

North Berwick, East Lothian: its archaeology revisited

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ABSTRACT

An overview of archaeological excavation and research in one of the smaller burghs shows surprisingly good preservation of deposits, especially beneath wind-blown sand, and evidence of the burgh's origins, topography, development and industries. The early importance of pilgrimage, the role of the Cistercian nunnery and the impact of climate are all subjects for continuing research. This paper is sponsored by Historic Scotland.

INTRODUCTION

North Berwick is one of the small east coast burghs characteristic of the medieval Scottish town, and was one of those chosen for study in the first series of the *Scottish Burgh Survey* (Simpson & Stevenson 1981). Bypassed in the industrial revolution, it developed quietly as a pleasant seaside resort, especially after the arrival of the railway in 1850 (Ferrier 1991, 68), and latterly has become a base for commuters to Edinburgh and a place of retirement. By the 16th century it had already fallen behind its neighbours Dunbar and Haddington (Simpson & Stevenson 1981, 2), and its modest scale then and now has limited both the evidence of occupation deposited in the past and the opportunities to discover it in the course of modern development. Nevertheless, a great deal more survives below ground than might have been expected, protected in part by the comparative lack of large-scale industrialization, and more of it has come to light, especially in the 17 years since the publication of the Burgh Survey, than might have been anticipated from the unobtrusive but pervasive redevelopment and regeneration of the town.

Much of this evidence has been recovered by the Scottish Urban Archaeological Trust (SUAT), and together with the results of other work has been summarized in an archaeological update to the Burgh Survey, commissioned and distributed by Historic Scotland. The present paper, also commissioned by Historic Scotland, is an overview of our current state of knowledge, especially of the contribution made by archaeology in the last 15 years, and its implications for further work in North Berwick and similar small burghs.

Urban archaeology may be even more rescue-driven than rural archaeology, because most urban sites are completely inaccessible until exposed by redevelopment, so it is always a challenge to integrate urban archaeology into a broader framework of research, either when planning a programme of urban excavation or, as here, offering an interpretive overview of what has already been done. Nevertheless, the study of North Berwick has contributed to a number of lines of enquiry, albeit unevenly and with many gaps. There have been three substantial excavations, four trial excavations and four watching briefs in North Berwick, as well as chance finds on at least

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seven recorded occasions; the numbers in italics below refer to the gazetteer which is appended to this paper.

LOCATION AND TOPOGRAPHY (ILLUS 1–2)

The royal burgh of North Berwick is situated in East Lothian, on the southern side of the Firth of Forth. It lies on the shore of a fertile coastal plain which projects markedly northwards into the Forth, and extends south to the Lammermuir hills some 20 km away. It is dominated by the distinctive conical summit of North Berwick Law (187 m), a volcanic plug directly to the south of the town, surmounted by a prehistoric fortification (see below). The main route from Edinburgh to the Border follows the Tyne valley some 10 km to the south, passing through Haddington and Dunbar to Berwick-upon-Tweed, so the town largely misses the long-distance traffic through East Lothian, despite being easily accessible from all the local centres.

The burgh's early importance derived from its maritime communications. It has a compact sandy beach, sheltered to east and west by rocky promontories, the eastern being almost an island, and occupied by the harbour. The High Street runs parallel to the beach, as do the subordinate thoroughfares of Forth Street and St Andrew Street, but there is an alternative perpendicular axis on Quality Street and Victoria Road which leads to the harbour. The site of the town is generally flat and low-lying, but rises to the south, gently at first, and then more steeply on the lower slopes of the Law.

PRE-URBAN EVIDENCE

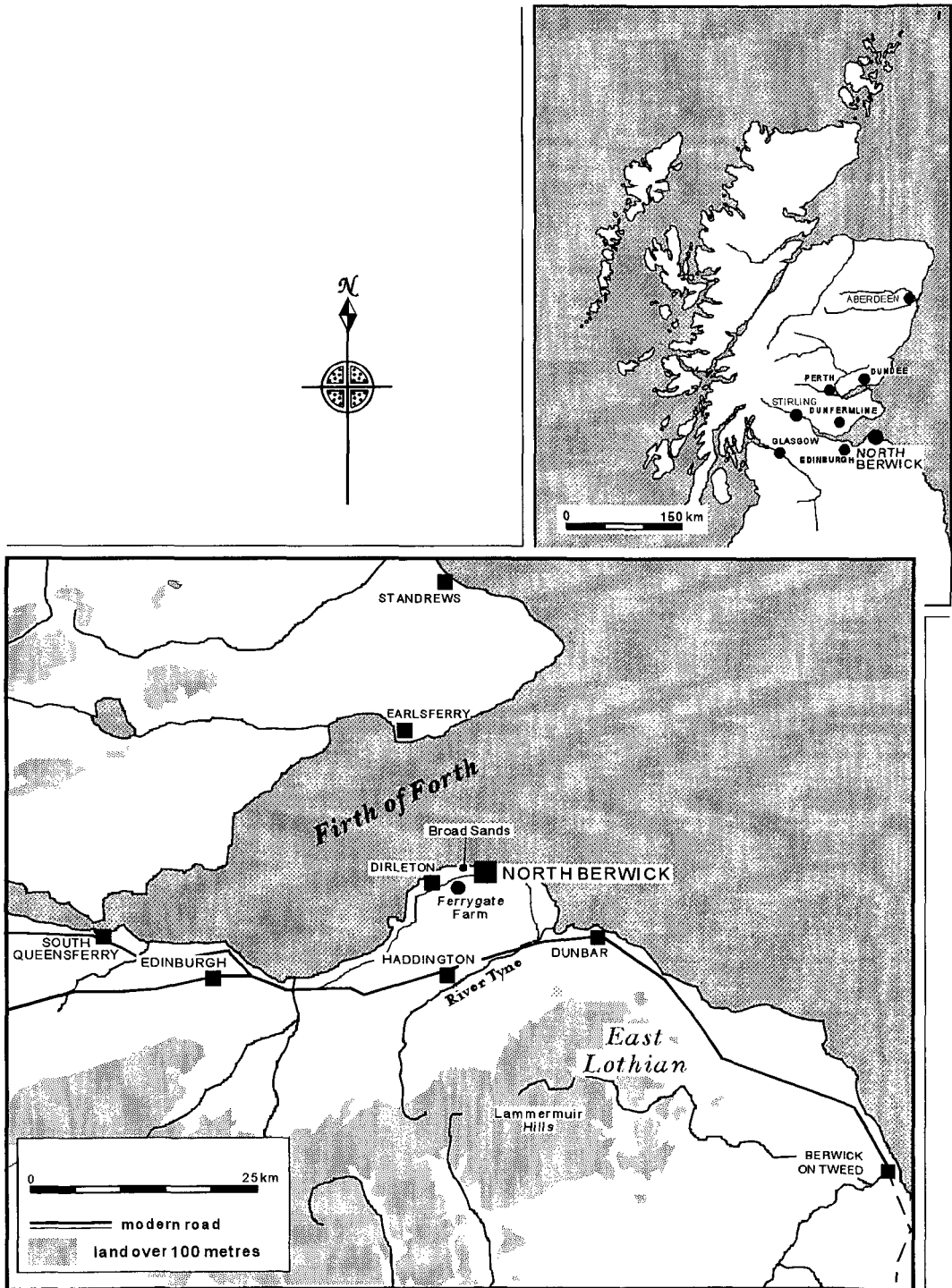
THE LAW

The burgh is dominated by the hill-fort on the Law directly to the south (*illus 2*), apparently of late Bronze or early Iron Age date, but our knowledge comes only from surface inspection and chance finds. The visible remains of this important monument are for the most part scanty, as much of the stonework has tumbled down the slopes in antiquity. An area some 150 m by 90 m was enclosed by a stone wall some 15 m below the summit, a terrace to the south-west was similarly enclosed, and there are hut circles on the lower part of the hill slope. When the quarry on the Law was worked in the 19th century, numerous middens were exposed and several prehistoric artefacts were recovered (Feachem 1983, 119). A Bronze Age axe and a bone bead were also found in 1962 (see below *17, 18*).

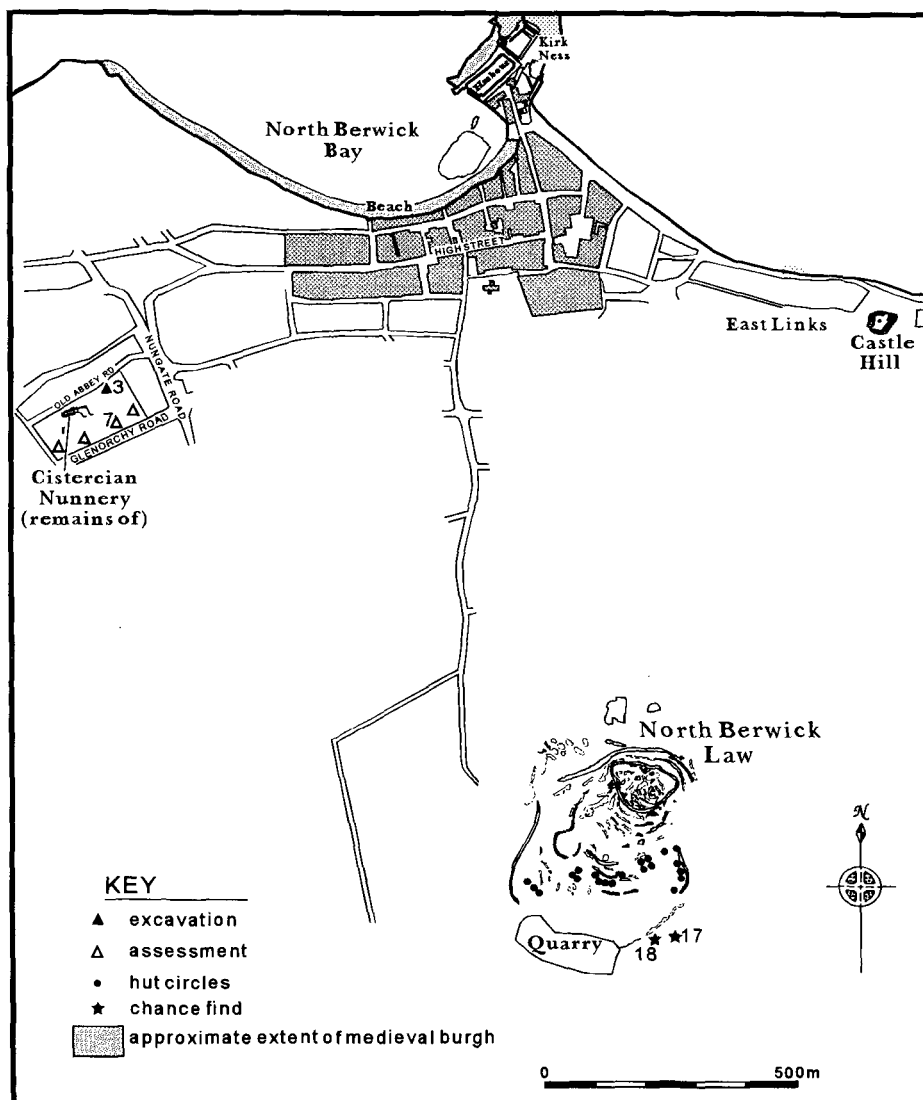
The site is of such exceptional strategic importance, easily defensible, dominating a fertile plain, with excellent maritime communications and a commanding view of a major seaway, that it would be surprising if it was not reused in Dark Age times. The immediate proximity of the burgh, its early importance as a ferry crossing to Fife, and evidence, albeit scanty, of sixth-century activity to the east of the burgh (Simpson & Stevenson 1981, 14) all raise the question of continuity, however tenuous, between hill-fort and town. There is, of course, nothing like the evidence required to take this speculation any further, but any opportunity which arose for fieldwork on the Law or documentary research into early Christian activity in this part of East Lothian might produce very interesting results.

CASTLE HILL

To the east of the burgh is Castle Hill, a flat-topped grassy mound overlooking the East Links, apparently an undocumented early motte. It stands c 12 m high, and seems to be an artificially



ILLUS 1 General location map (Based on the Ordnance Survey map. © Crown Copyright)



ILLUS 2 The burgh in its setting (Based on Ordnance Survey 1:25,000, 1969 © Crown Copyright)

modified natural mound, defended to the south by a ditch, with traces of an earth and stone bank encircling the summit (Simpson & Stevenson 1981, 16–17). It is a scheduled ancient monument, and shares many of the strategic characteristics of the Law, with the advantage of much greater accessibility, so it is not surprising that it was fortified, but puzzling that so little is known about it. Its location so far east of the burgh, and the absence of documentation makes its relation to the burgh or any pre-burghal settlement difficult to assess. Any progress in our understanding will come from fortuitous discovery of documentary evidence, or from archaeological investigation, for example in response to a natural threat such as erosion.

THE BURGH

The date of the first settlement at North Berwick itself is unknown, but a ferry port for pilgrims to the shrine of St Andrew was certainly in existence from the eighth century (Simpson & Stevenson 1981, 14). North Berwick became a baronial burgh belonging to the Douglas family in the 14th century, and was first mentioned as a royal burgh in the reign of James I (1406–37) (Pryde 1965, 47, 128).

THE PILGRIM ROUTE (ILLUS 1, 2, 4)

North Berwick owed much of its early importance to its location on the pilgrim route to the shrine of St Andrew. St Andrews is particularly affected by the peninsular geography of Fife, and is not readily accessible by land despite its ecclesiastical importance. This is also true of other early Christian centres, Iona being an extreme example, and emphasizes the crucial importance of maritime travel in early medieval Scotland. The crossing from North Berwick to Earlsferry was the quickest route for pilgrims travelling from the south to St Andrews, and cut off long inland journeys on both sides of the Forth. The precise boarding point for pilgrims in North Berwick is not certain; it has been suggested that it may have originally been closer to Dirleton at the Broad Sands close by Ferrygate farm (Ferrier 1991, 14), but if so, it must soon have moved to North Berwick Bay. Small boats, or tenders to larger ones, probably beached to embark and disembark pilgrims at Broad Sands, and could still have beached on the sands at North Berwick. The crossing is quite a long one (18 km) for a small boat, and the ferry service may have been very busy at the height of the season, so there may have been more substantial arrangements for boarding larger boats directly, perhaps located like the present harbour on the small rocky peninsula called Kirk Ness at the east end of North Berwick Bay. There are references to the harbour works in 1632 and 1726 (Simpson & Stevenson 1981, 18), and it was certainly in place by the time of Bishop Pococke's visit in 1760 (Kemp 1887, 319), while nearby is the ruin of the earliest parish church, established before 1177 and dedicated to St Andrew, suggesting a strong link with the pilgrim traffic. Also a ferryboat was chosen as the theme for the burgh's heraldic coat of arms, demonstrating the importance to the burgh of the pilgrim ferry.

The ferry route seems to have existed until the late 17th century, but use by pilgrims would have ceased in the 16th century as a result of the Reformation, and might have been in decline earlier. At a much earlier date, the sack (1296) and loss (1333) of Berwick-upon-Tweed extinguished a major centre of population in southern Scotland, while the ensuing long wars with England would have discouraged any movement of pilgrims from south of the border. This may have engendered an early decline in pilgrim traffic from the south passing through North Berwick; pilgrims from inland and the west might be more inclined to use the Queensferry crossing.

PARISH CHURCHES (ILLUS 4)

Although the first mention of the parish church is in 1177, it is likely that it had already been appropriated to the nunnery by c 1150 by Duncan, Earl of Fife; that grant was confirmed before 1199 by Malcolm, future Earl of Fife (Cowan 1967, 157; Cowan & Easson 1976, 147–8). The exposed peninsular setting of the first parish church would always have been rather inconvenient, but may be understandable if Kirk Ness was the main point of embarkation for pilgrims. It was reachable only by a bridge or causeway, at first of timber, though later of stone, which was largely destroyed, along with the church, in winter storms by 1656 (Ferrier 1991, 18, 49). The site was

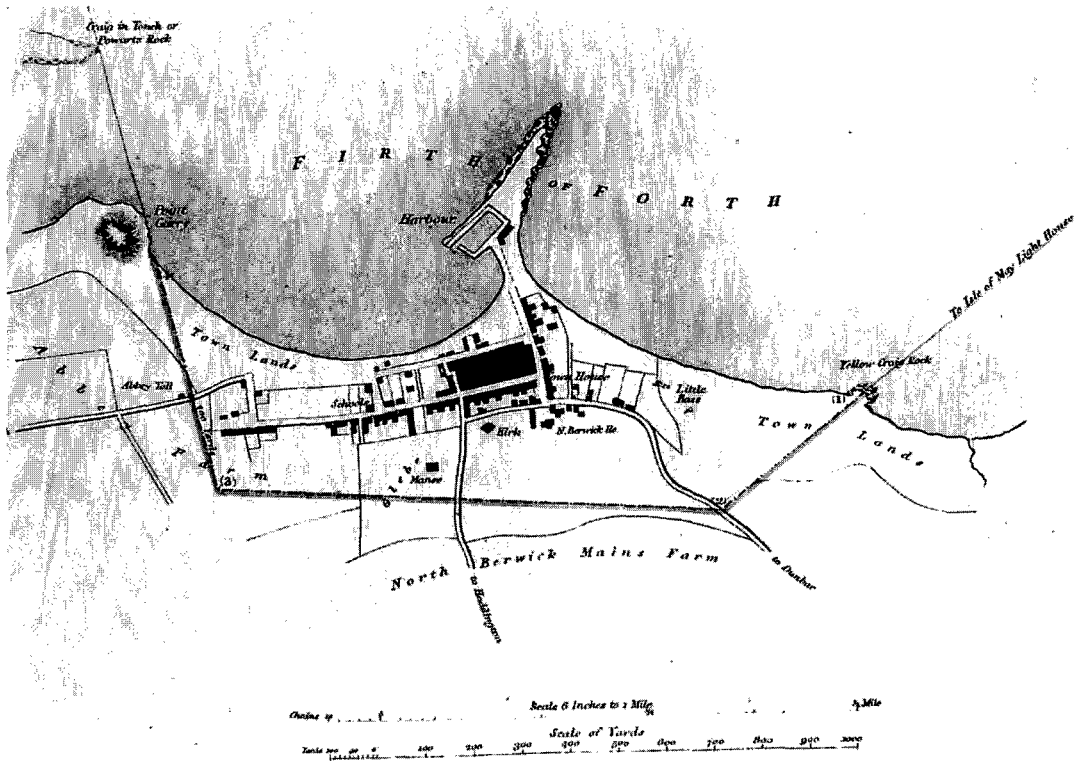
not originally so confined and exposed as it later became, being protected by a volcanic outcrop of tufa known as ‘the red leck’ (perhaps from Gaelic *leac*, stone or slab). Unfortunately this stone was found especially suitable for making hearths and ovens, and was being regularly quarried away by the 1530s (Ferrier 1991, 33), leaving the church ever more vulnerable. The storms which largely destroyed the church also washed away most of the graveyard which lay to the east, but even after the establishment of a new burial ground inland, some families continued to exercise rights of burial on what was left of the old site (Ferrier 1991, 49–51). Nevertheless, the site must always have been rather restricted even for a small burgh, and might have encouraged interest in an alternative burial ground. The church finally went out of use in 1659, and the congregation removed to a new building south of the High Street, which was completed in 1664 and rebuilt at the end of the 18th century (Simpson & Stevenson 1981, 5, 14).

By the late 19th century this church in turn was felt to be inadequate to the burgh’s needs, being rather dark and damp, and comparing badly with the more modern buildings of other denominations in the town. It was decided not to extend or rebuild on the same site, as this would have required extensive disturbance of a burial ground already more than 200 years old, and so the congregation relocated to a new building in the High Street, begun in 1882, completed the following year, and still in use (Ferrier 1991, 70). The 17th-century church remains as a ruin, surrounded by the old churchyard.

The only excavations on the ruined church by the harbour took place at the beginning of the century (1), and do not seem to have produced any recorded results, but there have been numerous finds from the area (12–15), mostly medieval. The importance of the pilgrims to the burgh is demonstrated in the 19th-century discovery in the old churchyard of a portion of a double-sided stone mould for casting pilgrims’ badges and ring brooches (Simpson & Stevenson 1981, 1, 10). The church is likely to be the earliest site in the burgh, and a fresh look at the finds assemblage might shed some light on early activity in the area. The site itself is unlikely to experience any major development in future, but could be subject to minor disturbance to consolidate the ruins, or upgrade services such as lighting. Burials, foundations and other evidence are likely to be very near the surface, and even quite fragmentary results might help to date the earliest use of the site.

ST ANDREW’S CHURCHYARD (ILLUS 3, 4, 7)

The decision to locate the 17th-century church and churchyard in the back of the High Street properties is rather curious. The location, though less constrained than the harbour site, seems rather hidden from view, and was itself given up in favour of a more prominent High Street site in 1882. It had a very disruptive effect on the street plan and property layout; the backs of the High Street properties had to be bought up and truncated (Ferrier 1991, 50f), while St Andrew Street passes in a double bend through Kirk Ports, severely restricting traffic, resulting eventually in the 1994 road widening scheme. Kirk Ports was not inserted until 1672 (Ferrier 1991, 52), and St Andrew Street seems to have been added later still. The parliamentary plan of North Berwick in 1832 (illus 3) depicts Kirk Ports clearly, but shows only a boundary wall on the line of St Andrew Street. The offset between Kirk Ports and the future St Andrew Street is already visible, but understated. St Andrew Street was eventually laid out as if to pass to the south of the church, making the offset to Kirk Ports even greater. Evidently the provision of an inner ring road for vehicles bypassing the High Street was more a priority of the 1990s than the 1660s. The truncated burgh plots may have left some evidence in the burial ground, and though the roads here all



ILLUS 3 North Berwick 1832

belong to the 17th century or later, it would be surprising if there was never an earlier back lane of some sort, of which traces might survive.

The discovery of a Viking-type comb (illus 7) from the first half of the 10th century during road-widening (9) raises intriguing questions about early occupation in North Berwick. The comb was not associated with the human remains, which are later, and it could be redeposited from some other part of the town altogether (A Sheridan, pers comm), but does at least suggest early activity in North Berwick, long predating the first mention of the parish church in the 12th century. The area round the church by the harbour is so confined and exposed that without the special demands of the pilgrim traffic the early parish church might never have been placed on the harbour site at all; before the establishment of the Earl's ferry for pilgrims, any focus of settlement might have been farther inland, closer to where the 17th-century church was eventually located. The churchyard is unlikely to suffer major disturbance in future, but consolidation of the ruins or environmental improvements might produce significant results; maintenance of graveyards tends to uncover surface finds, which if early would be extremely interesting on this site, and documentary records of earlier use may also come to light.

THE CISTERCIAN NUNNERY (ILLUS 2)

The Cistercian nunnery was located a little outwith the western edge of the burgh. It was founded by the first Duncan, Earl of Fife (1136–54), some time between 1147 and 1153, perhaps c 1150

(Cowan & Easson 1976, 147–8). The appropriation of the parish church to the nunnery was confirmed before 1199 by Malcolm, future Earl of Fife, but was probably first granted by Earl Duncan, c 1150 (Cowan 1967, 157; Cowan & Easson 1976, 147–8). By the 16th century the nunnery was closely connected with the Humes of Polwarth, from whom a number of the prioresses were drawn, including Margaret, the last pre-Reformation prioress and sister of Patrick Hume. After the Reformation, the nunnery's property was acquired by Alexander Hume (Cowan & Easson 1976, 148, *NB Chrs*, xii).

North Berwick seems to have been one of the larger nunneries in Scotland; in 1544 there were 21 nuns besides the prioress, and at least 16 at the Reformation, while its income (£1880 in 1561) was second only to Haddington (Cowan & Easson 1976, 144, 147–8). The references to wool exports to Italy in the 13th century (Cunningham 1905, Appendix) also suggest that it could have made a significant contribution to the local economy. There have been two excavations on the site, one in 1928–9 (3) which uncovered a tile kiln, and another (7) by AOC (Scotland) Ltd in 1994 (O'Sullivan 1995), which revealed lime clamps and a cemetery, and extensive medieval deposits. It is clear that the site (partly scheduled) has important potential to reveal more about the character of the nunnery, but it is not immediately clear how to relate this to the archaeology of the burgh. The tiles and lime were probably for the use of the nunnery, but the cemetery might have been available to others, friends and benefactors for example; this was certainly the case in Perth at the Dominican friary.

In Perth the friaries played a very active, even turbulent role in the life of the burgh (Bowler *et al* 1995, 939), but this may reflect the urban, activist mission of their orders and the lively nature of Perth politics at the time; in contrast, the nuns were 4 km out of Perth at Elcho, and one hears little of them. The Elcho convent consisted of at least 12 before 1547, and by the Reformation had been reduced to seven, while their income in 1561 was only £193 (Cowan & Easson 1976, 144, 146). The surviving ruins of their house confirm that it was a rather small community.

At North Berwick the situation was quite different. The nunnery was much larger and richer, only half a kilometre away from a much smaller and quieter town, where it controlled the parish church. There was no competition from other religious houses, unlike the extraordinary over-provision of friaries in Perth, and the prioresses were drawn from a powerful and wealthy family.

In 1556 the bailies of the burgh were in dispute with Prioress Margaret Hume over jurisdiction in the Westgate, which belonged to the nunnery. But Margaret was apparently able to settle the matter amicably, though not entirely to her own advantage, significantly 'wytht awise of Alex Home hyr brotheyr' who is named as a party to the resulting agreement. We learn that she has in her establishment a brewster, a tailor, a cordiner, a tapster, a smith and a baxter, all exempt from the burgh's jurisdiction so long as they conform to lawful weights and measures. The burgh bailies are called (by Margaret) 'the balyeis of the est gait' (*NB Chrs*, 73–4). It seems that the High Street was divided into Eastgate (the burgh proper) and Westgate (a western suburb dependent on the nunnery). The ecclesiastical suburb on the edge of a burgh is paralleled by the development of the Blackfriars' Lands in Perth (Bowler *et al* 1995, 949), and, of course, in a much grander, more formal way by the twin burghs of Edinburgh and Canongate. Margaret's description of the burgh bailies as 'balyeis of the est gait' perhaps expresses her private belief that the Westgate is none of their business, but 'auld use and wont, quhilk the said bailies and burgess was wint to excers have and use in hyr predicessouris tymes' unfortunately prescribed otherwise.

It is clear that the nunnery was an important agent in the life of the burgh, a landowner and major employer, able to deal on equal terms with the burgh officials, and strongly supported by

the prioress's influential family. The contrast is marked with the hapless Dominicans of Perth, who, despite their wealth and prestige, were systematically humiliated during a period of 18 years (1535–53) in their futile litigation over the Gilt Herbar (Bowler *et al* 1995, 939; Milne 1893, 229–30).

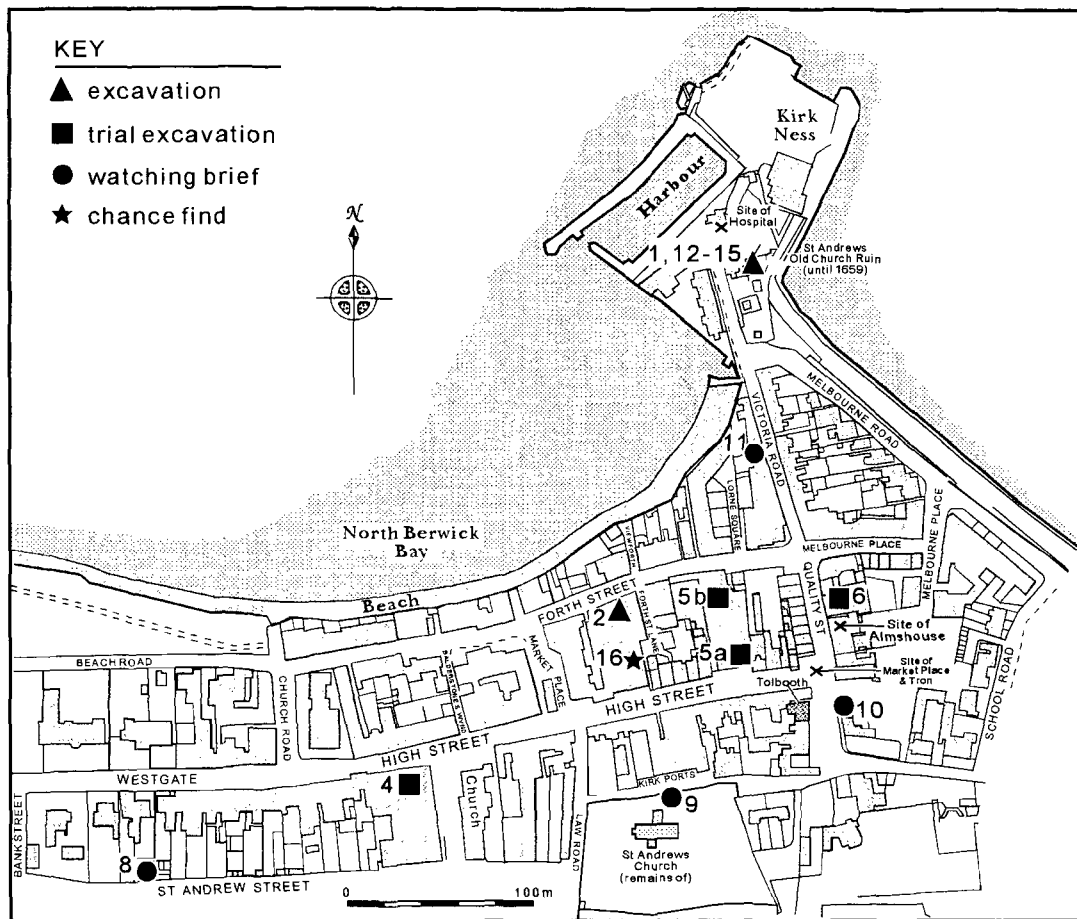
The interaction of burgh and nunnery would make a promising subject of further research. Extensive records are published (*NB Chrs*) and others may come to light, dealing with burials, benefactions, vocations, landholding, litigation, sales of property, and trade. Some of these factors may also appear in the archaeological record, for example in the population of the cemetery, the range of artefacts reaching the nunnery, and the food wastes discarded there.

BURGH WALLS

According to an Act of Parliament of 1503, North Berwick, like other east coast harbours, would have been required to erect defensive walls as a protection against English raids, but it is not known if this was actually done, nor is it clear just where we should look for such walls. Simpson & Stevenson (1981, 1, 10) suggest that defensive walls can be seen on Blaeu's 1654 map of Lothian, but closer inspection indicates that these walls may in fact belong to nearby Dirleton, or to one of the many woodland or estate enclosures characteristic of Blaeu's maps (Stone 1991, 16f, pl 5). Blaeu's maps of Scotland are based largely on field drawings by Timothy Pont, probably made between 1583 and 1596 (Stone 1989, 5), but there is no map of East Lothian amongst the surviving Pont manuscripts. The presence of deep deposits of wind-blown sand (see below) on two sites between Forth Street and High Street (2 & 5) seems to confirm that on the seaward side at least there was never any defensive boundary that would prevent the build-up of this material.

THE STREET PLAN (ILLUS 3 & 4)

The layout of High Street, parallel to the shore, with Forth Street as a secondary back lane, is generally straightforward, while the more complex history of St Andrew Street and Kirk Ports has been discussed above. What is less clear is the history of the Quality Street/Victoria Road axis. The location of the medieval ferry service will have had a significant effect on the layout of the town. Victoria Road was, of course, named in the 19th century, but already appears partly built up on the 1832 parliamentary plan (illus 3), and presumably continues the line of the causeway mentioned in 1656 (Ferrier 1991, 18, 49). Considerable reclamation and infilling must have taken place to convert the vulnerable causeway into a solid and substantial street, and may have sealed evidence of the early route to the harbour. Quality Street (formerly Crossgate) is early, with the Market Place and the tolbooth at the junction with High Street, and the market cross at the south end (Simpson & Stevenson 1981, 3f). The arrangement of property boundaries suggests that the Crossgate axis has generally been subordinate to High Street, but this may not always have been so. The wide part of Quality Street south of High Street is the location of the tolbooth, the market cross and the tron, and is the nearest 'inland' point to the harbour; as such it seems a strong candidate for the early focus of the burgh, with access to the harbour and church via Crossgate/Quality Street and the causeway. On the other hand, small boats using the beach rather than the harbour would have ready access to properties along High Street, and the street leads west towards the important nunnery. High Street is much better placed to provide for a growing burgh, being level and fairly long, whereas Crossgate is restricted at both ends, by the sea and a hill. The relative prominence of Crossgate and High Street may have varied before



ILLUS 4 The burgh. (Based on Ordnance Survey 1:25,000, 1969 © Crown Copyright)

settling on the present pattern, and this could be reflected in the archaeological record by the orientation of early building plans and property boundaries.

The extent of the medieval burgh can broadly be deduced from the presence of the characteristic long, narrow burgage plots on either side of the High Street, suggesting boundaries along Forth Street or the shore, and St Andrew Street. Forth Street and St Andrew Street have probably been inserted or have grown up from back lanes, and may have truncated the backs of the burgage plots. The eastern and western boundaries are uncertain. From the plan one would surmise that the burgh had grown westwards along High Street, perhaps pausing at several western boundaries before settling somewhere between Church Road and Bank Street, and perhaps straggling out into a western suburb along Westgate, apparently dependent on the nunnery. It is not at all clear what happens east of Quality Street; one might conjecture a boundary between Melbourne Place and School Road. The 1832 plan seems to show a solid nucleus of settlement bounded by Market Street and Quality Street, with zones of decreasing density beyond it. If there ever was a town wall, it is not obvious where it ought to be found.

Linear trenches along the main streets, for example for pipe repairs, may one day reveal some evidence of this.

TRADE AND INDUSTRY (ILLUS 4–6)

North Berwick seems to have been an important trading centre from early times. This was recognized for example by Robert II, who confirmed the Earl of Douglas's right to have a port and erect a custom-house and tron. There are 13th-century Italian references to wool from the sheep of *Norbonucche* (North Berwick) Cistercian nunnery (Cunningham 1905, Appendix). The town may have gained from the fall of Berwick-upon-Tweed in 1333, and in 1400–1 had exports worth £168, compared with £65 for Dunbar and £84 for Haddington (Simpson & Stevenson 1981, 2). In later years, however, it fell behind, in 1535 paying £11 5s tax, compared with Dunbar at £32 10s, while in the 1540s it was burned by Somerset. This decline in contributing power continued, for example £36 in 1645 compared with Dunbar's £108, and 4s in 1649 compared with £1 2s. By the end of the 17th century the town had neither market nor fair, and no ships or boats except two fishing vessels (Simpson & Stevenson 1981, 2, 3). The reasons for this decline are not clear. It may be that the small size of the harbour, its relative isolation from land routes and its exposure to storms (see below) had always limited the town's potential, while the decline of the pilgrim route exposed those limitations in full.

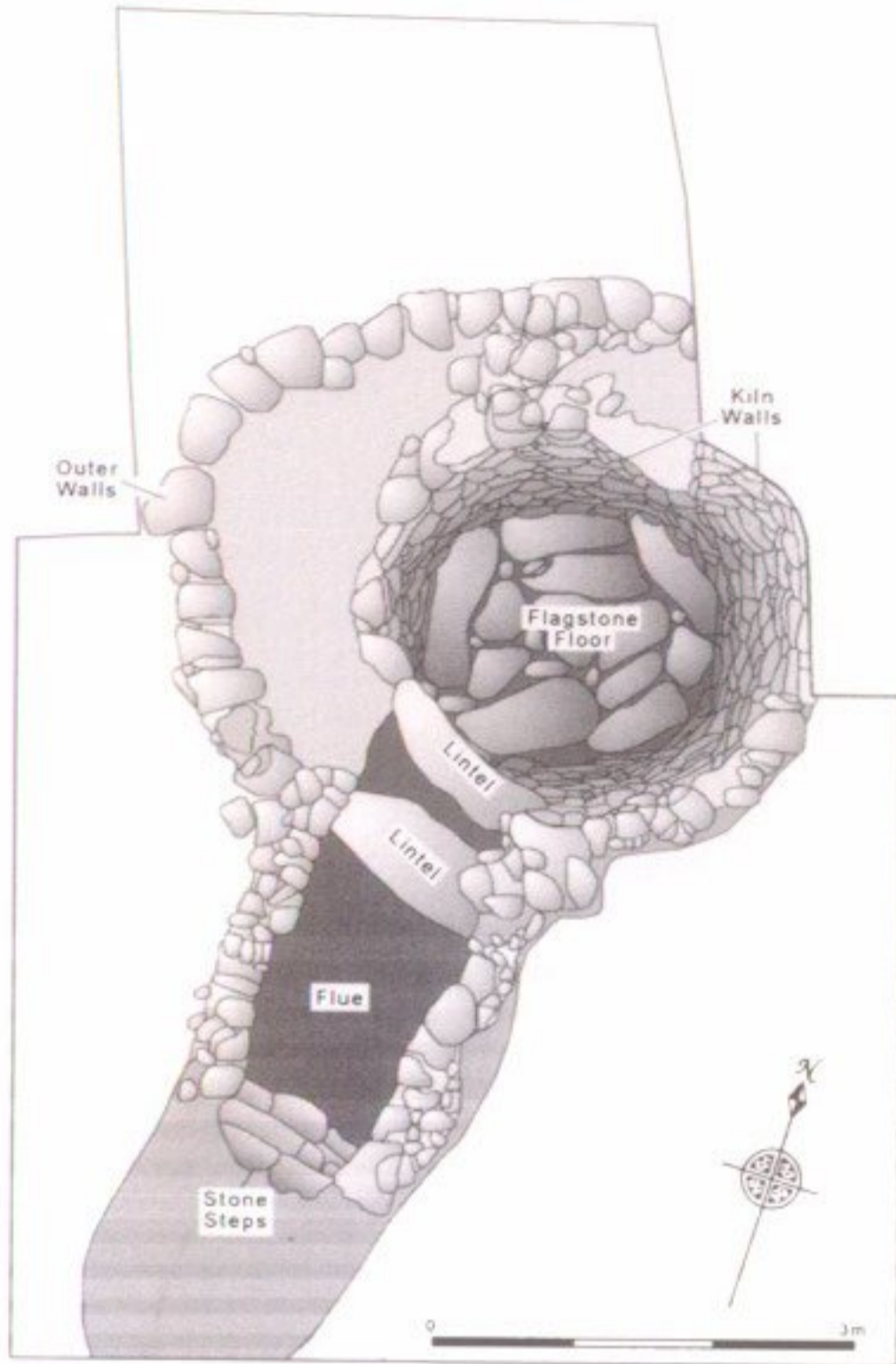
When Bishop Pococke visited the town in September 1760 it was still very small, but there were some signs of recovery. He found it 'a small ill-built town situated on a strand' (Kemp 1887, 319: from Letter LXVII, 22 Sept. 1760). The harbour was located, as now, on the west side of the headland, and could receive vessels up to 200 tons at spring tides, but more commonly up to 100 tons. The burgh seemed to have found a modest but sufficient niche in the export of cereals and related products: 'This town has a trade from their distilleries and Manufacture of starch: They also have large granaries here, & export a great quantity of Malt and of several kinds of Grain' (*ibid*).

The economy of a medieval and early modern burgh is to some extent represented in the ubiquitous animal bone and broken pottery from the excavated sites, but the durability of these materials can exaggerate their economic importance. Cereals would have been far more important, and are mentioned explicitly in Bishop Pococke's visit. The industries and products which he names are all based on cereals in one form or another: distilleries, starch, malt and grain.

Two sites have produced evidence of these industries: at Forth Street Lane (2) in backlands south of High Street, a very large drying kiln (illus 5 & 6) was found, solidly built of stone, and associated with medieval pottery in the White Gritty Ware tradition (12th–15th centuries). This was clearly of industrial rather than domestic scale, much larger and solidier than examples from medieval Perth, which are usually of clay (Bowler *et al* 1995, 929). Such a kiln could have served an essentially similar purpose, drying grain or malt, in any of the industries named by Pococke, and suggests that even in medieval times North Berwick was beginning to specialize in the processing of cereals.

A different sort of evidence came from a very small excavation on the frontage of 83–87 High Street (4), where two small circular unfired clay tanks were found, set into the ground, again accompanied by White Gritty Ware. They have no close parallels, but could have been used for soaking grain in water, a necessary step in malting, brewing, and distilling, and probably in starch-making too. However, environmental evidence produced only minimal traces of cereals, but quite a lot of fishbone and shell fragments, not much abraded, so perhaps originating nearby (Bowler & Lind 1987). It may be that grain soaking was producing only minimal spillage and

ILLUS 5 The kiln, Forth Street Lane



ILLUS 6 The kiln, Forth Street Lane



negligible preservation, for example if the grain was soaked in porous sacks, while the drying process which produces abundant carbonized grain was taking place some distance away. Otherwise, the tanks may have been used for something quite different, such as keeping shellfish alive; one would expect fishing to play some part in the life of a coastal burgh; even in its decline at the end of the 17th century, the town still had its two fishing boats (Simpson & Stevenson 1981, 2, 3).

WIND-BLOWN SAND (ILLUS 4)

The presence of interleaving deposits of wind-blown sand and midden is the most commonly identified factor on excavations in North Berwick, appearing at Forth Street Lane (2), 18–24 High Street (5), Dalrymple Garage, Quality Street (6), and 7 Victoria Road (11). These deep sand deposits sealing medieval occupation layers show that severe episodes of sand deposition occurred during the life of the burgh. With a sandy beach lying directly to the north of the High Street, it is easy to imagine how winter storms and northerly gales would quickly whip up and spread masses of sand over the town, especially when the buildings were lower and offered less shelter from the wind. This does not seem to have prevented the town from functioning, but must have been very disruptive, clogging streets and burying gardens. This probably happened in winter, so there would be no immediate loss of garden produce, but generous manuring and cultivation would be required to bring gardens back into production again. Wind-blown sand has been found in other coastal burghs, for example Montrose and Ayr. In Ayr the effect was serious enough to be recorded in 1405 and 1507 (Gourlay & Turner 1977, 4f), and to give a name to Sandgate.

These sand deposits are important from an archaeological point of view because they deeply bury evidence of the early town's occupation and layout, and because they closely resemble undisturbed natural sand. If sufficient areas could be exposed, quite ephemeral traces of boundaries, cultivation and buildings might be preserved, and also, between successive layers of sand, evidence of reorganization and reallocation of land following major disruption of occupation. At Forth Street Lane (2) fragmentary traces of buildings were found during trial excavation. Small burghs such as North Berwick do not have the depth and intensity of occupation to bury and preserve their early traces as happens in Perth, but the natural process of sand deposition can produce the same result. However, the resemblance to undisturbed sand can easily mislead archaeologists (and engineers), and can lead to the premature abandonment of a site as sterile after superficial evaluation has revealed only deep layers of clean sand just beneath modern ground surface. The extent of wind-blown sand over the burgh needs to be identified as far as possible, as it defines an area where early deposits may survive at a lower level than would otherwise be expected.

CONCLUSIONS

Any account of archaeology in a Scottish burgh is bound to be a statement of unfinished business, even after the 17 years that have passed since the publication of the burgh survey. Some of the questions identified then (Simpson & Stevenson 1981, 8) have not yet been tackled archaeologically; these include the earliest date for the burgh, changes in street alignment, early development on the site of the first parish church, the nature and date of the Castle Hill motte, and the origin and development of the harbour. There have been attempts to identify the locations of the almshouse and hospital (6), but so far with negative results. All of these are still worth

investigation, and opportunities will arise, in response to development or natural threat. The early church and the motte are of particular importance, and could usefully be made the subject of systematic multidisciplinary research, to guide and inform their future management and interpretation.

Progress has been made since many questions were raised in 1981. The evidence identified, but only partly revealed, can be related to the origins of the burgh, the existence or otherwise of burgh walls (so far negative), the character and role of the nunnery, and the development and specialization of its industries. Results, in some cases, have been surprisingly rich, especially in the case of the industrial features from High Street (4) and Forth Street Lane (2) as well as from the nunnery (3 & 7). The modest amount of work undertaken has shown clearly that a small burgh can preserve substantial archaeological remains, quite beyond anything that was known or expected in 1981. There are also further lines of enquiry to pursue, in the role of pilgrimage in the burgh, the impact of environmental factors and winter storms, the evolution of the street plan and the interaction of the burgh and the nunnery. The burgh boundaries have still to be defined, especially on the western side, where there may have been a suburb dependent on the nunnery. It is especially important to define the extent of wind-blown sand as a major phenomenon of burgh life, and because of its implications for the prediction and preservation of archaeological remains.

Burgh organization, buildings, industries, crafts, and trading patterns may all prove to be subtly different in a small burgh such as North Berwick, compared with what is found in larger, more cosmopolitan burghs such as Aberdeen, Perth, Glasgow, and, as evidence becomes available, Edinburgh with its satellites Leith and Canongate. Continuing attention to the smaller burghs, of which North Berwick is an especially promising example, may give us a more balanced framework in which to consider how urban settlement as a whole contributed to the life of medieval and early modern Scotland.

GAZETTEER

EXCAVATIONS

1 **St Andrew's old church** (NGR: NT 5540 8556). Excavation took place on this site in the early years of this century. However, apart from an entry on an Ordnance Survey record card (NT 58 NE 3), no published record appears to exist (Simpson & Stevenson 1981, 15).

2 **Forth Street Lane** (NGR: NT 5535 8537). Trial excavations by SUAT in February 1993 located archaeological deposits to a depth of c 2.2 m below modern ground level. Scottish East Coast White Gritty Ware pottery dating between the 12th and 15th centuries was recovered from these layers which overlay a stone wall foundation running north/south. A second trench on the Forth Street frontage located deposits to c 1.8 m below modern ground level. The final trench located archaeological material to c 2.5 m below ground level. The organic deposits were sealed by layers of wind-blown sand (Hall 1993, 56). These trial excavations identified the existence of structures c 0.8 m below ground level, including a dry-stone wall foundation, perhaps for a wooden superstructure, and fragments of burnt daub, perhaps from the destruction of a daub-and-wattle building. These seemed to indicate buildings on the High Street frontage, while other deposits may be middens relating to the occupation of this part of the medieval burgh.

Full excavation of part of this site, also by SUAT, in April/May 1993 located the substantial remains of a medieval sandstone-built kiln. This stood up to 2.37 m high, with an internal diameter of 2.6 m at its rim. The flue was on the south-west side, with sandstone walls, and a niche in the eastern wall, probably for a lamp when cleaning inside the kiln. Scrupulous sweeping would be required, as any build-up of soot, chaff or dust under the kiln floor could catch light from the fire in the flue, and set the grain on fire. Further sherds of White Gritty Ware were associated with this structure (Cromwell 1993a; 1993b).

3 **Cistercian nunnery tile kiln** (NGR: NT 5465 8504). A tile kiln immediately north-west of the nunnery seems to have been used solely for the production of glazed floor tiles for the conventual buildings (Richardson 1929, 284). This rare feature is scheduled as a monument of national importance but is not at present visible as it was backfilled by the excavator in the 1930s.

TRIAL EXCAVATIONS

4 **83–87 High Street** (NGR: NT 5520 8525). Trial excavations by SUAT in 1987 located two circular unfired clay tanks c 0.3 m and c 0.5 m in diameter, set in the ground close to the street frontage. They survived to maximum heights of 0.2 m and 0.15 m, but were originally perhaps as much as 0.6 m deep internally. These structures were of uncertain purpose but appeared to be watertight so long as they did not soften and collapse, and could have been made airtight with suitable lids. They could have been for some part of the malting and brewing process, for example the initial soaking of the grain to make it sprout. Environmental evidence produced only minimal traces of cereals (just a few carbonized grains of barley, wheat and oats) but quite a lot of fishbone and shell fragments, mainly mussel. This was not much abraded, and perhaps originated nearby (Bowler & Lind 1987). They were associated with a small assemblage of Scottish East Coast White Gritty Ware pottery, dating between the 12th and 15th centuries (Bowler 1987a; 1987b).

5 **18–24 High Street** (NGR: NT 5538 8535). Trial excavations by SUAT in 1990 located organic medieval deposits to at least 2 m below modern ground level on the High Street frontage (5a). The remains of a clay-bonded wall foundation were sealed by layers containing White Gritty Ware. The deposits were sealed by layers of wind-blown sand. A trench towards the Forth Street frontage (5b) located natural sand at 1.35 m below modern ground surface sealed by further organic deposits (Hall 1991, 49).

6 **Former Dalrymple Garage, Quality Street** (NGR: NT 5545 8535). Trial excavations by SUAT in 1995 located by thin bands of midden and wind-blown sand. A small group of White Gritty Ware (dating from the 12th to the 15th centuries) was recovered from these midden deposits. No archaeological deposits survived on the Quality Street frontage adjacent to the former site of an almshouse and pilgrims' hostel due to the destruction that had been caused by the insertion of petrol tanks in the garage (Mackenzie 1995a).

7 **Cistercian nunnery** (NGR: NT 5460 8500). An archaeological evaluation by AOC (Scotland) Ltd in 1994 located a cemetery containing at least 24 graves on the eastern side of the nunnery ruins. Two industrial features, possibly lime clamps, were located in the same area one of which predated the cemetery. A former stream channel on the northern side of the site may have formed a natural boundary to the nunnery grounds on this side. It contained extensive land fills that produced medieval pottery and other midden material (O'Sullivan 1995, 9). These deposits have high potential for analysis of the environment of the medieval nunnery and burgh.

WATCHING BRIEFS

8 **15 Westgate** (NGR: NT 5506 8526). An archaeological watching brief on contractors' excavations by SUAT located some 2 m of garden soil above natural sand. No deposits of archaeological interest were located (Hall 1993).

9 **St Andrew's churchyard** (NGR: NT 553 852). In the course of a road-widening scheme in 1994 a Viking-type decorated single-sided comb (illus 7) (NMS IL 969) from the first half of the 10th century was recovered from soil removed from the old kirkyard of St Andrew. Further examination of the spoil heaps by a team from the National Museums of Scotland and Edinburgh Archaeological Field Society located disarticulated human remains, animal bone and pottery (Nat Mus Scot 1994, 46). The remains were considerably later than the comb, which may well be redeposited (A Sheridan, pers comm).

10 **2 Quality Street** (NGR: NT 5545 8531). An archaeological watching brief beside no 2 Quality Street by SUAT in January 1994 located garden soil to a depth of 0.7 m below modern ground level. No archaeological deposits were encountered. A stone-lined well of probably recent date was reported close to the street frontage (Mackenzie 1994, 46).

11 **7 Victoria Road** (NGR: NT 5540 8507). A watching brief on building foundations by SUAT in 1995 located mixed sand deposits to a depth of c 0.42 m which produced early modern pottery. The foundation work did not go deep enough to encounter the top of natural sand (Mackenzie 1995b).



ILLUS 7 The Viking-type comb from St Andrew's churchyard
(*National Museums of Scotland*)

CHANCE FINDS

12 **St Andrew's old church: sword** (NGR: NT 554 855). An iron sword, dated to the late medieval period and inscribed IN SOLINGEN J.G.L. was found in a grave near St Andrew's old church (Simpson & Stevenson 1981, 11).

13 **St Andrew's old church: Roman coin** (NGR: NT 553 856). A small bronze Roman coin of Caligula (AD 37–41) was found in sand from the shore east of St Andrew's old church (Simpson & Stevenson 1981, 10).

14 **St Andrew's old church kirkyard: brooch mould** (NGR: NT 554 855). A portion of a double-sided stone mould for casting pilgrims' badges and ring brooches was found in the old churchyard of St Andrew's (Simpson & Stevenson 1981, 10).

15 **St Andrew's old church: artefacts** (NGR: NT 554 855). A collection of artefacts recovered from the site of St Andrew's old church is held by the burgh museum. These include a 12th-century pendant cross, a candle extinguisher, a bone die and a bronze button (Simpson & Stevenson 1981, 11).

16 **50–54 High Street: coin hoard** (NGR: NT 5532 8533). A hoard of 63 silver coins of Alexander III of Scotland and Edwards I, II and III of England was found by workmen digging off the High Street in 1882 (Simpson & Stevenson 1981, 11).

17 **Bronze Age socketed axe** (NGR: NT 5566 8395). A Late Bronze Age socketed axe was found eastward of the quarry on the south side of the Law, and some 46 m from the old entranceway to the plateau (NMRS NT 58 SE 33).

18 **Bone bead** (NGR: NT 5563 8394). A short distance west of the axe find, a large and unique bone bead was found at NGR: NT 5563 8394. The axe and the bead were both found in 1962 (NMRS NT 58 SE 33).

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