the gun to be raked downwards more effectively (Maxwell-Irving 1971, 220, pl 27b).

The excavations on the east side of the towerhouse produced a similar story of a rebuilding of the original barmkin wall using a predominance of red sandstone (see below), hinting perhaps that the two works were carried out simultaneously. The excavation, however, was unable to determine the date more precisely.

We have no recourse, therefore, other than to surmise when this radical change may conceivably have taken place. And in the light of what we know of Smailholm Tower's history over the hundred years or so from 1520, arguably the only logical time for such a costly operation to have been warranted was the period during and immediately after the 'rough wooing' of the mid-1540s. The Pringles of Smailholm suffered, as all close to the Border suffered, from the depredations of that time, sufficient indeed to persuade John Pringle, then the laird, to become an 'assured Scot', that is one who, for the sake of his own well-being and those in his household, transferred his allegiance to

England for the duration of the troubles (Merriman 1968, 10–34). The need for those living on the Border to be securely housed was made perfectly clear by an Act of Parliament in 1535 (*Acts Parl Scot*, II, 346; quoted in Cruden 1981, 145). Although there were subsequent directives to Borderers on both sides of the divide in the 1570s and 80s to look to their defences (quoted in RCAMS 1956, 417), in view of the fact that Smailholm had effectively been forsaken as a lordly residence by Andrew Pringle by 1574, in favour of one on his neighbouring estate in Galashiels (Pringle 1933, 110), it must be doubtful whether any major building works would have been carried out at Smailholm during the remaining period of Pringle possession.

The acquisition of the estate by Sir William Scott of Harden in 1645, following the death in penury of Sir James Pringle, resulted in substantial changes to Smailholm Tower, as the excavations clearly demonstrated. But it is most unlikely that those alterations affected the towerhouse in any other than a superficial way. On the contrary, the evidence points to the towerhouse being downgraded as the main residence in favour of a new house within the west courtyard, and the fact that this new building was constructed using the igneous rock as the main building material, with the red sandstone restricted to quoins and rybats, further justifies our understanding that the remodelling of the top storey in the towerhouse is unlikely to have been carried out at the same time. The incorporation of stretches of open wall-walk, for one thing, is most unlikely at this late date, and the blocking up of the gunhole high up in the west gable, probably carried out at this time, suggests that any requirement to defend the property had by now evaporated.

Indeed, the days when Smailholm Tower would be seen as serviceable as a residence were numbered. In 1645, the estate had been purchased by a member of the gentry already happily residing elsewhere and the rebuilding seems to have been done for the benefit of a junior member of Scott of Harden's family. At the beginning of the 18th century, so Sir Walter Scott recalled (1817, II, 151), an old dowager lady resided there, and in the light of the archaeological record it was probably at her death that the rocky, exposed site was finally abandoned. When, shortly after, Robert Scott, Sir Walter's grandfather, took up the lease of the farm from his chief and relative, Scott of Harden, he was more comfortably and amenably housed in a new farmhouse down in the hollow of Sandyknowe to the south-east of the old tower (Lockhart 1906, 6).

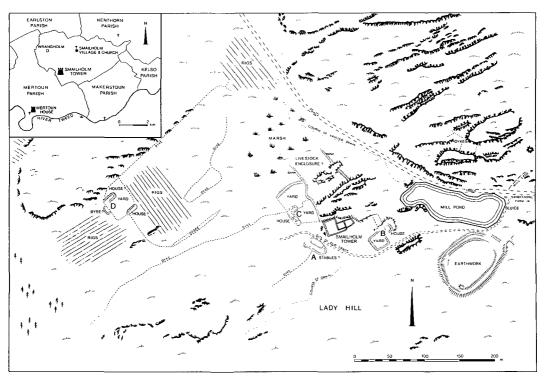
THE FIELD SURVEY (illus 4 & 5)

In 1536, John Hoppringill obtained sasine of the

'western part of the dominical lands of Smailholm and the husbandlands and cottages pertaining thereto with one tower of Smailholm (occidentalia partis terrarum dominicalium de Smalem ac terrarum husbandarium et cotagarium eisdem pertinentium unacum turre de Smalem)' (Exch Rolls, XVI, 607).

In 1559, this same John resigned in favour of his son, David, the lands of Halcroft and the dominical lands called the Mains of Smailholm 'with the tower, fortalice and manor, husbandlands and cottages (cum turre, fortalicio, et manerie, terris husbandiis et cotagiis)' (Reg Mag Sig, IV, no 1344).

Quite when the Pringles first received title to certain lands in the barony of Smailholm is not known but the family was certainly in possession before 1459. Their exact landholding is not clear but, in broad terms, it embraced the western part of the barony, the boundaries of which would appear to have been coterminous with those of the parish of Smailholm (illus 4, inset). The barony, held in its entirety by the earls of Douglas until their forfeiture in 1455, appears to have been split into three parts thereafter. The eastern part, comprising the marginally better farmland and taking in the 'vill' or 'toun' of Smailholm with its 12th-century parish church, was apportioned between two notable



ILLUS 4 Survey of features around Smailholm Tower. (Inset: probable extent of the Pringles' holding [shaded] within the barony of Smailholm)

Border families – the Cranstouns, whose residence was at Corsbie Tower, 6 miles (9.5 km) north-north-west of Smailholm Tower, and the Kers of Cessford Castle, 9 miles (14.5 km) to the south-east. The Pringles were granted the western part, including the lands of Wrangholm and Halcroft. Wrangholm as a place-name no longer survives and is indeed absent from the first edition of the Ordnance Survey, published in 1863. But it can be identified on earlier maps (eg, Roy's of c 1750; Thomson's of 1821) as having lain in the very west of the parish, in the vicinity of the modern farm of New Smailholm (centred on NGR NT 62 36). The place-name of Halcroft has completely disappeared and cannot even be traced on early maps.

The tract of land in the immediate neighbourhood of Smailholm Tower is littered with the tell-tale signs of former habitation and agrarian activity. That they were not included in the Ordnance Survey's first edition points to their being redundant features before the mid 19th century and their very wasted remains hint at some antiquity. In the absence of archaeological excavation, none of the features recorded in the survey can be positively dated as to construction and use. Given what we know of the history of this part of the parish, however, and what we can generally discern from the remains, it would seem plausible that many of the features are late medieval and may well have been in active occupation or use during the Pringle/Scott tenure of the estate.

The most prominent feature in the landscape after the towerhouse itself – the earthwork lying 150 m to the south-east – has already been fully recorded in the *Roxburghshire Inventory* (RCAMS 1956, 418–19) and nothing can be added to that account. During the excavations at the tower, the opportunity was taken of 'tidying up' a cutting through the rampart along the south-west flank made

by a farm track but nothing of significance was found. Whatever period in history, or prehistory, this earthwork belongs to, it is most unlikely to prove of late medieval date.

Four former building complexes were identified. The largest of these, A, lay closest to the tower, just 15 m to the south-west of the gateway into the barmkin (illus 5). This building stood right beside an old road or track, no longer used but delineated on the Ordnance Survey maps, which would appear to have served as the main approach to the tower, coming from the east and west. The greater part of that track is no longer apparent but it is particularly well preserved where it passes close by the tower. Building A beside it on its west side is something of a puzzle. It was constructed on two levels, an upper terrace on the south-west measuring overall 30 m by some 7 m, and a smaller lower terrace in front (that is, nearer the tower) 17 m by 5 m. The upper level was clearly subdivided into three unequal sections and the local igneous stone had been used in its construction. The lower level was less clear but may also have been of stone construction. As to use, this must remain in doubt. It seems most unlikely to have served as a residence and perhaps should be seen as a farmyard attachment, perhaps a stable, in view of its close proximity to both road and tower and the fact that excavation within the barmkin showed that there had never been provision for one there. The split-level construction might even suggest a hay-loft.

The remaining three building complexes, on the other hand, may more plausibly be seen as houses, perhaps the residences of the tenants of the estate, the laird's 'cottagers'. Building B, perched upon a smaller rocky craig 60 m to the east of the tower, is scarcely visible now but seems to have measured 11 m by 7 m over stone walls 1 m thick. No signs of subdivision can be made out. Clearly associated with the house was an enclosed area on its south west, probably a kail-yard, some 360 m² in extent and defined by a bank with stone in its construction.

Building C, 35 m to the west of the barmkin gateway, is much more distinct (illus 5). Clearly built of stone, it measures 23 m by 6 m with an extension, also stone built, measuring 10 m by 5 m at the north-east corner. The main building was subdivided into three, possibly four, unequal-sized rooms by stone partition walls. There were no signs of doorways. This building seems to have had two enclosed areas associated with it, the one on the east, between it and the tower, measuring 957 m^2 , and that on the north about 1175 m^2 , both defined by stone walls.

The fourth building complex, D, lay some distance from the tower, 300 m across the moor to the west. Again largely constructed of the local igneous rock, it comprised a yard, or enclosure, 1716 m² overall, associated with three separate structures, all oblong on plan. Two of them were placed at the north-west corner and stood adjacent to each other. One measured 20 m by 8 m, the second 11 m by 6 m. Across the yard at the south-east corner the third structure measured 17 m by 8 m. The two larger structures may be seen as houses; the third and smallest structure may have been a byre.

The rough ground around the tower had clearly been intensively cultivated in the past, contrasting with its present exclusive use as rough grazing pasture. Several areas of rig cultivation were identified on the moor to the north-west and west of the tower, the individual strips about 5 m wide (what were commonly called 'five-yard rigs'). Numerous stone dykes were traced in this same area delineating former enclosures that may have defined these fields of arable land. One enclosed area, however, was noticeably different, that lying immediately to the north of the craig on which the tower was perched. This large enclosure, 50 m in width from south-west to north-east but with an indeterminate length, was defined by stone/clay walls and showed no signs of ever having been cultivated. It may conceivably have been an enclosure for beasts, used possibly as a reasonably safe gathering-place for livestock from across the estate in times of crisis and afforded a measure of protection by being close to the tower and barmkin. The theft of 60 cattle from Smailholm-craig in one raid by the garrison of Wark Castle, Northumberland, in June 1546 (Pringle 1933, 106–7), must



ILLUS 5 Bird's-eye view of Smailholm Tower from the north-west, showing Building A (centre right) and Building C (bottom right)

reinforce the view that barmkin enclosures themselves were not emergency cattle enclosures for entire herds, though it may well have been the case that certain beasts, including the laird's horses, one or two milk-cows and the odd sheep or bullock were taken inside either for safe-keeping or as an emergency food-supply.

One feature of interest remains to be mentioned, the mill-pond to the east of the tower. This expanse of water provided a source of energy for the mill machinery at Sandyknowe Farm until quite recently and the sluice, lade and wheel-pit can still be traced in the area between the pond and the farm steading. The mill-pond, however, is obviously of some antiquity, though not as ancient as the large earthwork to its south which formerly had a quite steep north-east flank before the creation of the mill-dam flattened out the contours. There is good reason for believing the mill-pond to have been contemporary with the occupation of the tower, for Timothy Pont noted the existence of a waterpowered mill in the immediate vicinity of the tower in his map of The Merse (Mercia), drawn in the 1580s (Blaeu 1654, vol V). This mill we may presume was the one referred to in a document dated November 1636 (Reg Mag Sig IX, no 611, 220-1). Traceable on the ground, particularly in the area lying to the east and north of the probable cattle enclosure, are several stone-lined and vaulted drains channelling water from the craigs to the mill-pond. Long stretches of those drains have collapsed long since and no longer function, and this is entirely the case with that drain lying to the south-west of the tower and which brought water from off Lady Hill and channelled it down the gully between the rocky craigs on which the tower and Building B stood. A particularly well-preserved stretch of drain survives between the east boundary of the cattle enclosure and the modern farm-track, measuring 500 mm wide and 550 mm high.

THE EXCAVATIONS

With the exception of an exploratory trench to the north of the towerhouse, excavation was confined to the area of the barmkin. For economy of space, the following account is an abbreviated version of the full report which can be found in the microfiche section of this article (fiche 3:C3). The features and layers are not indexed in this report; sufficient detail, where relevant, is provided in the text. Features are shown thus: F42; layers thus: ABC.

THE WEST COURT

The larger of the two courts lay on the west side of the towerhouse between it and the gateway into the barmkin through the west wall. This wall was the only part of the perimeter still standing to any substantial height at the time of excavation, being in places over 4 m high. The gateway, centrally placed, was represented by a gap 2.7 m wide, though clearly it had been narrower when entire. The barmkin wall skirting the west court varied between 1.5 m and 2.2 m in thickness. Along the south edge the wall narrowed considerably immediately east of the south range of buildings. On the south side of the towerhouse the wall hugged the very edge of the cliff to leave as much space as possible in the vicinity of the entrance into the tower.

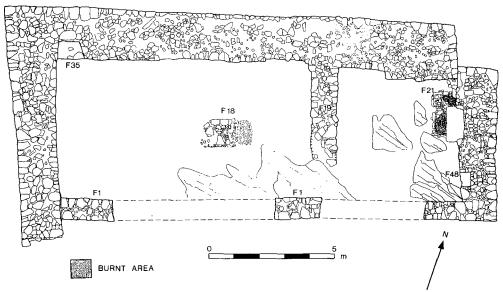
The area of the west court was taken up by two ranges of buildings, placed either side of a central courtyard consisting mainly of flat slabs of igneous rock. In places the natural rock projected through this crude metalling and had in places been chipped away to provide a more even surface. Considerable wear was evident throughout the courtyard and this wear pattern was particularly noticeable along the routes linking the several doorways.

The North Range (illus 6)

The north range used the barmkin wall for its east, north and west walls. The south wall was built largely of the igneous rock but showed signs of having been substantially altered. During the



ILLUS 6 The north range under excavation, viewed from the east. Room II (foreground), Room I (centre) and Room III (furthest away). The square stone setting in the centre of Room I is the hearth (F18) from the phase-one hall



ILLUS 7 Plan of the north range in phase one

course of excavation it became apparent that there had been two main phases of building. In the first, the range had comprised two rooms, a small one to the east and a larger one to the west. This was replaced by a three-roomed structure using the same external walls, with an extension on the southeast built against the west wall of the towerhouse. With the sole exception of the secondary wall dividing the west and east courts, the only use of lime mortar as a bonding agent throughout the entire complex proved to be confined to alterations associated with this remodelling of the north range.

Phase one (illus 7)

The south wall (F1) in this first phase was clay-silt bonded and built at the same time as the barmkin wall itself since the two are jointed together at the east end where the barmkin wall abutted the towerhouse. The position of the entrance(s) into this north range from the courtyard could not be ascertained because of the extent of the reconstruction work (the mortar-bonded sections) carried out on this wall during the second phase.

The building was partitioned into two rooms by a wall (F19). The larger room on the west measured 10.2 m by 5.6 m; the smaller room to its east was about 5 m square. The doorway linking the two rooms lay towards the south end of the partition but its exact position and width could not be determined.

The floor in the larger room overlay the uneven bedrock. The larger gaps in the bedrock had been infilled with rubble and the settling of this infill material had caused considerable disturbance in the floor levels along the north part of the room forcing the north barmkin wall to bulge outwards in places. The instability of this north wall could well have prompted the major remodelling associated with the later phase.

Scarcely any surviving features in this main room could be associated with this first phase. The most obvious was a stone setting (F18) near the middle of the room. It measured 1 m square and the east part had been subjected to intensive burning. The floor immediately to its east was equally heavily burnt, strongly suggesting that this feature had been a hearth. The restricted area of burning

on the stonework indicated that the fire itself had been raised, probably contained within a grate. The area of burning on the stones and the adjacent floor could well have resulted from the raking out of the embers from that raised grate. A narrow clay- and stone-filled trench around the four edges of the hearth, which cut through the burnt soil associated with it, probably represented the removal of a stone kerb around the hearth. In the north-west corner of the room there was a recess (F35) set into the north barmkin wall. This may have been the location of a narrow window, perhaps even a gunhole covering the northern approach to the site.

In the smaller room on the east, the floor surface was far from even. In the north-east corner was a cobbled hearth (F21), set against the east wall (illus 8) with a spread of ash and burning over and around it. Smoke from this fireplace was doubtless carried upwards by a 'hingin' lum', a hooded flue of lath and clay applied to the inside face of the wall. Also associated with this phase was a small wall-cupboard (F48) set into the east wall. This had subsequently been blocked up.

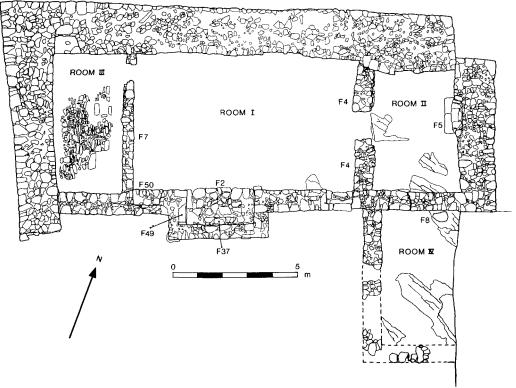
Despite the comprehensive nature of the excavation, including even the removal of much of the rubble infill beneath the floor of the larger room, scarcely any artefacts were discovered, and certainly nothing that would indicate a date of construction or occupation of this phase-one north range.

Phase two (illus 9)

This second phase saw considerable alterations to the north range. The partition wall (F19) was demolished and replaced by a silt-bonded wall (F4) a short distance to the east, so reducing the width of the east room to 3·4 m. An additional partition, the earth-bonded wall (F7), was inserted to create



ILLUS 8 The phase-two Room II from the west. The cobbled hearth of the phase-one fireplace (F21) can be seen beneath and slightly to the left of the phase-two fireplace (F5) set into the far wall



ILLUS 9 Plan of the north range in phase two

an extra room, 2.8 m wide, at the west end of the range, reducing the length of the central room to about 9 m. All three rooms had had their wall surfaces rendered with plaster.

Entry from the courtyard was through an inward-opening door in the south wall of the central room. The basal rybats of the doorway were finely-moulded sandstone blocks. Attached to the west rybat was an iron crook set in lead into the stone on which the lower hinge of the door pivoted.

The doorway linking Rooms I and III, at the north end of the partition wall (F7), also had dressed sandstone jambs, though more simply fashioned than the main entrance doorway with just a plain broad chamfer. Here too the door crook was in position on the north side of the opening, allowing the door to open into Room III against the north wall. One of the jamb stones had a square hole in it which had been blocked up with mortar and small stones, suggesting that it had been reused. Indeed, from the rubble debris (AAB; AAK; AAT) sealing this later building came a number of assorted dressed sandstone pieces which had quite clearly come from another building, or buildings (fiche 3:E8). That the origin of the stone was not Smailholm itself (that is, from the phase-one north range) is demonstrated by the superior quality of the stonework which would suggest an ecclesiastical context; in which case their exclusively pale pinkish-grey Upper Old Red Sandstone composition would point to the nearby abbey of Dryburgh 3.5 miles (5.5 km) south-west of Smailholm Tower (MacGregor & Eckford 1952, 246-8). None of the dressed stonework appears to have been incorporated into Smailholm in the manner first intended, but used merely as building material. An exception may be the probable credence which, since all the pieces recovered were found together, seems to have been reused as a decorative feature, probably an aumbry, in the north wall of Room I (fiche 3:E8).

The fireplace (F2) in Room I was recessed into the south wall. The rybats were simply chamfered and the hood arched over, for nearly all the plain sandstone voussoirs were found amongst the demolition debris. A fireback (F37) of randomly-set stones had been built against the back wall as a protection. A thin patchy layer of ash and the heavily cracked hearthstones were evidence of substantial use. Set into the west side of the fireplace hearth was part of an aumbry (F49), used most likely for housing the salt-box. It was 700 mm wide and 380 mm deep and, although its full height could not be determined, a groove 220 mm up from the base indicated the position of a shelf. The stump of fireplace masonry incorporating this aumbry, the only portion of barmkin building surviving to any substantial height (some 3 m) prior to excavation, had been consolidated in its ruined state in the distant past, for a buttress of stone had been built across the aumbry so as to support the column of stonework above. This repair may well date from the time Sir Walter Scott was expressing concern about the 'dilapidations' in 1799 (see above).

Immediately west of the fireplace was a window recess (F50) with the remnant of a stone window-seat. This had been blocked-up to sill level at a later date and sealed below this blocking was an iron spur of a type common in the 17th century (illus 14, no 8). Opposite the fireplace, in the north barmkin wall, had been the aumbry made up of the pieces of credence already referred to.

In Room II, the phase-one hearth was now replaced by a fireplace (F5) set into the east wall. It measured 1.2 m wide by 300 mm deep and its large sandstone hearthstones projected 400 mm into the room. That this fireplace was not mortar-bonded might suggest that it had been inserted at a time preceding the major remodelling of this north range. In support of this is the fact that this second fireplace was further altered when mortar-bonded stonework reduced its width to 550 mm. At the same time, its base was raised a little. The sandstone blocks forming the sides of the fireplace had small holes in them where an iron grate had been attached across the front.

Room III at the west end of the range was disproportionately narrow (2.8 m wide). Apart from the possible narrow window-light/gunhole tucked into the north-west corner, a legacy from the phase-one building, there were no other features to suggest a function. The lime-mortared floor and the nicely-dressed sandstone doorway linking with Room I, however, suggest something more important than storage space and it may be that here had been a timber staircase leading to private chambers on the upper storey.

At some stage during the second phase an additional room (Room IV, measuring 5.5 m by 3 m) was built at the south-east corner of the north range. Access into the room had at one time been gained via a doorway linking directly with Room II. With the south and west walls of this added room so extensively robbed, it is impossible to determine whether there had been any entrance directly from the courtyard, though in view of the room's use, at least in part, as a coal-store, this seems more than likely. Much of the floor was covered with coal up to a thickness of 200 mm. The only feature noted was a large igneous block laid flat on top of a projection of bedrock in the north-east corner creating a shelf or platform (F8) 600 mm above the floor.

Room IV was probably demolished whilst the remainder of the north range was still in use, judging by its very denuded state and the fact that the doorway linking with Room II had been blocked up. It is with this Room IV, though, that the roof-raggle 6 m up from ground level on the west elevation of the towerhouse is associated, and this height would indicate that the extension, and by implication the whole of the north range in this second phase, was a two-storeyed construction.

Artefacts recovered from this second phase point most forcibly to a date of occupation during the latter half of the 17th century. They include the iron spur from Room I and numerous clay-pipe fragments (fiche 3:F2). Certainly the cyma moulding on the entrance doorway into Room I from the courtyard cannot be earlier than the 17th century (fiche 3:E9 & 11).

There was evidence to suggest that this north range had been used after its abandonment as a

residence. The mortared floor in Room III had been overlain at a later date by a well-laid and cambered floor of cobbles. These showed no signs of wear on their surface. The cobbling stopped short of the side walls leaving gaps filled with large stones and silt (AAT) from which came a hardhead of James VI minted in 1588 but in this context clearly in a redeposited level (fiche 3:E7). The gaps hint perhaps that something had been built or placed against the walls, though there was nothing to suggest what that something might have been or indeed whether it continued around the north and south sides of the room. A few pieces of manganese-glazed pottery of 18th-century date, associated with it (ABB), suggest that this part of the north range at least continued to be used into that century, probably as a farm outbuilding.

The South Range (illus 10 & 11)

The south range comprised two rooms – Room V, about $5.5\,$ m by 4 m, and Room VI, $4.8\,$ m by $4.2\,$ m. The north and east walls (F10 and F14) were built of the local igneous rock bonded with clay. Around Room VI these walls had been almost completely robbed out, though their positions could be determined from the lack of wear on the projecting bedrock. Separating the two rooms was the earthbonded wall (F11) and it would appear that there had never been a doorway through this wall to connect the rooms directly. For this reason it was difficult to be certain whether alterations in the two rooms were made at the same time.

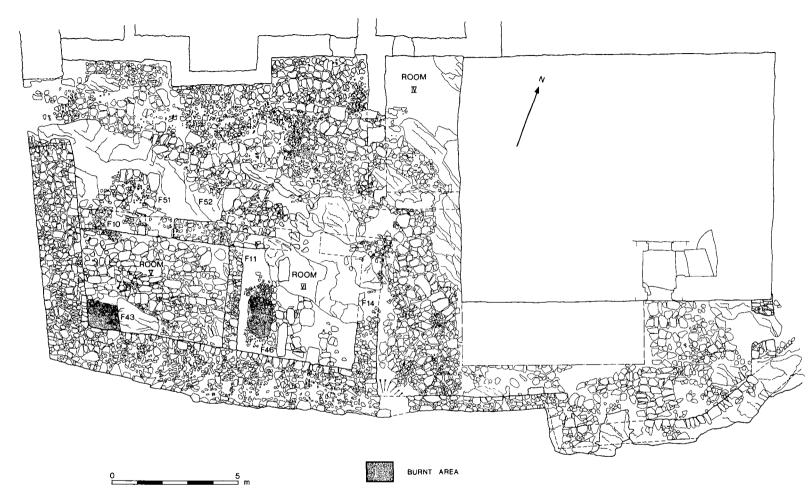
Room V

The entrance to Room V was situated midway along the north side (illus 10). In the earliest phase, the floor was flagged and showed sign of considerable wear. In places the surface had settled and been repaired. In the south-west corner were the remains of a hearth (F43), not too well-laid but the intense burning of the soil and the south wall in this corner indicated that the fireplace had seen considerable use. Overlying it and spreading out from it over the flagged floor were successive layers of burning and peaty soil. A rotary-quern (illus 13) was recovered from this earliest floor level.

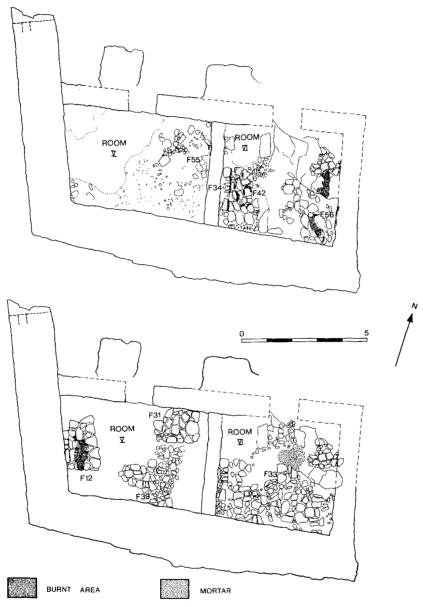
In the second phase (illus 11A), the flagged floor was overlain by a floor primarily made of hard-packed clay. Little remained of the fireplace associated with this phase, but its position was ascertained from burning on the east wall of the room and a few burnt stones and patches of burnt soil (F55) immediately in front. Overlying the clay floor was a layer containing a large amount of coal. Indeed, in the north-west corner of the room the layer was entirely coal. In places where the floor level was sealed by later stone features, patches of occupation material survived containing large amounts of animal bone.

There was a further, and final, phase of alterations (illus 11B). Once again the fireplace was moved, this time to a central position against the west wall. This fireplace (F12) was substantially intact and, like the large fireplace from Room I in the north range, it had a stone fireback. A rectangular stone platform (F31) was positioned in the north-east corner of the room just inside the entrance. Robustly built, it may have served as a solid base for supporting a heavy item of equipment, perhaps a brewing vat. Another stone feature (F39), roughly T-shaped, ran from this base to the south wall and off to the west for a short way. Wear on the uppermost edges of many of the stones suggested that it may have provided a solid foundation for a regularly-walked route through the room, perhaps passing between work-tables.

Fragments of clay pipes recovered from this floor (ACE) date this last phase of occupation to the latter half of the 17th century (below, p 258). Sealing this floor was a loamy layer containing much fibrous material, perhaps the debris of the collapsed turf roof. This in turn was sealed by a rubble demolition level which covered the entire range.



ILLUS 10 Plan of the west and south courts with the south range in phase one



ILLUS 11 Plan of the south range: A (top) - phase two; B (bottom) - phase three

Room VI

Although the north wall of this room had been completely robbed, the probable position of the entrance to the room was indicated by patches of wear on the bedrock running across the line of the wall near the middle. In the room, a matrix of silt and small stones provided a foundation for the flagged floor of the earliest phase (illus 10). Also associated with this phase were two sandstone slabs, one beside the south wall, the other beside the north wall just west of the presumed entrance. This

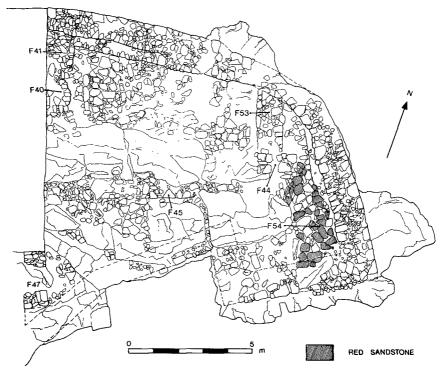
alignment of slabs separated out an area about 2 m wide against the west wall, and at the south end of this was a hearth (F46) showing signs of considerable use. The only sherd of identifiably medieval pottery (that is, pre-17th century) from the entire excavations was recovered from this earliest hearth.

In the second phase (illus 11A), this hearth (F46) was relaid (F42) and given a stone fire-back (F34) to protect the partition wall. An extra fireplace (F56) was added against the east wall near its south end. The third and final phase (illus 11B) saw the hearth (F42) abandoned but the fire-back (F34) apparently retained as a feature projecting above the new floor level. Perhaps it was used as a base, possibly for shelving against the west wall. The hearth against the east wall may have been abandoned altogether. Slightly to the east of the centre of the room was a square patch of stonework (F33) which may have served as a base for a pillar or post, perhaps forming a partition in the room. A coin of Charles II (fiche 3:E6) and a pottery vessel (fiche 3:F1) date this latest phase to the later 17th century. The inclusion of a block of window mullion (fiche 3:E8) in the post base (F33) suggests that these last alterations were carried out contemporaneously with the major remodelling of the north range where there was considerable reuse of fine-quality dressed stonework.

Immediately outside the south range, against the north wall, two stone platforms (F51 and F52) had been built upon the sloping rock (illus 10). These provided level surfaces above the sloping courtyard and may have been used for external storage.

THE EAST COURT (illus 12)

The smaller court to the east of the towerhouse was similarly defined by a stone barmkin wall which had clearly undergone change during its period in use. The original wall was between 1.2 and 1.5 m wide and hugged the very edge of the craggy rock around the north, east and south sides. Little



ILLUS 12 Plan of the east court with the three phases of the barmkin wall

of the south side survived but its position could be determined from the lack of wear on the bedrock. In general in the area of the court, the bedrock was highly polished where it had been continuously walked on, but the areas once occupied by walls retained the dull surface of exposed but unworn rock. In the north-west corner of the area were the foundations of a wall (F41) built parallel to and abutting the east wall of the towerhouse. The wall, about $1\cdot15$ m wide, was clearly bonded into the original barmkin wall, suggesting that it may have been the base for a stair giving access to the barmkin walltop.

At a subsequent period, the stretch of barmkin wall along the east side was replaced by a second wall (F54) to its west. In stark contrast to its predecessor, this wall contained a substantial quantity of red sandstone, suggesting maybe a contemporaneity of construction with the topmost storey of the towerhouse. At a still later date, this east wall, along with the remainder of the circuit around the court, was rebuilt on slightly different lines. The north stretch was reduced to a width not exceeding 1 m; the east stretch (F53) was rebuilt, again slightly nearer the towerhouse, with a width of about 1 m; of the south stretch, the greatest change was the construction of a cross-wall (F47) running north to abut the south-east corner of the towerhouse, thereby separating this east court from the rest of the barmkin area. A doorway just under 1 m wide was centrally positioned through this wall. This stretch of wall was mortar-bonded suggesting that it may well have been contemporary with the phase-two north range.

Considerable animal disturbance had destroyed any stratigraphy there may have been in the east court. The general impression, however, was of a court that had always served as open ground. The depth of topsoil and humic silt, 200 mm, may indicate gardening activity during the latest phase, dated from the pottery and clay pipes to the later 17th century (fiche 3:F2). A roughly semi-circular stone setting (F40) placed against the east wall of the towerhouse seems to have been associated with this latest phase, perhaps a base for a compost heap.

EXTERNAL NORTH TRENCH

A trench was excavated to the north of the towerhouse, directly below the chutes serving the latrines in the north-east corner of the tower. In view of the dearth of artefacts recovered from the barmkin area itself, it was hoped that such a trench might yield more in the way of datable artefacts. In the event, this small trench produced more artefacts than the entire barmkin area but, though these included objects of some antiquity – namely the two pieces of flint, one an arrowhead – they were associated with clay pipes, coins and pottery vessels of undeniably later 17th-century date (fiche 3:E6–F7). Contrary to giving a broad picture of artefacts in use throughout the occupation of the rocky summit, the material recovered from this trench would appear to represent what was cleared out of the towerhouse when the last resident, the old dowager lady, died there at the beginning of the 18th century.

THE FINDS

COINS

David Caldwell

Seven coins were found in the excavations, all Scottish of the 16th and 17th centuries. Most show moderate signs of wear from circulation. The complete catalogue is in fiche (3:E6-7); only the stratified coins are included here.

- Turner (2d), copper, of Charles II (1663). Wt 1.21 grains. (80/62: ACM Room VI, phase 3)
- Turner (2d), copper, of Charles II (1663). Wt 1.68 grains. (80/7: AAC South range, destruction debris)

ARCHITECTURAL FRAGMENTS

The catalogue of fine-quality dressed stonework from the phase-2 and -3 levels in the west court is in the microfiche section of this article (3:E8).

MISCELLANEOUS ARTEFACTS (illus 13-15)

Period 1

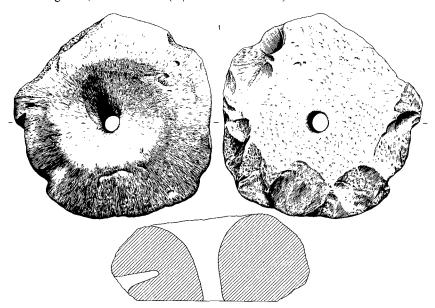
(Pringles: from 15th to mid 17th century)

1 Upper quern stone, of brown quartzitic sandstone. Central hole for grain; side hole for insertion of stick for rotation. (81/109: ADK – Room V)

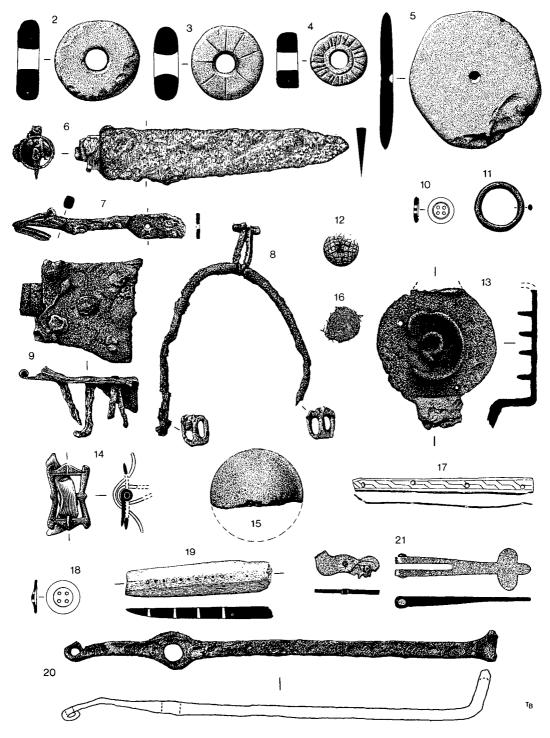
Period 2

(Scotts: later 17th century)

- Stone spindle whorl, of sandstone. Undecorated. (81/37: ACA Room V)
- 3 Stone spindle whorl, of sandstone. Incised radial lines on both faces. (80/5: AAH Room I)
- 4 Stone spindle whorl, of sandstone. Incised radial lines on one face only. (79/13: AAK Room II)
- 5 Stone disc, of shaly sandstone. Central hole drilled part-way through each face. (81/80: ACV-Room V)
- 6 Whittle tang knife. Trace of iron tang and wooden grips. (81/46: ACE Room V)
- 7 Iron object. Perhaps from a pair of scissors (cf no 27), or a double-leaf spring from a lock. (81/71: ACO east court)
- 8 Iron rowel spur. With two terminal attachments. (80/8: AAE Room I)
- 9 Iron plate. With iron nails and traces of wood attached. Probably a hinge plate from an item of furniture. (80/16: AAM Room I)
- 10 Bone button. (80/120: AAK west court)
- 11 Copper alloy ring. Possibly a curtain ring. (80/1: AAB Room II)
- 12 Textile button. (81/63: ACN Room V)
- 13 Iron object. Possibly the ward from a lock mechanism with two concentric collars and the fixing incomplete. (80/124: AAG Room IV)
- 14 Copper alloy buckle. With part of leather belt attached. (81/57: ACK Room V)
- 15 Stone cannonball fragment, of sandstone. (79/12: AAJ Room I)



ILLUS 13 Sandstone upper quern stone (scale 1:6)



ILLUS 14 Miscellaneous artefacts (nos 2-21) (scale 1:2, except no 12 scale 1:1)

Period 3

(Destruction/disturbed levels: 18th–19th century)

- 16 Textile button. Woven round a wooden core. (80/14: AAL Room V)
- 17 Copper alloy strip. Incised strapwork decoration on one face only. (80/4: AAJ west court)
- 18 Bone button. (80/121: AAJ west court)
- 19 Bone knife grip. (80/6: AAA west court)
- 20 Iron window catch. (80/3: AAD Room IV)
- 21 Copper alloy object. Two pieces, perhaps from a balance. (80/10: AAA west court)
- 22 Stone spindle whorl, of sandstone. Incised decoration on one face only. (81/122: west court)
- 23 Stone spindle whorl fragment, of sandstone. (81/93: ADB south court)
- Iron cauldron pieces. Four pieces from the upper part of a cauldron. Pots like this were extensively manufactured by the Carron iron foundry and other Scottish foundries in the second half of the 18th century and early 19th century. (80/2: AAD Room IV)
- 25 Iron rowel spur (cf no 8). (81/53: AAA west court)
- 26 Iron buckle. (80/123: AAA west court)

Period 2

(Artefacts recovered from external north trench)

- 27 Iron scissors. (81/105: ACT)
- 28–9 Copper alloy pins. (81/94–5: ADA)
- 30 Flint arrowhead. Barbed and tanged. (81/96: ADA)
- 31 Glass bead. Coloured and deeply striated. (81/89: ACZ)
- 32 Iron key (81/82: ACT)
- Stone object, of sandstone. Possibly a mortar but more likely a lamp for one of the two bowls is heavily fumed. (For similar lamps see Allan 1984, 294–5.) (81/107: ACZ)
 Not listed: assorted pieces of window- and bottle-glass, clay balls, etc 19th century.

POTTERY (illus 16)

George Haggarty

The full catalogue is on fiche (3:E12).

Conclusions

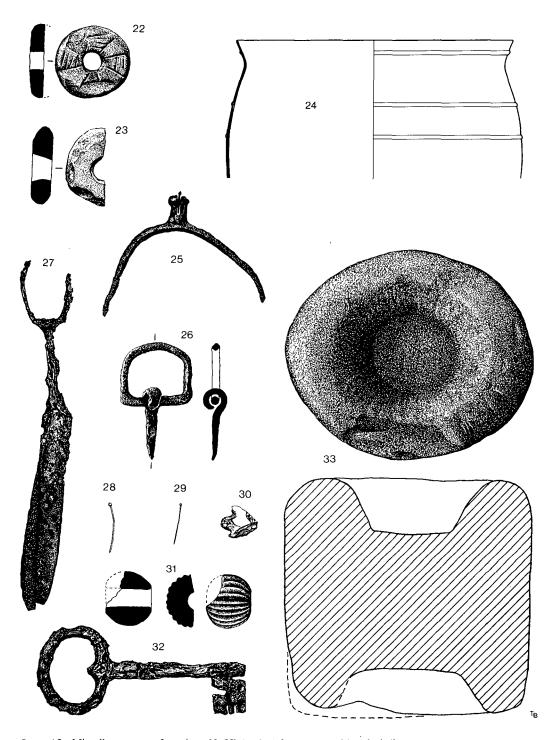
For the purpose of this report the pottery has been treated as a fairly homogeneous group, with the exception of a few residual medieval sherds, including a badly abraded handle from the garden soil in the east court (ACO) and a further two unstratified strap-handle fragments (nos 1-3). The only sherd from a stratified context which may well be pre 17th-century is a single body-sherd from the phase-one fireplace (F46) in Room VI.

The bulk of the Scottish material from the site seems to fit comfortably into the 17th century with the exception of the small vessel (no 16) from a phase-three level in Room VI (ABL) which might be a little later. There appears to be a definite gap in the pottery record with little that could be attributed to the 18th century. The topsoil and disturbed contexts contained some late Victorian and early 20th-century china, material attributable to Smailholm Tower's growing use as a picnic site and visitor attraction.

The dominant pottery is Scottish post-medieval oxidized ware (nos 10–15). This material has been discussed elsewhere (Haggarty 1980, 36–46). Since then, Caldwell and Dean (1981) have established at least one production centre for this type of pottery, at Throsk in Stirlingshire. Without the aid of thinsectioning, however, it is not possible to determine whether this Smailholm material is from Throsk or some other, as yet unidentified source.

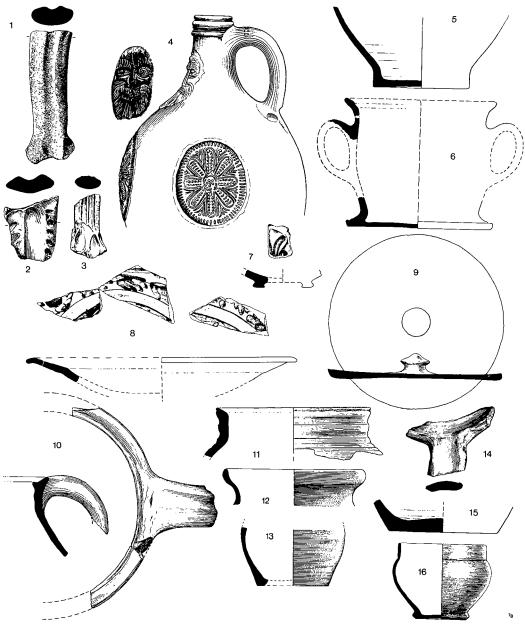
Scottish post-medieval reduced wares, although the dominant ceramic type on most post-medieval sites so far excavated in Scotland, are represented by only three body sherds. These two types of pottery were probably replaced by manganese-glazed ware in the early 18th century and a few such sherds in this material were recovered, including part of a vessel from the cobbling in Room III (ABB).

Imports consist of one lid in what would seem to be a late Saintonge unglazed fabric (no 9); one bellarmine with facemask and three impressed roundels, probably in Frechen stoneware (no 4); a basal



ILLUS 15 Miscellaneous artefacts (nos 22-33) (scale 1:2, except no 24 scale 1:4)

fragment from another stoneware vessel, again probably Frechen (no 5); and three examples of tin-glazed earthenware, one a decorated plate (no 8), one a decorated charger (no 7) and a third, a possible two-handled posset pot (no 6).



ILLUS 16 Pottery (scale 1:4)

CLAY TOBACCO-PIPES

Dennis Gallagher

The full catalogue of illustrated pipes is on fiche (3:F2-7).

Conclusions

A total of 852 clay-pipe fragments was recovered from 57 different contexts. The pipes have been recorded and studied according to guidelines suggested by Davey (1981). The date range of pipe fragments from the occupation phases ranged from c 1620–40 to the early 18th century. The main concentration of pipe material was from the external north trench. Lesser stratified concentrations came from the east court and in the phase 2 and 3 levels from Rooms V and VI.

The group contained bowls of 17th- or early 18th-century date which may be divided into the following groups:

```
15%
        6 bowls unidentified makers, 1620-40:
10%
      10 bowls W/B (William Banks, Edinburgh);
2.5%
       1 bowl
                T or I/B (Thomas or John Banks);
5%
       2 bowls W/Y (William Young, Edinburgh);
                P/C (Patrick Crawford, Edinburgh);
2.5%
       1 bowl
       6 bowls unidentified makers, 1640-80;
15%
20%
       8 bowls unidentified makers, 1680-1730.
```

Almost all the pipes are of Scottish manufacture, mainly from Edinburgh/Leith which was the major centre of pipemaking in the 17th century (Gallagher, forthcoming a). Only two bowl fragments are derived from a non-Scottish source. The heart-shaped GC stamp (no 12) has a distribution through eastern England and may reflect the movement of the maker from central southern England to London and then to Gateshead, the probable source of the present fragment. A small fragment of another heart-shaped stamp (no 13; not illustrated) was found in the same context as the GC stamp. This may be identified with an IG mark discovered in Newcastle; it is typologically earlier than the GC mark and may be dated to 1635–60. These Gateshead/Newcastle pieces reflect the pattern of other pipe assemblages from the Scottish Borders where a small amount of north-east English material is found along with Scottish pipes. They may have arrived with travellers from England rather than representing the patronage by Scots of an English product. No Dutch pipes were present at Smailholm, their distribution in Scotland being mainly confined to coastal areas.

The production of pipes in Scotland is first recorded in the 1620s and the six early bowls from Smailholm represent an early popularity of smoking in that household. The bowls identified as products of William Banks of Edinburgh reflect this maker's monopoly of Scottish pipe-making which he held during the first half of the century (Gallagher, forthcoming a). Burnished fragments made up 13.4% of the total assemblage, a figure low in comparison with the 40% burnished that were recovered from recent excavations at Jedburgh Abbey, Roxburghshire (Gallagher, forthcoming b). Such a comparison as this has to be qualified, however, by taking into consideration factors such as the differing dates of the pipes and the fact that certain makers appear to have produced a consistently higher standard of product. This latter would seem to be true of Patrick Crawford of Edinburgh whose products dominated the market in south-east Scotland but who is poorly represented in this assemblage.

The 19th- and 20th-century material includes pipes from the factory of Charles Tennant of Tweedmouth, the nearest manufacturer to Smailholm, who was active 1852–1915.

FAUNAL REMAINS

Lin Barnetson

A fuller discussion of the evidence is on fiche (3:F8–G2).

Conclusions

In terms of diet, the Smailholm assemblage is dominated by sheep, fowl and fish and although cattle make up only 10% of the total fragment count, their contribution would not have been insignificant given the relative meat yields of mutton and beef carcasses. Pork was obviously eaten on occasion but pig bones account for less than 1% of the total sample. Only the sheep sample is large enough to confirm the preparatory function of Room V but there the lack of forelimb bones is intriguing. Mutton shoulders must have been discarded elsewhere.

Chickens and fish were important, and although it is not surprising that salt-water fish formed part of the diet, it is extremely interesting that their bones were recovered in such quantity. No fresh-water species

TABLE 1
The range of species and number of identified fragments

D	C-44	Chara	Dia.	IIaaaa	Dind	Fish	Dobbit	Other
Deposit	Cattle	Sheep	Pig	Horse	Bird	risn	Rabbit	Other
N Range, phase 1	4	10	1		8		1	
N Range, phase 2								
Room I	9	50	1	1	11	1	1	weasel
Room II	6	4			3			frog
Room IV	4	8			1		1	
N Range, phase 3								
Room III	2	11			6	1		rat
W Court	11	10			1		12	
S Range, phase 1								
Room V		2			1			
S Range, phase 2								
Room V	48	390			136	188	12	
						(+200)		
S Range, phase 3								
Room V	24	72	4		14	5	1	
Room VI	18	44	6		16			
E Court	4	1			2		1	
Total	130	602	12	1	199	395	29	3

were recognized, though it is possible that their bones are present in the large collection of unidentified material. Many early English sites yield fresh-water species, such as pike, but despite the fact that Scottish lowland burns and rivers can support a variety of fish, their bones seldom appear in archaeological contexts. Whether this is a reflection of species distribution or preference for the tastier and readily available sea fish is not yet clear.

Although the Smailholm assemblage is small, good preservation and careful excavation (including sieving) have yielded a very interesting sample for comparison with other sites. The sheep were of the small, horned variety common to southern Scotland in the medieval period and their dimensions accord well with those at other sites such as Threave Castle (Barnetson 1981, 131–6). The cattle and pig samples are too small to permit similar comparisons. Domestic fowl and, to a lesser extent, fish are also typical components of both rural and urban diets in this period and appear in all medieval middens. Smailholm,

TABLE 2
Skeletal element frequencies of cattle and sheep in phase-two levels in Room V

Bone	Sheep	Cattle
Scapula		
Humerus	1	
Radius		
Ulna		
Innominate	7	
Femur	6	3
Tibia	6	2
Metacarpal	20	
Metatarsal	12	
Phalanges	24	2
Carpals/Tarsals	4	1
Astragalus	3	
Calcaneum		
Vertebrae	69	14
Costae	134	15
Cranium	22	
Maxilla	10	
Mandible	18	
Horn-core	3	

however, either made good use of sea fish or had better preservation than most other sites in that 16% of the bones identified to species were salt-water fish compared to only 3.5% at the peninsular site of Cruggleton Castle in Galloway (Barnetson 1985, 68–72). Future excavation of similar dwellings, albeit on a small scale, could enable us to build up a picture of local economies and husbandry for a period of Scotland's history which has, until recent years, been somewhat neglected by archaeozoologists.

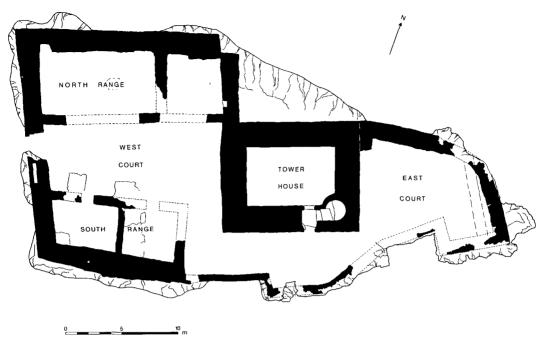
DISCUSSION

It has to be stressed at the outset how disappointing it was that the excavations failed to produce any material sufficient to determine the date when the towerhouse and barmkin were built. Just two artefacts – the hand quern from Room V (illus 13) and a scrap of pottery from Room VI – were recovered from all the phase-one levels and neither was of help in giving other than a general medieval date. There would seem to be two plausible reasons for this dearth of artefacts. Firstly, it may be that the inhabitants were particularly clean-living, assiduously cleaning up any debris and taking it to the midden, which we have to assume was sited outwith the barmkin enclosure. In the second place, there is the distinct possibility that the redevelopment of the site by the Scotts in 1645 resulted in a wholesale clearance of the place prior to rebuilding. A third possibility, that the inhabitants were so poor that they had little to lose or throw away, can be dismissed out of hand. After all, we are dealing with a family of some substance. For example, Andrew Pringle's estate, at his death in 1585, was valued at about £450 sterling, putting him among the top 10% of all landed gentry in terms of wealth anywhere on the Border (Dixon 1976, I, 213–4; Ap 1/viii).

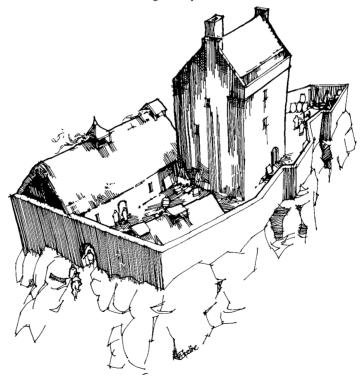
Notwithstanding this lack of datable artefacts from the earliest phase of occupation, the excavations produced sufficient structural evidence to demonstrate how the residence had been planned at the outset and how it was adopted and adapted by succeeding generations of occupants down the years. There were two significant phases. Firstly there was the building of the complex, and though we have no independent dating it would seem reasonable to suppose that this was contemporary with the erection of the towerhouse very probably in the 15th century. Secondly, there was the substantial remodelling carried out by the Scotts in the 1640s. There were other, more marginal alterations to the fabric carried out at other times, and there was very probably a final, non-residential use of part of the complex after the last occupant died there at the beginning of the 18th century.

The original barmkin complex was shown to be a far more sophisticated arrangement than one might have supposed (illus 17). The generally held view prior to excavation had been that of a towerhouse serving as the only residential unit surrounded by service offices – eg the kitchen, bakehouse, brewhouse and stable. The excavation showed, however, that in the west court there had been residential as well as service accommodation. The residential unit placed on the north side of the west court, is interpreted as a hall-block, comprising a larger hall on the west and a smaller chamber on the east. The presence of an outer or great hall complementing the residential provision is accepted at the great royal and baronial castles, like Edinburgh and Tantallon, but their existence at contemporary towerhouses has not been generally appreciated. But they are beginning to emerge, either through a re-examination of upstanding architectural remains, as at Crichton Castle, Midlothian (Tabraham 1987) or through archaeological investigation as here at Smailholm and elsewhere (eg Threave Castle (Good & Tabraham 1981, 99–102)) where excavation is beginning to reveal these less robustly built halls. A general discussion of the evidence is being published in the succeeding paper in this volume.

The hall and chamber at Smailholm appear to have provided good residential accommodation (84 m²) to complement Pringle's somewhat cramped and restricted provision within the towerhouse itself (213 m²). The hall itself had a fireplace positioned almost centrally within the room, in a



ILLUS 17 Ground plan of Smailholm Tower in Period 1 – the Pringle occupation



ILLUS 18 Reconstruction drawing of Smailholm Tower in Period 1 – the Pringle occupation

manner similar to other medieval great halls like Bothwell Castle, Lanarkshire (Simpson 1925, 27) and Doune Castle, Perthshire (Pringle 1987, 22–3). The smoke from the fireplace was most likely vented-out through a louvre or timber vent in the roof and this points to a structure of single-storey height. The smaller chamber had a fireplace set against the side wall and we assume that it had a 'hingin' lum', a flue, constructed perhaps of lath and clay, attached to the inside face of the wall, in a manner that was not uncommon, particularly in the Border country, until comparatively recently (RCAMS 1956, 136, fig 46).

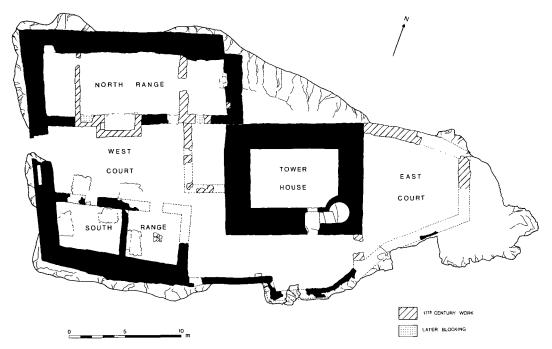
Across the west court, along the south side, was service accommodation. It is impossible to determine more precisely what this service was, though we may reasonably assume that, as both had fireplaces, one had served as the kitchen and the other perhaps as a bakehouse or brewhouse. Prior to excavation and the discovery of the hall-block immediately adjacent, it was thought that a kitchen range within the barmkin must have served the hall within the towerhouse since there was no such provision therein. In the light of these excavations, it seems reasonable to suppose that any meals taken by the family within the towerhouse were prepared and cooked in the hall fireplace (as numerous contemporary woodcuts and other illustrations suggest). In which case it may be more likely that the kitchen range within the barmkin served the hall-block directly opposite, where more general entertaining was undertaken. The absence of kitchens within a good number of these less grand early towerhouses has never satisfactorily been explained and the suggested arrangement at Smailholm may offer a more reasonable solution than the more generally held but somewhat implausible explanations like the fire hazard or the undesirable smells.

The south and east courts, in this first phase, appear to have been left as open ground, that on the east probably serving as a small garden. The barmkin wall around the entire complex was a substantial one, generally well over 1 m thick. The nature of the superstructure of this wall was impossible to define but the presence of a stone foundation (F41) in the north-west corner of the east court, integral with the barmkin wall and interpreted as the base of a stair, may suggest that the barmkin wall was provided with a wall-walk. An artist's reconstruction (illus 18) conveys an impression of what the Pringle residence may have looked like during the first phase of occupation.

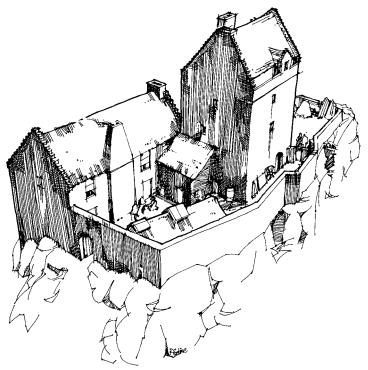
Subsequent changes to this accommodation which can confidently be assigned to a period before the major rebuilding in the 1640s include an alteration to the fireplace within the chamber in the hall-block by abandoning the 'hingin' lum' and fully incorporating the fireplace within the thickness of the east wall. There were some alterations to the south range, particularly to Room V where the fireplace was resited. The overwhelming proportion of animal, bird and fish bone from the site came from this phase in Room V and the fact that much of it was from non-edible parts points to this room serving as the kitchen, at least in this second phase, and very probably from the outset too.

Perhaps the most significant alteration was to the barmkin wall around the east court where the east section was taken down and rebuilt slightly nearer the towerhouse. That this new section incorporated a great deal of red sandstone in its construction points to its having been built at the same time as the restructuring of the topmost storey of the towerhouse, which is likewise built largely of red sandstone. Although the excavation failed to produce an independent date, we argue elsewhere (see above p 237) that this change may well have been carried out in the 1540s.

The most radical alteration, however, was that carried out by the Scots in the 1640s (illus 19). Their arrival heralded the end of the medieval era, for their perception of a lordly residence was markedly different from their Pringle predecessors. We cannot now say quite what use they made of the old towerhouse but it seems that it no longer formed the focus of the residential accommodation. In its stead, they erected a new house, largely self-contained, on the north side of the west court, over the site of the former hall-block. Its fragmentary state does not allow the building plan to be fully understood. It had clearly been a two-storeyed construction as the roof-raggle 6 m up the west



ILLUS 19 Ground plan of Smailholm Tower in Period 2 – the Scott occupation



ILLUS 20 Reconstruction drawing of Smailholm Tower in Period 2 – the Scott occupation

elevation of the towerhouse shows, and there may have been an attic storey also. The narrow Room III may have been the site of an internal timber stair giving access to the upper rooms, which would have included bed-chambers. The remaining two rooms on the ground floor within the main block had clearly been living rooms. Room I was most probably the principal room incorporating the kitchen whilst Room II was possibly the parlour. Room IV, in the extension on the south-east, was clearly storage space at ground level.

The south range was altered at the same time, though it continued as service. With the kitchen now integral with the new house, Room V was allotted a new use and the substantial stone setting (F31) may have been the support for a heavy fixture such as a brewing vat. Room VI had no fireplace in this last phase and may have been for stores only. The barmkin wall was altered also, most noticeably around the east court. The stretches along the north and east sides at the least (the stretch along the south scarcely existed) were rebuilt with a reduced thickness, giving the wall the appearance more of a garden wall rather than any solid defensive shield. And, apparently for the first time, the east court was separated off from the remainder by the insertion of a cross-wall at the south-east corner of the towerhouse. A second artist's reconstruction (illus 20) serves to illustrate how the residence may have looked during the period of the Scotts' tenure.

Some general observations are called for. As far as constructional techniques go, it is clear that lime mortar as a bonding agent in wall construction was confined to the Scott rebuilding. Prior to that, all walls had been clay-silt bonded. Roof coverings would seem to have been of turf or thatch throughout the complex and at all dates. Certainly there was no slate, tile or stone recovered from the destruction debris overlying the north range, and there was good evidence for the use of a fibrous material over the south range. This comes as no surprise for the use of turf and thatch was common throughout the Border country until this century. The roof of the towerhouse was, however, stone-slabbed for a few slabs survive *in situ* and further pieces were recovered from the external north trench.

The excavation produced no draw-well or other form of water supply and the provision of fresh water for use by the household must remain in doubt. There may have been rainwater-barrels placed at strategic places within the enclosure but they can only have been of limited value if the roofs were covered with fibrous material. It might seem a little extraordinary but there may have been a small, man-made reservoir directly beneath the south face of the rocky craig, for the field-survey identified what may just have been a stone dam here, with the water being drawn off Lady Hill by the now-defunct drain. It may be that the household used the natural gap in the bedrock of the craig at the point just to the south-east of the towerhouse to draw water from that reservoir.

The excavation produced a quantity of coal from various contexts. None was positively identified from phase-one levels but there was a considerable amount from the phase-two fireplace in Room V and throughout the 17th-century levels. Analysis of the coal by the former National Coal Board suggests that the coal originated from an outcrop or opencast basin with a low sulphurous content and this would point to geological strata east of Smailholm, rather than to the west. The Brampton area of Northumberland is a possibility, as may be the little-known mining operation at Cove, on the Berwickshire coast, which closed during the 18th century (NSA 1845, II, 298).

The artefactual assemblage from the later levels, as one might expect, reflects an east coast dependence, like the coal. Pottery from the Forth area or imported through east coast harbours from production centres on the Continent; salt-water fish perhaps landed at Eyemouth; clay pipes from Edinburgh/Leith. The large quantity of clay pipes includes some particularly early examples, hinting that smoking had become popular in the Smailholm household by the 1630s. In which case, it was the Pringles who had taken to the weed, though whether Sir James Pringle had sought solace from it to take his mind off his growing financial troubles will never be known.

ACKNOWLEDGEMENTS

Whilst this report was in preparation, Tom Borthwick retired from 'Ancient Monuments' after a lifetime's service as our archaeological illustrator. His drawings of the Smailholm artefacts published here were his last 'official' masterpieces. Tom's quite superb drawings have graced many a report down the years and we wish to record here our special debt to him.

We are grateful to the following staff who worked on the excavation: Tom Chilton, Eoin Cox, Gordon Ewart, Patricia Fettes, George Haggarty, John Lewis and Alison McIntyre, and to Gladys and Fred Bettess who carried out the detailed field survey. Our thanks go also to Lin Barnetson, David Caldwell, Dennis Gallagher and George Haggarty for their specialist contributions; to Richard Fawcett (architectural fragments), Dave Evans and Sarah Jennings (pottery), Geoff Collins (geological identification), Tom Pettigrew of British Coal (coal identification); and to Dave Pollock for his artistic reconstructions.

Finally, we must thank Mr and Mrs Tom Stewart of Sandyknowe for their forebearance throughout our comings and goings.

DISPOSAL OF FINDS AND DOCUMENTS

The note-books, field drawings, photographs and other material have been deposited with the National Monuments Record of Scotland; the finds await final disposal.

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This paper is published with the aid of a grant from the Historic Buildings and Monuments Directorate (SDD)