Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84; 5: A, Excavations & other fieldwork at Forteviot, Perthshire, 1981; B, Excavations at Urquhart Castle, Inverness-shire, 1983; C, Excavations at Dunnottar, Kincardineshire, 1984

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ABSTRACT

This paper concludes the series of reports on excavations and related fieldwork, carried out between 1974 and 1984 by the University of Glasgow on sites identified, on the evidence of written sources, as belonging to the Early Historic or Early Medieval period. The three excavations reported here, at Forteviot, Urquhart and Dunnottar, yielded very little direct archaeological evidence; but the associated fieldwork, aerial photography and historical research make important contributions to our knowledge of Pictish culture and society. At Dunnottar, an interesting cult focus was recognized, and a hitherto unknown fort was identified. Urquhart revealed a potentate's landed estate at the time of the Columban conversion, with its associated fort and cemetery. Forteviot yielded evidence for a Pictish-Christian cemetery, and displayed the iconography of kingship on the occasion of the Scottish takeover of the Pictish kingdom.

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GENERAL INTRODUCTION

In 1973, we initiated a long-term research programme designed to fill a major gap in Scottish archaeology; namely, that represented by the settlement archaeology of the 'Dark Ages', the Early Medieval period, or the Early Historic period. A major inspiration for this policy was that in Scotland – in contrast to Wales and south-west England – fortified sites which might be attributed to this period on the evidence of historical or quasi-historical references were fairly common; but despite this, only one of them, Dunadd, had received serious archaeological attention, and that as long ago as 1929 (Christison 1904; 1905; Craw 1930).

Once the overall policy had been conceived, a discussion document was prepared with the intention of seeking the comments and advice of other scholars in the field – both archaeologists and historians – on such matters as the reliability of some of the attributions, and the degree of priority to be given to particular sites. Unfortunately, through no fault of our own, that discussion document was not published until 1981 (Alcock 1981), by which time half of the proposed series of excavations had been completed. A brief summary of the actual progress of the research was given in the first of the present series of excavation reports (Alcock, Alcock & Foster 1986).

Two of the sites reported here, Urquhart and Dunnottar (illus 1: 3 & 6), formed part of the original programme of excavation on fortified sites. The third one, Forteviot (illus 1: 5), was added despite the fact that it was not fortified. The addition was made for two reasons. First, it had become apparent that the forts with which we were concerned were noble, or even, in some cases, royal. The written evidence for Forteviot suggested that this had also been a royal centre, initially Pictish, and subsequently Scottish as well. Second, during the 1970s, air photographs of Forteviot gave hints about the possible location of the royal centre, and suggested that it had a deep time dimension, back to the Late Neolithic/Early Bronze Age, a phenomenon which may be matched at some royal sites in Ireland, and also in Northumbria.

Whereas the previous reports in this series have each been dedicated to a single excavation, the present report deals with three sites. This is possible because, in keeping with our previous publication policy, we are concerned here only to report in detail those discoveries which relate directly to the Early Historic period. Of the present three sites, only Urquhart produced any structures of that date. Dunnottar, while yielding nothing earlier than the late-12th century on the site itself, none the less provides an occasion for discussing an important Pictish ritual focus and a

EARLY HISTORIC FORTIFICATIONS
IN SCOTLAND

Land Over 500ft.

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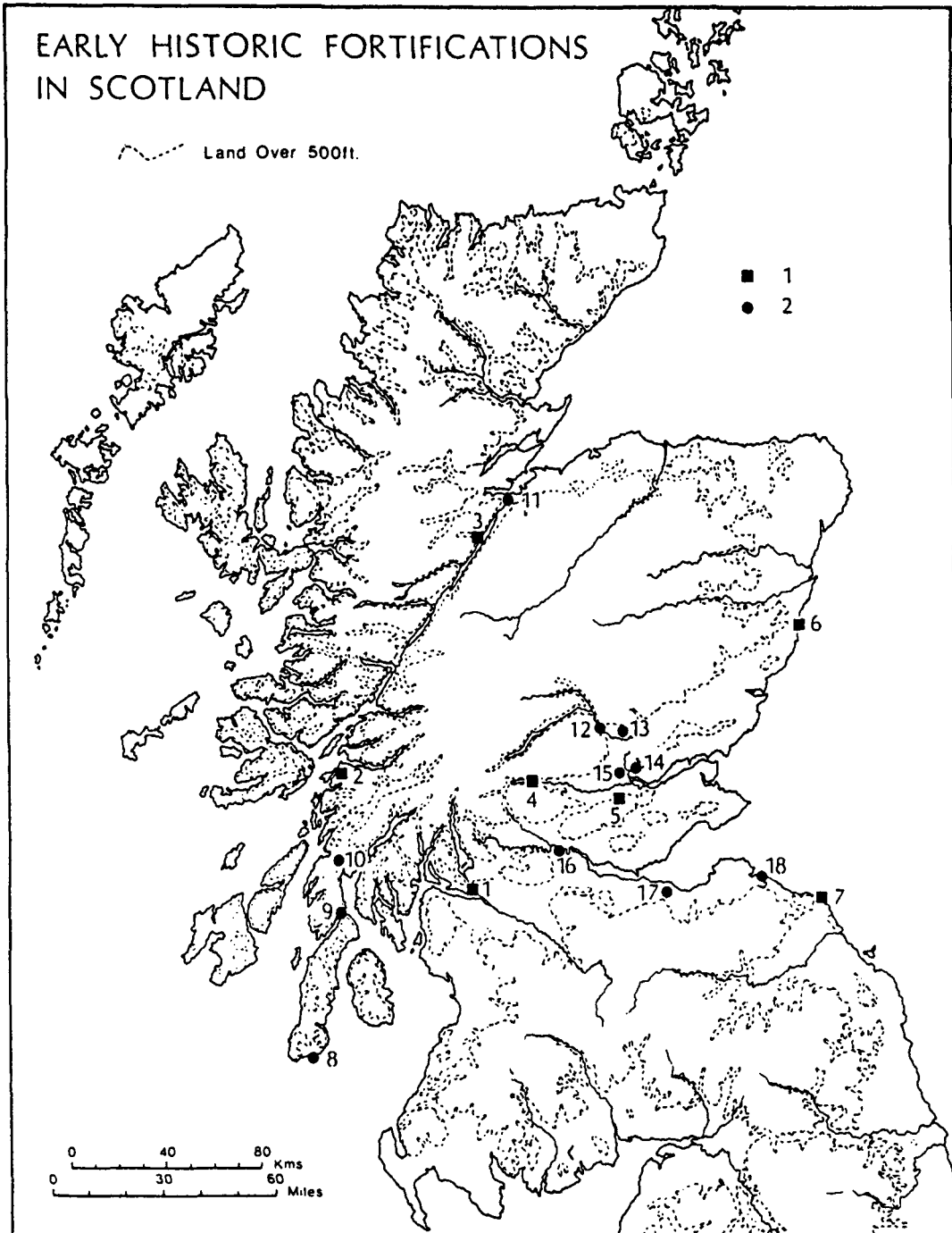
ILLUS 1   Map of Early Historic forts and other royal sites in Scotland. 1 – Sites excavated 1974–84:
1 Dumbarton; 2 Dunollie; 3 Urquhart; 4 Dundurn; 5 Forteviot; 6 Dunnottar; 7 St Abb's Head.
2 – other sites with historical references: 8 Dunaverty; 9 Tarbert; 10 Dunadd; 11 Inverness;
12 Dunkeld; 13 Clunie; 14 Scone; 15 Inveralmond; 16 Stirling; 17 Edinburgh; 18 Dunbar

possibly related fortification. Nothing medieval at all was found in the excavations at Forteviot. None the less, they provide a reason for surveying the evidence for the Picto-Scottish royal centre, especially in the light of the new aerial photographs, and an enhanced appreciation of the carved stones from Forteviot and its vicinity.

At Dunnottar and Urquhart, enough is presented here of the later medieval remains, in the form of both veridical and interpretative sections, as to make the overall stratification clear. Unlike the earlier reports, however, there is no transcription of the site records, embedded in a full report and reproduced in microfiche format. The site records, however, can be consulted in the archives of Glasgow University. It should be stressed that both these sites yielded a collection of stratified medieval material, principally pottery. In the case of Urquhart, there was also a large collection of well-preserved animal bones. These could form the subject matter of a valuable research programme on High Medieval archaeology, but not by the present authors.

This report completes the record publication of our excavations, accompanied by such wider discussions as the excavation results, together with our growing familiarity with the sites, have prompted. We hope, however, that ultimately it may be possible to write a final paper of more general conclusions. This may be of value to other researchers by suggesting where we would consider it most profitable to follow up the present programme, and where priorities might lie for the future. Meanwhile,the general conclusions from the excavations will be incorporated in the wider framework of an expanded version of the 1988–89 Rhind Lectures (Alcock 1988b), which is now in active preparation.

A: Excavation & Other Fieldwork at Forteviot, 1981

INTRODUCTION

The original programme of research on Early Historic sites in Scotland had concentrated exclusively on those with artificial fortifications or strong natural defences (illus 1). Work at Clyde Rock, Dundurn, and Dunollie, however, had brought another relationship to our attention: these defended places had all been seats of kingship. It seemed reasonable, therefore, to extend our programme to include royal seats which apparently had not been fortified, if indeed such places could be identified. A particular reward that might be expected would be the recovery of plans of large timber buildings, such as were known from aerial photography and excavation in Northumbria at Yeavering and Milfield (Hope-Taylor 1977). This was the more important because no traces of internal buildings had been discovered at the sites mentioned above.

The initial choice of Forteviot (illus 1:5) as a place worthy of examination was determined by a long tradition that it had been a royal seat, initially of the Picts, and subsequently of the Scots after Kenneth son of Alpin took over the Pictish kingdom. Parts of this tradition were supported by chronicle and even charter evidence, as well as by the occurrence of Pictish and Scotto-Pictish carved stones. Although nothing was visible on the ground, tradition pointed strongly to a place known as 'Haly Hill', on the north-west outskirts of the modern village, as the palace site. Moreover, immediately east of the village, aerial photographs gave tantalizing glimpses of a possible Early Christian cemetery and Pictish burial enclosures. Further to the south were clear cropmarks of henge monuments of the third and second millennia BC, which suggested a long time-dimension to the ceremonial and ritual use of the area: a thought-provoking background to the seat of barbarian kings in the later first millennium AD.

In 1981, a small-scale excavation was carried out at the traditional palace site of Haly Hill, with negative results. An interim report on this was published in an ephemeral format (Alcock

1982a); a permanent record appears below. At the same time, the occasion of a conference on the early church in western Britain and Ireland was used to explore very widely both the secular and ecclesiastical aspects of Forteviot (Alcock 1982b). The main conclusions of that exploration are summarized in the present paper. Finally, the opportunity is taken to bring up to date the aerial photographic record of Forteviot, and the interpretation originally set out by Dr Lesley Macinnes in Alcock 1982a. This is now replaced by a new transcription and interpretation by Marilyn Brown of the Royal Commission on the Ancient and Historical Monuments of Scotland.

TOPOGRAPHY, TRADITION & HISTORY

Forteviot lies in lower Strathearn, about 1 km south of the river Earn and a little east of the confluence of the Water of May with the Earn (illus 2 & 12). It was thus possibly in the ancient kingdom of Fortriu (Anderson 1973; 1980, map on p 126). North of the Earn, the land rises immediately to the east/west running Gask ridge, at a height of up to 150 m. To the south, the rise to the Ochil Hills, with summits above 500 m, is at first quite gentle, so that Forteviot lies in the middle of a wide tract between 10 m and 15 m above sea level. This terrace bears some of the finest agricultural land in Scotland: in terms of modern capability for agriculture, it falls in
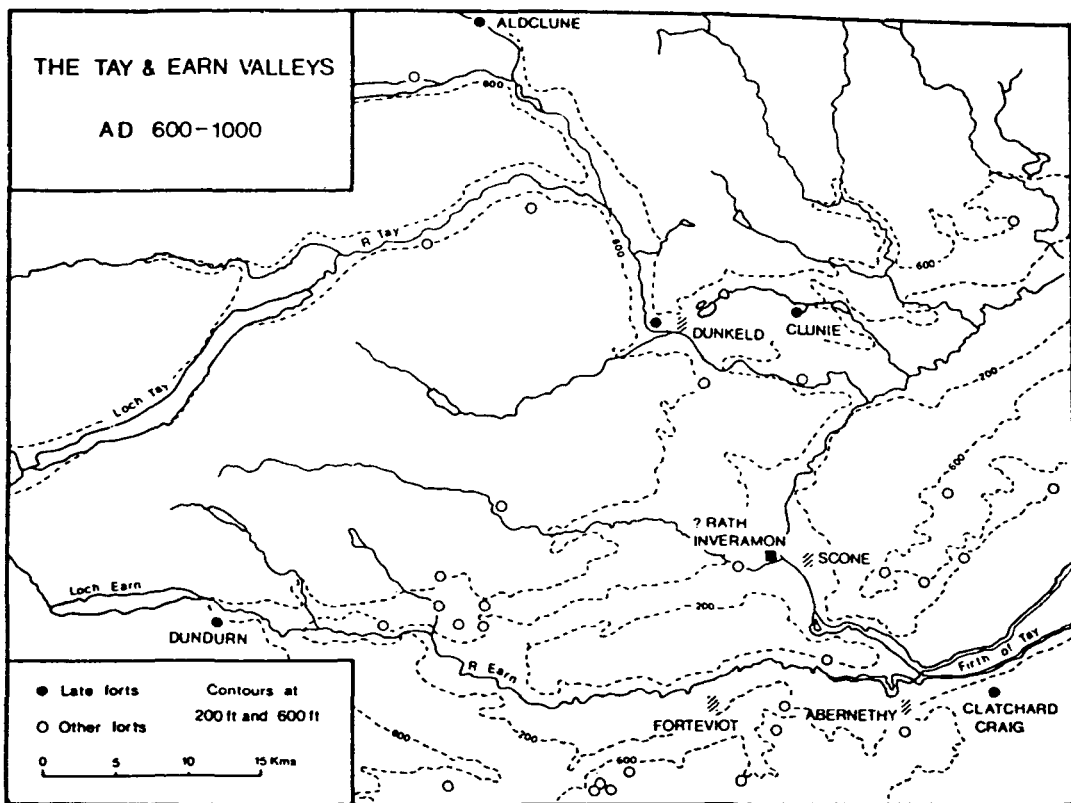
ILLUS 2 The wider setting of Forteviot. Forts and royal centres in the Tay and Earn valleys. For Aldclune, see Stevenson 1985; for Clatchard Craig, Close-Brooks 1986; for King's Seat, Dunkeld, Feachem 1966, 73–5; for other sites, Alcock 1981
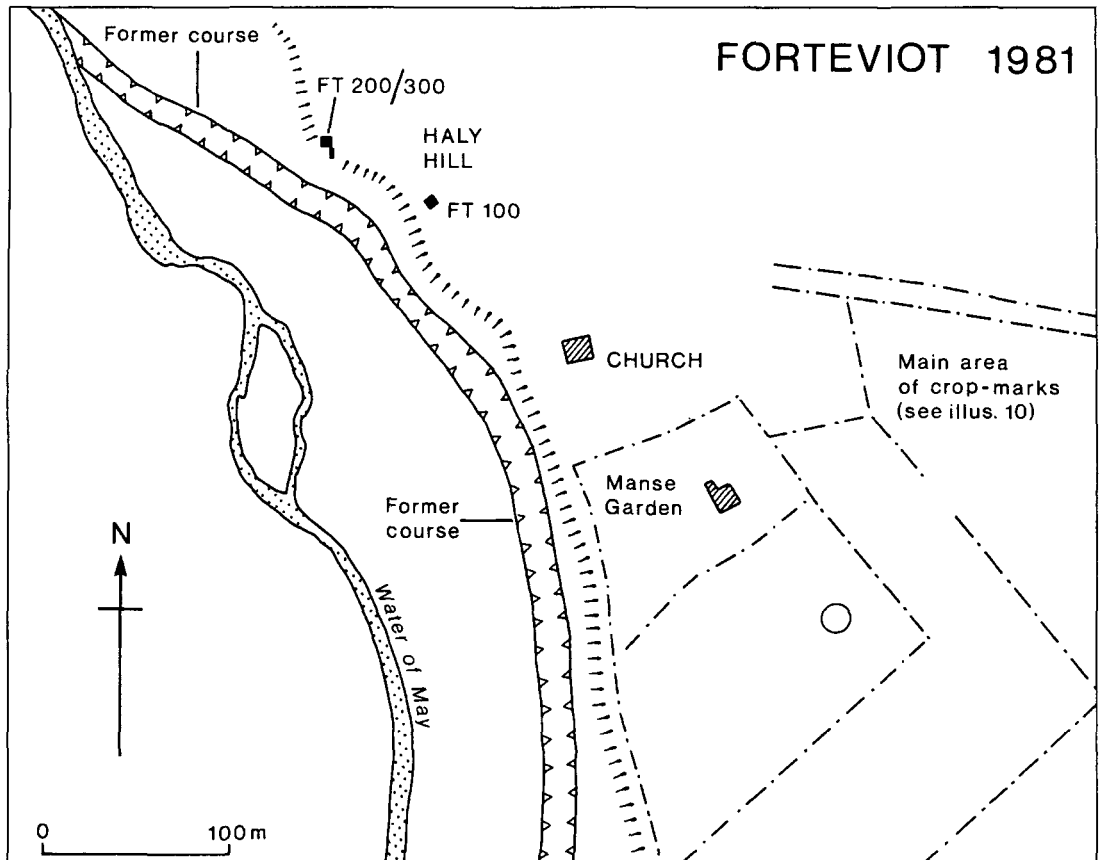
ILLUS 3   Forteviot, showing Haly Hill with the 1981 excavations, the main area of cropmarks, and the present and former courses of the Water of May

categories 2 and 3.1, capable of producing high yields of cereals and grass (Walker *et al* 1982). The combined potential of arable farming on the lower ground, and year-round grazing at higher levels, has attracted human activity over a span of some five millennia.

The Water of May, rising as it does in the Ochils, is at times a very active stream; and in particular, as it approaches Forteviot, it has carved out a steep scarp on the east. The May is now canalized, but an old channel can still be seen beneath the scarp (illus 3 & 12). Viewed from north-west of Forteviot, the scarp appears as a distinct hillock; and it is evident from late 18th- and early 19th-century accounts that this had been an altogether more marked feature before much of it was carried away by erosion. This is Haly Hill, which appears on early editions of the Ordnance Survey 6-inch map as 'Supposed Site of Residence of several of the Pictish & Scottish Kings'.

The belief that a principal residence, palace or castle had been erected at Forteviot by Malcolm III Canmore (1058–93), and that its ruins were still to be seen, goes back at least to 1638 (details and references in Alcock 1982b, 217). Accounts of the state of preservation of the ruins, however, are mutually contradictory. In 1772 the minister of Forteviot described the remains as a heap of rubbish; yet other observers claimed that about the same time there were walls still standing 15–20 ft (4.5 m to 6.0 m) high. There was, however, agreement that the site was being

eroded by the Water of May; and by 1832, the palace site had been almost entirely swept away (Skene 1857, 278).

Modern scholarship enables us to penetrate behind traditional beliefs to the historical significance of Forteviot. The earliest documents which demonstrate a royal presence there are charters of Malcolm IV (Barrow 1960 no 256) and William the Lion (Barrow & Scott 1971 no 17), dated at Forteviot respectively in 1162 x 1164 and 1165 x 1171. Since the witness list for the first of these includes Countess Ada, the king's mother, and William his brother, a royal residence may be inferred. This is not to imply that the king and his family were there permanently, rather than in the course of a royal progress. Grants of the church in Forteviot were also made by Malcolm IV in 1164 (Barrow 1960 no 257) and by William in 1173 x 1177 (Barrow & Scott 1971 no 116).

It is not possible to establish a documented history of Forteviot back before the time of Malcolm IV, simply because of the scarcity of writs and charters from earlier reigns, and their total absence from those of Malcolm III Canmore and his predecessors (Duncan 1975, 171). This means that it is impossible to check Skene's claim, based on 'the constant tradition of the country' (1857, 276), that Malcolm Canmore had erected a palace at Forteviot, and made it his principal residence. Indeed, given the interest of Malcolm III and his queen, St Margaret, in Dunfermline and its church (Cruden 1986, 21–5), Skene's claims for Forteviot seem unlikely.

Before the establishment of the Canmore dynasty, two references to events at Forteviot in the ninth century are to be found in a source conveniently designated the 'Scottish Chronicle' (text in Anderson, 1973; 1980, 249–53; discussion, *ibid, passim*, and Cowan 1981). In summary, this has been described as 'a king-list and a set of Gaelic annals . . . spliced together . . . possibly at Brechin, shortly before 995' (Cowan 1981, 18). It covers a period of about a century and a half before that date. Though some, and perhaps even many, of the annal-based entries may have been written down contemporaneously (though not in the Scottish Chronicle itself), it is not possible to test its reliability in detail. It is noteworthy that twice in its short span the Chronicle's compiler found it necesary to give alternative accounts of a particular event, marked by the phrase *alii autem dicunt*.

The Scottish Chronicle relates that Kenneth son of Alpin was the first Scottish king to rule over the Picts; and that after a reign of 16 years (that is, over the combined kingdom of the Scots and the Picts), he died in the palace at Forteviot, *in palacio Fothiurtabaicht*. This, as we know from other sources, was in AD 858. Kenneth was succeeded by his brother Donald, in whose reign the Scots (*Goedeli*) 'made rights and laws . . . with their king at Forteviot'. This was obviously a major legal and political event, but it is also the last mention of Forteviot in the Scottish Chronicle. Donald himself died not at Forteviot but *in palacio Cinnbelathoir*, a place which remains unidentified.

A yet earlier reference, to the last of the Pictish kings, is to be found in the Regnal Lists D and F, which relate how Drust son of Ferat, having reigned three years, 'was killed by the Scots at Forteviot or, according to some, at Scone; *occisus est apud Fertheviot secundum quosdam Sconam a Scottis* (Anderson 1973; 1980, 266, 273). The phrase *a Scottis* is a reference to the story that the Pictish nobility had been massacred treacherously by the Scots. This is a common form of dynastic origin-legend; another Insular example, this time involving the massacre of British nobles by the Saxons, is related in *Historia Brittonum* chapter 46 (Morris 1980, 32; 73). The double reference to Forteviot and Scone suggests that Forteviot had been the actual location; but that by the time the event was committed to writing, probably in the 11th or 12th century, the main royal centre had been transferred to Scone. None the less, there was evidently a strong tradition asserting that Drust had been slain at Forteviot. We may therefore accept that this had been a Pictish royal centre which was adopted by the Scots in the early stage of their take-over.

A reference to Forteviot in yet earlier times may be found in the foundation legend of St Andrews. This relates how, when St Regulus, or Rule, brought the relics of St Andrew to Pictland, he met the three sons of the Pictish king Hungus (that is, Oengus: though it is not certain whether Oengus I or Oengus II is to be inferred) at Forteviot (*urbs Fortevieth*). Oengus himself, it was said, subsequently founded a church (*basilica*) there. (For the legend, Skene 1867, 183–93; for discussion, Henderson 1967, 86; Anderson 1974a, 1974b.) In M O Anderson's view, 'it is difficult to find anything in the legends that can be treated as history, apart perhaps from the name of the founder and incidental information about the writers' own times' (1974a, 7). Its major relevance to the present paper is that a king and his three sons may be the theme of a carved stone arch from Forteviot, which will shortly be discussed.

It is interesting to speculate on the character and layout of the ninth-century Scottish, and probably also Pictish, royal centre at Forteviot in the days of Drust, Kenneth and Donald. Cowan has commented that '*palacium* can mean "palace" but in this context it is more likely to represent a timber hall or perhaps "pale" or "palisade" ' (1981, 9). The second and third of these equations are dubious: the first is true, but hardly significant. The architecturally elaborate courts of the Carolingian and Ottonian emperors (accessible eg in Conant 1959; 1979) are hardly relevant in the present context. Among lesser stone buildings, we may note the relatively simple halls of Moravian and Polish princes (eg Poulík 1975; Jażdżewski 1975; Vána 1983); and also, at present unique in Britain, the equally simple royal hall at Northampton (Williams *et al* 1985). Elsewhere, it would be difficult to find the Early Medieval kings of barbarian Europe living in anything other than timber halls: often, indeed, of considerable size and magnificence. For excavated and published Insular examples we may cite, in Anglian Northumbria, the seventh-century halls at Yeavering (Hope-Taylor 1977); and, in a West Saxon context, the Late Saxon ones at Cheddar (Rahtz 1979).

Whether we are dealing with Frankish emperors, Polish princes, or English kings, two buildings are regularly present at the court of a Christian ruler: a large hall, whether of stone or timber, for feasting, audiences and other court ceremonials; and a church, either a chapel-royal or a more public building. The expectation of an archaeologist engaged in *Pfalzenforschung* is to recover such buildings, whether, rarely, as standing remains, or as the below-ground plans of vanished structures. The remainder of this paper explores this theme at Forteviot.

THE EVIDENCE OF CARVED STONES (Illus 4–6)

Carved stones and, above all, a remarkable sculptured arch, bear witness to Early Medieval activity at Forteviot; but they also present a depressing picture of the extent to which evidence has been lost. By 1903, Romilly Allen was able to record only five sculptured stones, none of them complete, in the vicinity of Forteviot and Milton of Forteviot (Allen & Anderson 1903, 321–7). Unfortunately, examination of the stones still preserved in the church at Forteviot makes it clear that his drawings are neither complete nor wholly accurate; it is not, however, the purpose of the present paper to provide a corpus of the Forteviot stones.

Of the preserved stones, **Forteviot no 1** (illus 4) is the lower half of a cross-slab, bearing on the figural face a horned beast, biting the neck of a serpent, which in turn seizes the beast's horn; it would be natural to interpret the beast as an ox, but its jaw is that of a carnivore. The serpent itself is an extension of the tail of one of a pair of guardian beasts such as flank the figural face of some Pictish cross-slabs; the tail of the other appears to end in a bird's head. The designs on the other face and the two sides are principally of interlace. The style is essentially Pictish, and a date in the eighth or earlier ninth century seems appropriate.

ILLUS 4   Front, side and rear views of cross-slab, Forteviot no 1. Height 0.6 m.
Photos: courtesy of T E Gray

Forteviot no 3 (illus 5) is a fragment from the arm of a free-standing ringed cross, and is therefore of Irish, Scottish (Ionan), or (unlikely) Anglo-Scandinavian inspiration, rather than Pictish. Allen noted that it has 'part of one of the quadrants of the connecting ring', but he did not illustrate this. The outer edge of the quadrant has a square-sectioned rib, decorated with a square-key pattern (Allen & Anderson 1903, no 887). Although it is quite dissimilar in detail, the fact that this fragment comes from a free-standing cross relates it to the cross at Dupplin, across the Earn from Forteviot, which is discussed further below. Given the apparent Irish or Scottish influence, a date in the later ninth century might be appropriate.

Forteviot nos 4 & 5 are mere fragments, the first with a spearman on horseback, the other with rather confused interlace. Dr M Spearman has also brought to our attention other fragments which have only recently been deposited in Forteviot church, including at least one which appears to be an architectural fragment rather than part of a cross or cross-slab.

Forteviot no 2 is the most remarkable, and the most controversial, of the Forteviot stones: an arch-shaped slab of sandstone (illus 6). This, as Skene stated in 1832, 'was discovered . . . lying in the bed of the [Water of] May, immediately under the Haly Hill'. It is reasonable to believe that originally it had formed part of one of the buildings on Haly Hill which had, again in Skene's words, 'been almost entirely swept away . . . by the encroachments of the May' (Skene 1857, 278; paper delivered 1832). The description of the arch given here is based in part on accounts by previous writers (Skene 1857; Stuart 1867; Allen & Anderson 1903; Richardson 1964), but more especially on a detailed examination and discussion, face to face with the stone, between the authors and Dr Michael Spearman. On the whole, a common interpretation prevailed; in what follows, dissenting opinions are identified by initials.

The slab has been shaped to a double curve. Despite some slight irregularity, the best available measurements make it clear that the intention was to carve an arc of a true circle, with an inner diameter of at least 4 ft (c 1.2 m), and an outer diameter of about 7 ft (c 2.14 m). The imperial measurements are preferred here to metric ones, because they are likely to
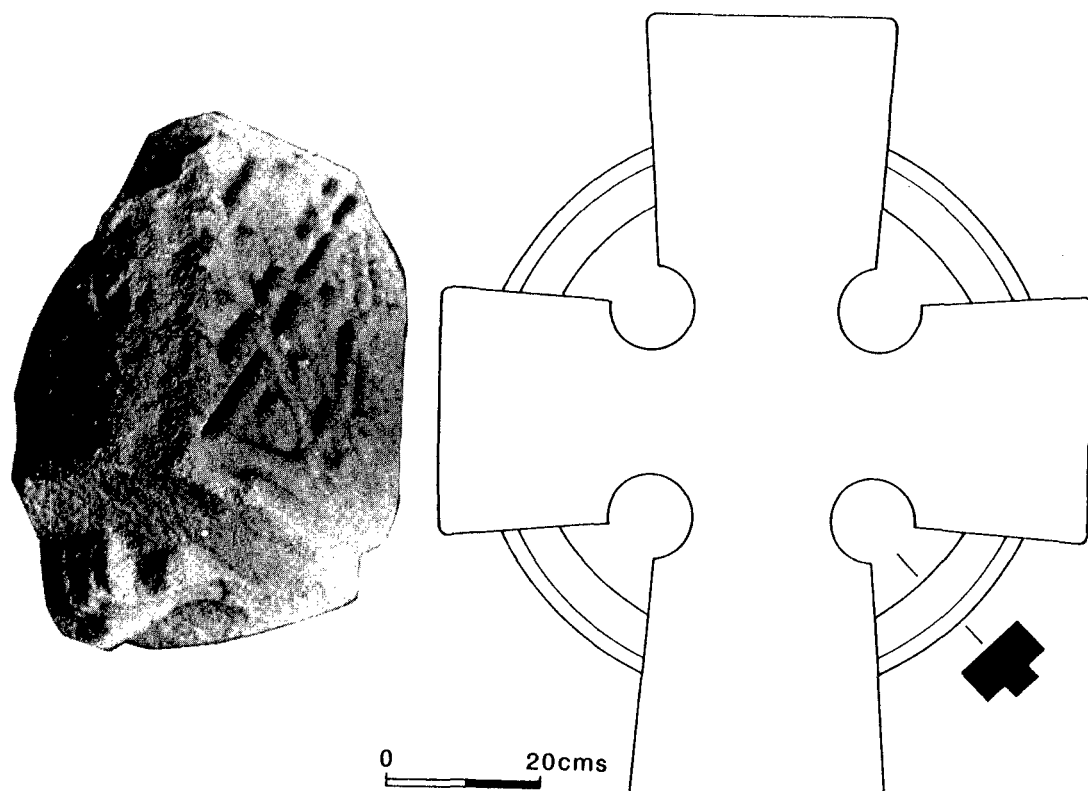
ILLUS 5   Head of ringed cross, Forteviot no 3: three-quarter view of extant fragment (not to scale) and outline reconstruction

give a better idea of the original intentions of the sculptor. Both ends of the slab are broken, and it is therefore uncertain whether it originally formed a complete semicircle; or, as currently reconstructed in the National Museum, a sector only, rising from sloping jambs. MS defends this on analogy with the doorways in the 11th-century round towers at Abernethy and Brechin, and on general Irish parallels; but the authors consider that the parallels are not sufficiently close in time or place to justify departing from a symmetrical reconstruction as a semicircle.

The rear of the slab is very rough, suggesting that it has been split from a thicker piece; its present maximum thickness is 1 ft 1 in (0.31 m).

The face bears sculptured figures in false relief: that is, the background has been lowered, but the figures themselves are flat, consistent with the plane surface of the slab. Details, especially of the drapery, have been achieved by drilling holes at intervals, and then linking these with less deeply inscribed lines. The carved detail is remarkably sharp, though not necessarily more so than that on other monuments which are known to have stood in the open for some hundreds of years. The overall design is framed top and bottom by grooves which form a feeble roll moulding.

The centre piece of the arch is a badly damaged cross. The broad shaft of this sweeps boldly

ILLUS 6   Forteviot no 2, the carved arch (*Copyright: Trustees of the National Museums of Scotland*)

inwards to a transom which is no wider than the shaft. Vertical wavy lines on the shaft may represent the grain of a wooden cross, or carved interlace on a cross-slab or free-standing cross. The upper part of the cross has largely flaked away. We accept the suggestion by MS that this is probably the result of 16th-century iconoclasm, with the interesting implication that the arch might still have been standing at that time, and was then deliberately thrown down into the Water of May.

To the spectator's right is an animal – lamb or ox – set in an awkward upright posture. To the right again are two cloaked and cowled figures, with heavy moustaches, and bearing staffs. Most previous commentators have seen here three figures; but Stuart's illustration (1867, pl CXIII) mistreats the drapery of the right-hand figure, and separates the rising thigh from the rest of the body in order to create a third cowled person. The slab breaks off on a line from the buttock to the upper calf of the second figure. Below this, if the arch is restored as a full semicircle, there is room not only for the lower leg and foot, but also for a third figure, truncated after the manner of the existing left-hand one.

To the left of the cross is a single larger figure. He is not cowled, thus allowing us to see that he is either wearing some sort of head-dress, or more likely has elaborately curled hair, which continues down the nape of his neck as a curled queue or pig-tail, rather than as a normal Pictish scroll. He also has a more magnificent moustache than his companions. He clutches, double-handed, a staff similar to theirs; or less probably, a large sword in a scabbard which narrows towards the tip (LA). As a further mark of high status, the hem of his cloak has a band of embroidered key-fret. Beneath his feet is a horned beast, and below this again there is room for one or more further figures, whether animal or human.

Any discussion of the function and iconography of the arch must start from its central

feature: the cross. This surely implies that it comes from a church, or perhaps a palace-chapel. The animal must therefore be a paschal-lamb, symbol of Christ himself. Stevenson long ago suggested that the 'curled hair [of the principal figure] . . . and the long moustaches . . . perhaps indicate a warrior chief' (1955; 1980, 127). This interpretation may reasonably be strengthened to claim that the figures depicted are a king and three companions. This in turn reminds us that MacGibbon and Ross (1896–7, 623) suggested that the king was *Hungus, magnus rex Pictorum*, that is, Oengus I or Oengus II, with his three sons Eoganan, Nechtan and Finguine. According to the St Andrews foundation-legend, the sons met St Regulus (St Rule) at Forteviot; and subsequently, Oengus founded a *basilica* there in honour of St Andrew. The soundness of this iconographical identification is independent of the historical truth of the legend; it merely requires the legend to have been known at the time when the arch was carved. Discussion of the chronology must be deferred, however, until the architectural role of the arch has been more firmly established.

It is not easy to find close parallels for a non-voussoired, double-curved arch of the dimensions of that from Forteviot. Megalithic lintels with a pseudo-arch cut in the lower face are known over both doors and windows in Anglo-Saxon churches; in the porch-tower at Restenneth, and at the round towers at Abernethy and Brechin; and very widely among early stone churches in Ireland. This, however, is not the form which we have at Forteviot. Some nine or ten true double-arched window heads are recorded in Anglo-Saxon churches; but their spans range from a mere 6 in to 2 ft (0.15 m to 0.6 m) at the maximum. There can be no doubt that our example was the head, not of a window, but of a door. In this case, as Mr G Stell kindly informs us, only one parallel can be offered: the west door of the tower at Earls Barton in Northamptonshire (Taylor & Taylor 1965, 222–6, with fig 99). This, at 3 ft 3 in (1.0 m) wide, is rather narrower than that implied at Forteviot; but the difference is not so great as to rule out the comparison. The Earls Barton tower is assigned by the Taylors to their period C1, that is, AD 950–1000.

The Earls Barton example makes it clear that the dimensions of the Forteviot doorway would be acceptable for an external door through a tower-porch. Indeed, the Taylors' chart of doorway sizes shows that around 4 ft (1.2 m) was a favoured dimension for Anglo-Saxon doorways, whether leading through a tower or porch or directly into the nave (Taylor & Taylor 1978, fig 664). It would also be suitable for access to a lateral porticus or side chapel. It might be thought to be unusually narrow for a chancel arch (see the Taylors' chart of sizes of major arches (1978, fig 654). On the other hand, the chancel arch at Bradford-on-Avon was only 3 ft 6 in (1.07 m) wide (Taylor & Taylor 1965, 89). Professor Fernie has stressed that 'Bradford-on-Avon shows that the Forteviot stone could be from a chancel arch; the loss of things Anglo-Saxon is so great that even one survival has to be taken as significant.' Certainly, interpretation as a chancel arch – that is, an internal door – would well fit the unweathered condition of the Forteviot arch.

Whatever the actual position which the Forteviot arch had in the building plan, it clearly demonstrates the existence, on Haly Hill, of a church of some decorative, or more correctly iconographic, pretension. It is also reasonable to assert, on structural grounds, that the fabric which held the arch was not that of a timber-and-thatch church, *more Scottorum* in Bede's words (HE iii 25), but one of cut and mortared masonry, *more Romanorum*. We must then ask, how early might such a church have been built in southern Pictland?

This question may be answered in terms of the second or third decade of the eighth century, after Ceolfrith, abbot of Monkwearmouth-Jarrow, had sent builders to the region at the request of King Nechtan (HE v 21). As a definite example of such a church, the porch-tower at Restenneth

has been cited; and especially the high-quality masonry of the lower part of the tower, with its narrow south doorway spanned by a megalithic lintel with a pseudo-arch (Simpson 1963). Recently, however, it has been argued that 'there is little doubt that the structure [at Restenneth] belongs to the late 11th century or the early 12th'. Furthermore, five other monuments, which had been regarded as exemplifying the earliest masonry buildings known in Scotland, have recently been ascribed to the four decades between c 1090 and c 1130: the round towers at Abernethy and Brechin; and churches or chapels at Egilsay, Edinburgh Castle and St Andrews (St Rule) (Fernie 1986).

It has to be said, however, that while the internal logic of Fernie's paper appears beyond question, it was necessarily written to a tight agenda: one which is indeed too narrow to be helpful in the present case. Inevitably it leaves four questions unasked, and therefore unanswered. Where are the remains of the churches built *more Romanorum* for King Nechtan? Where are the churches implied by Barrow's map (1983, fig 1) of *egles* place-names: some 15 between the Forth and the Aberdeenshire Dee? Where are those at the major ecclesiastical centres implied by clusters of Early Christian crosses and cross-slabs: apart from Meigle, St Andrews and St Vigeans, there are a further 10 of these in the same region? Finally, where are the remains of the later 9th- and 10th-century churches referred to or implied in the Scottish Chronicle (text: Anderson 1973; 1980, 249–53): Brechin, Dunblane, Dunkeld, Scone, and the unidentified *civitas* (in the sense of monastery) *Nrurim/uturim*?

It is difficult to believe that none of these churches had been built of dressed and mortared stone. Indeed, Professor Fernie has kindly commented in a letter to the authors that 'since [his] arguments applied to six specific buildings, he does not deny the possibility of earlier lost masonry churches'. In broad terms, the failure to discover remains of such buildings poses a major – and largely unacknowledged – problem for ecclesiastical historians and archaeologists. The immediate relevance to Forteviot is that there are no compelling grounds for holding the Haly Hill church to the end of the 11th century or later. It becomes necessary to take account of stylistic arguments derived from the figure sculpture of the arch itself.

Stylistic parallels point coherently to Class III of the scheme devised by Allen & Anderson (1903). For these, a date in the century after the Scottish take-over of Pictland would be generally acceptable (Stevenson 1955; 1980, espec 126–7; Henderson 1978, 56–7). Characteristic features are the disappearance of Pictish symbol-designs, and the loss of the liveliness of men and horses which is so noticeable among the Class II figures. The Forteviot arch presents the following detailed parallels. The heavy moustaches can be seen on the Dupplin cross (illus 14) and the Benvie cross-slab (Allen & Anderson 1903, 260b). The supposedly royal hair-style also appears at Benvie. The folds of the cloaks occur at Invergowrie (*ibid* 266b), the key-fret hem at Dupplin, and the horned beast on the Forteviot no 1 cross-slab. Moreover, the double outline of the belly and joints of that beast is seen in a modified form on the paschal-lamb. This itself is a Pictish trait, admittedly one which is exceptionally rare on Class II cross-slabs. It may nevertheless hint at some Pictish influence on the Forteviot arch, and correspondingly a date shortly after Kenneth's take-over of Pictland for its erection.

In summary, then: if we may allow the building of a mortared stone church in eastern Scotland around the middle of the ninth century, or in its second half, then the style of the figures, both human and animal, on the Forteviot arch, is exactly what we might expect in such a church. Beyond this, it is a reasonable conjecture that it was deliberately erected by Kenneth, or his brother Donald, on or close to the site of a palace of their Pictish predecessors.

THE EVIDENCE OF EXCAVATION

The early accounts of Forteviot, together with the discovery in the Water of May of the carved stone arch, emphasize the primary significance of Haly Hill for any programme of archaeological research. The problem which had first to be investigated was this: did anything still remain of the supposed palace-buildings, which were still visible in the 18th century; or had they been, in Skene's words 'entirely swept away . . . by the encroachments of the May' (1857, 277). It was with this in mind that limited excavations were carried out, with a team of ten students, from 3 to 24 July 1981.

Haly Hill, and its scarp towards the May, is covered by a conifer plantation, which drastically restricts the ground available for excavation. Two 4 m squares were originally laid out at the southern and the western edges of the accessible area, and both were extended as the work developed (illus 3). No evidence for buildings earlier than the late 18th century was recovered, and Skene's account can therefore be taken as accurate and definitive.

A concise account of the excavations follows.
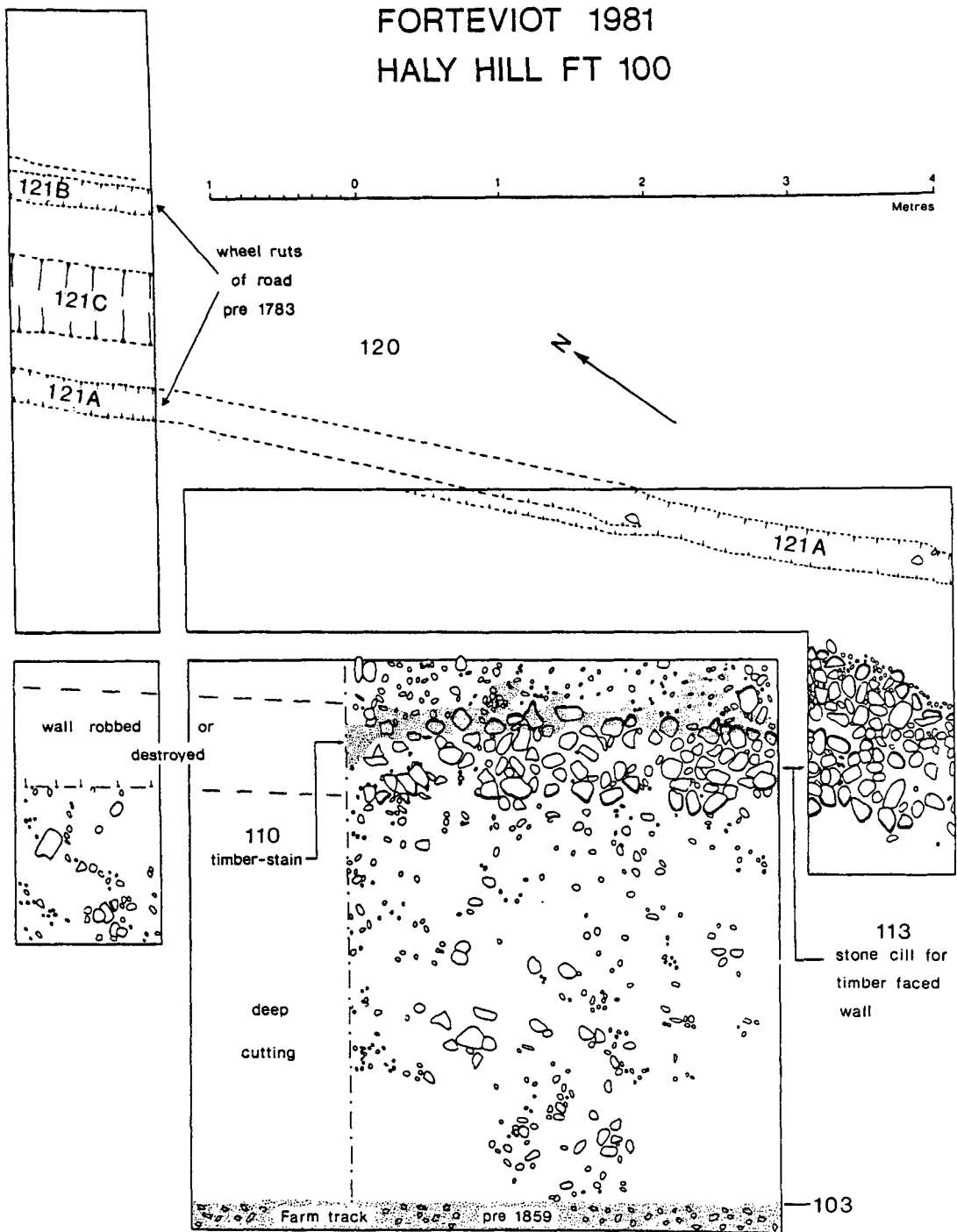
CUTTING FT 100 (Illus 7)

The earliest recognized feature, lying immediately on natural gravel, was a fine metalled road, FT 120, about 2.5 m (8 ft) wide. This had two well-developed wheel-ruts at 1.4 m (4 ft 6 in) centres (FT 121A, 121B), and a slight central depression caused by horses' hooves (FT 121C). Its alignment reveals that this is the road shown on Storrie's map of Perthshire, running north from Forteviot to Milltown (*sic*), and then on to the crossing of the Earn. It may therefore be dated before 1783.

The road was overlaid by a clean compact clay, which was the floor of a building of which only the west wall was located. This appeared initially at the base of the 19th-century plough soil as a ghost feature, FT 110, ranging from 100 mm to 200 mm wide, and running straight for at least 3 m. This overlay the inner edge of a dry-stone cill wall, FT 113, about 600 mm (2 ft) wide, made up of split boulders and rounded cobbles, the largest only about 200 mm long. To the west of the wall, scattered gravel and small cobbles marked an external yard. It seems likely that the cill had supported a turf wall, with an inner cladding of staves, planks or wattling. Two projections of the ghost feature beyond the face of the dry-stone wall may mark upright posts 1.4 m apart, but if so, the posts had not been set into post-holes.

This interesting fragment of a rural building was overlain by a black soil, containing much 19th-century pottery, glass and other debris, FT 102/105/106. This was a tilth, enriched, according to local tradition, by night soil from Perth. At the base of the tilth, plough furrows could be detected cutting into the top of a sandy clay which represented the collapse of the turf wall. The ploughing itself stopped on the west about a metre short of a very poor cobbled surface, FT 103. This seems to be the track shown as running from Forteviot, across Haly Hill, to Milltown of Forteviot, on the 1859 edition of the Ordnance Survey 6-inch map. Above this, and across the whole excavated area, was a continuous layer of black plough-soil.

CUTTING FT 200/300 (Illus 8)

This cutting, which was located above the north-west corner of the plantation, produced no man-made structures. Natural gravel, FT 215, lay at a depth of 1.2–1.5 m below the modern turf. Irregular depressions in the surface of the gravel appeared to mark root holes or animal burrows.

FORTEVIOT 1981
HALY HILL FT 100

121B

121C

121A

wheel ruts
of road
pre 1783

120

121A

N

wall robbed
destroyed

or

110
timber-stain

113
stone cill for
timber faced
wall

deep

cutting

Farm track   pre 1859

103

ILLUS 7   Forteviot 1981, Cutting FT 100, plan

Above the gravel was some 700 mm of grey or brown loamy soil, containing few stones, presumably a natural deposit. The lower part of this was almost sterile, FT 214, 213, but in the upper third, FT 212, there were many coal and shale fragments together with recent pot, glass and iron fragments. This seemed to mark a zone of 19th-century cultivation, similar in character to the plough-soil of Cutting FT 100, but with less rubbish.

Above the coaly level, finds were less frequent, and the fill changed to a homogeneous brown loam, FT 211, 209. This was interleaved with a wedge characterized by orange streaks, FT 210, which suggested an irregular mound of clayey turves. The top of the brown loam, FT 208, has been ploughed. All the material above the coaly layer, FT 212, has been introduced artificially during the last century, probably as part of some agricultural operation.

A one-metre wide extension through to the scarp above the Water of May, designated Cutting FT 300, showed that the stratification of Cutting FT 200 extended to the edge of the scarp, becoming progressively more degraded by erosion, and especially because of rabbbit burrows. The following equations in the layers may be proposed: 302/303 = 209, 211; 304/305 = 212, 213; 306 = 214; 307 = 215. In proposing these equations, however, it should be noticed that the pronounced coaly layer, FT 212, was not clearly distinguishable in Cutting FT 300. Moreover, both modern and medieval pottery continued down into FT 304/305, perhaps as a result of animal intrusions.

Whatever the explanation of the deposits overlying natural gravel, it is certain that there had never been masonry buildings within Cutting FT 200/300; nor, given the absence of masonry debris, mortar spreads or other such indicators, even within close proximity to it.

THE EVIDENCE OF AERIAL PHOTOGRAPHY

To offset the disappointing results from this excavation, we may turn to the evidence of aerial photography. Traces of early structures, detectable from the air as dark marks in ripening
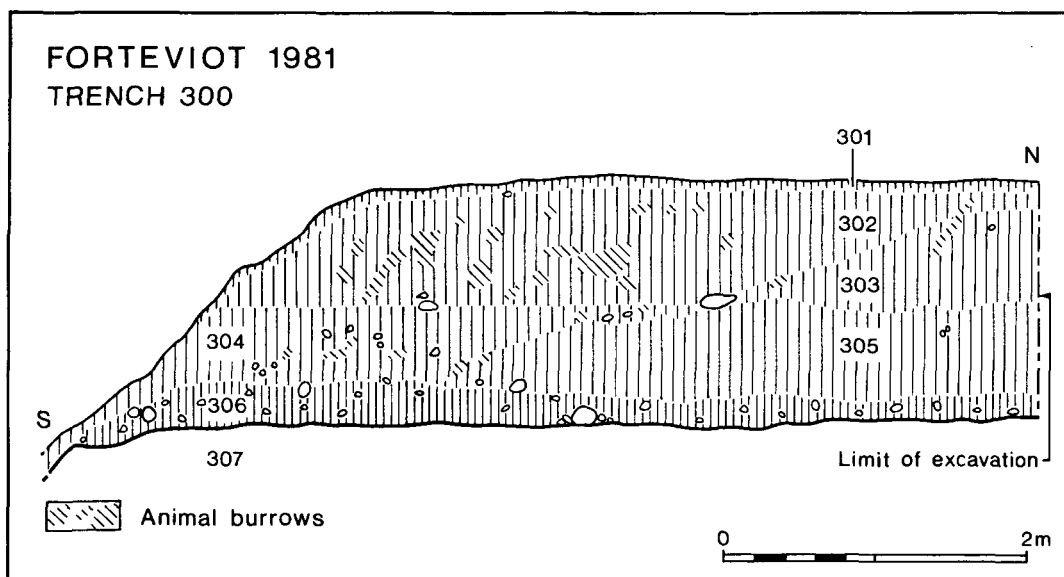
ILLUS 8 Forteviot, Trench FT 300, section

ILLUS 9   Aerial photograph of cropmarks east of Forteviot village in 1989 *(Crown Copyright: RCAHMS)*

ILLUS 27   Map of Glen Urquhart, from General Roy's Military Survey (1747–55), marking settlements in red, fields under cultivation in yellow, with indication of rigs, and woodland in green, in addition to hills and rivers. This represents the climax of pre-Improvement cultivation. *By permission of the British Library*

crops, had been noticed on the terrace to the south of Forteviot village as long ago as 1975 (St Joseph 1976, 56–7, with pl VIIa). These included palisaded enclosures, and circular ditches both large and small. In general terms, they suggested burials and, more importantly, ritual monuments of the 'henge-monument' class. They thus revealed a high degree of ceremonial and ritual activity in the third and early second millennia BC (St Joseph 1978a, 47–50).

In subsequent years, other cropmarks were noted and photographed, further north and immediately east of the present village. These included evidence of square- and penannular-ditched burials, comparable with those recently recorded as standing monuments at sites such as Garbeg in Inverness-shire (Stevenson 1984). Since the latter could reasonably be attributed to the Picts, probably in the fifth to eighth centuries AD, the relevance of these cropmarks to the Pictish phase at Forteviot was immediately apparent. A plot of all the cropmarks recorded to the east of the village was therefore prepared by Dr Lesley Macinnes. This, together with a detailed description and interpretation, was published in the interim report on the 1981 fieldwork (Alcock 1982a)

Since then, Forteviot has been observed annually, and especially clear cropmarks were photographed in 1989 (illus 9: colour). The latest observations of the cropmarks east of the village have been incorporated in a new transcription by K H MacLeod (illus 10 & 11), together with a revised interpretative description by Marilyn Brown both of whom are on the staff of the Royal Commission on the Ancient and Historical Monuments of Scotland.

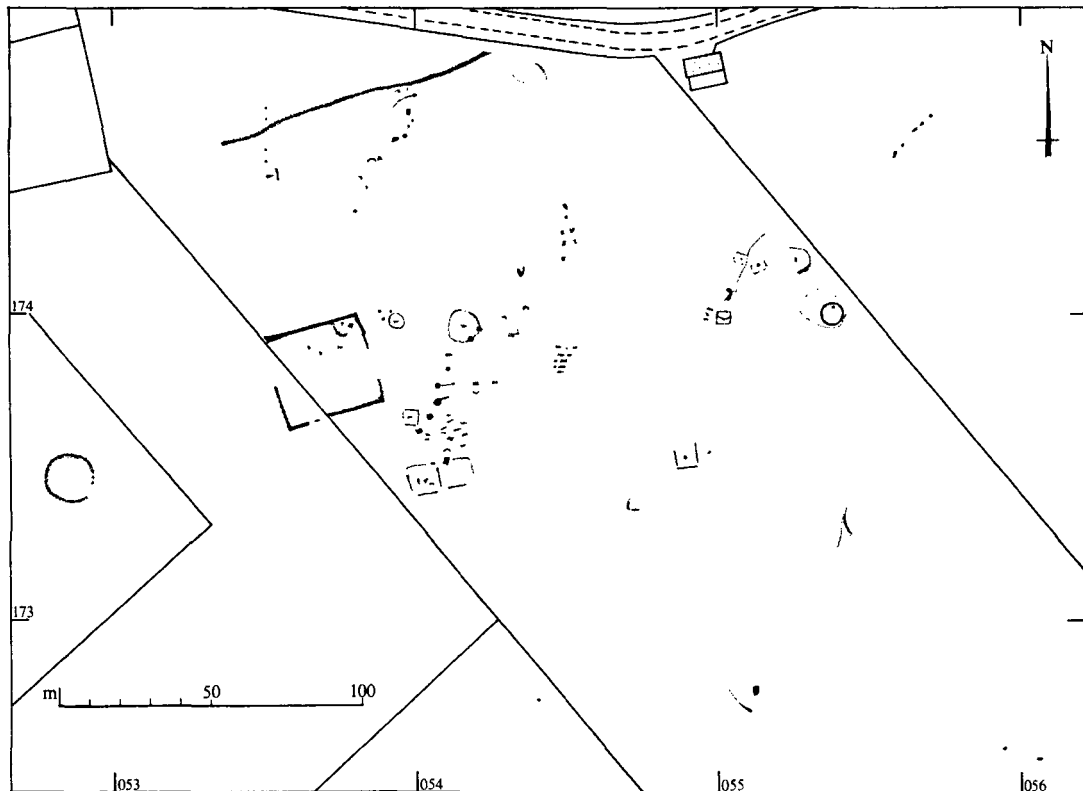CROPMARKS EAST OF FORTEVIOT VILLAGE: INTERPRETATIVE DESCRIPTION

M Brown

The accompanying plan (illus 11) was prepared from aerial photographs taken between 1975 and 1989. One set of photographs, dating from August 1989, supplied the majority of the information on which the computerized transcription was based, with three other photographs from different years supplying most of the additional features; further details have been added after consideration of all the other photographs. The most prominent cropmark features visible on the photographs are those arising from recent agricultural activity and from geological and soil formations; these have been omitted from the plan. In some areas of the site, such cropmarking has obscured or confused archaeological features, making it difficult to establish their forms with any certainty. This applies in particular to the cropmarks of apparent pits, which are scattered widely across the site, and are normally only identified as being man-made when forming a recognizable pattern or in association with other features. The individual cropmarks are described from west to east (1–12), with the pits lettered separately (A–E) (for key to numbers and letters, see illus 10).

1 A subcircular enclosure, measuring about 15 m in diameter within a narrow ditch. A break on the east arc may mark the position of an entrance, but the marks of the ploughing pattern in the field prevent any positive conclusion. A cropmark of amorphous appearance, which is too indefinite for transcription, may also be seen in the interior.
2 A broad, slightly curving linear cropmark is visible for some 90 m, running from the ENE towards the modern boundary of the manse garden.
3 A rectangular enclosure, aligned approximately ENE/WSW, measures about 32 x 28 m within a single ditch whose course is partly obscured by geological cropmarking, so that there is no clear indication of an entrance. Within the north-east angle there appears to be an arc of ditch, and there are pits and other cropmarks, mostly too indefinite to plan, scattered across the rest of the interior.
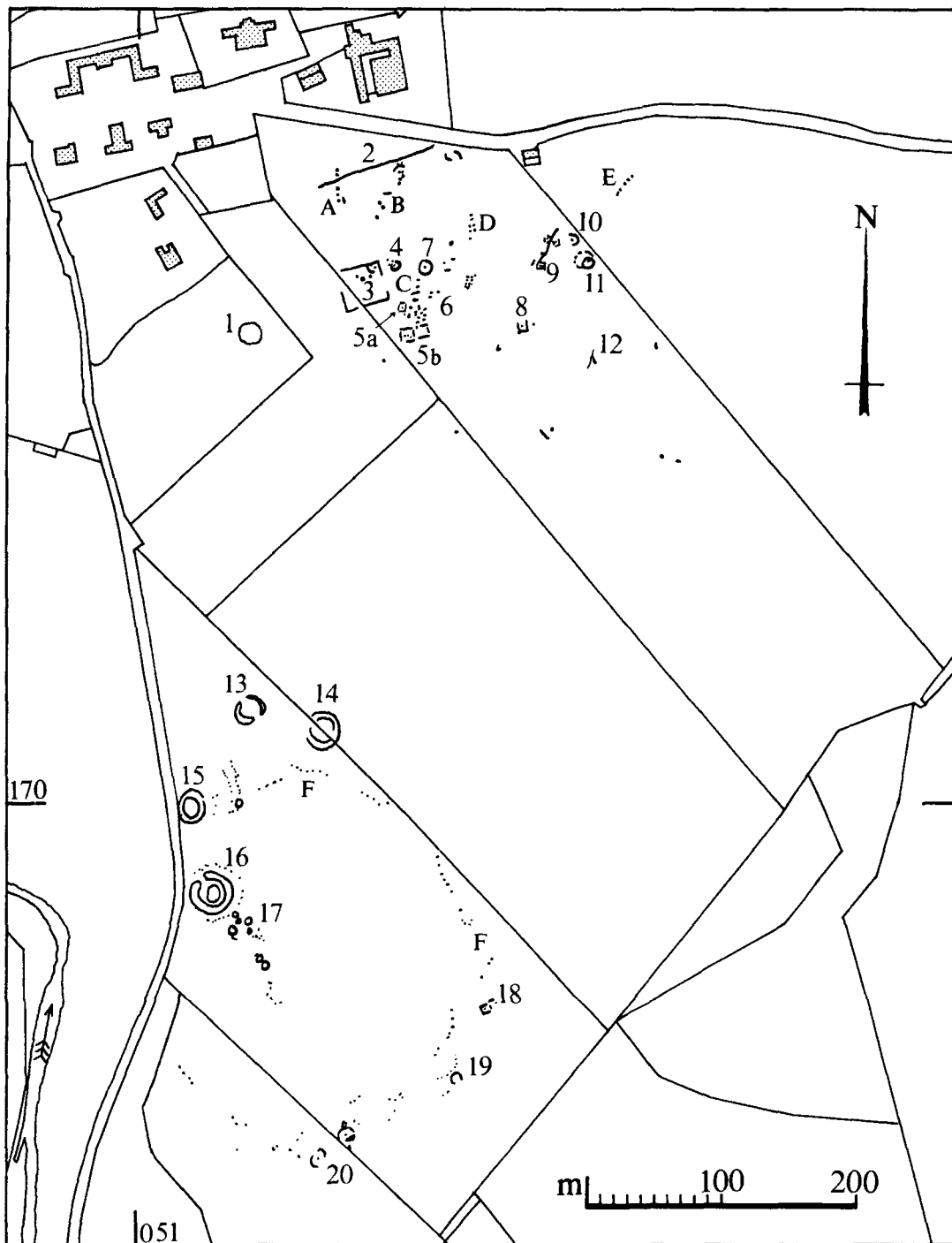
ILLUS 10 Transcription of aerial photographs of cropmarks east and south of Forteviot village by K H MacLeod (*Crown Copyright: RCAHMS*)

ILLUS 11 Transcription of aerial photographs of cropmarks immediately south-east of Forteviot village by K H Macleod. For key, see illus 10 (*Crown Copyright: RCAHMS*)

4 What appears to be a circular ditched barrow measuring about 5 m in diameter with a central elongated pit aligned approximately east/west. Three other pits lie immediately to the north-west.

5 The cropmarks of three ditched square barrows: (a), the least definite example, lies close to the south-east angle of the rectangular enclosure (2); (b), two others sharing a common side and aligned approximately east/west. The larger measures about 10 m square within ditches that are interrupted at the corners. There are traces of at least three pits within the more westerly example of the linked barrows and one east/west aligned example inside its companion. Within the more northerly barrow, which measures about 6 m across, there is a similarly aligned pit.

6 Immediately to the north of the linked square barrows are a series of short linear features about 2 m in length, apparently arranged in rows and all aligned roughly ENE/WSW. They probably mark the position of interments in a cemetery; a similar group of cropmarks can be seen some 30 m to the north-east; individual markings of comparable appearance can be seen scattered across the site.

7 A penannular ditched feature, open on the north, measuring about 10 m in diameter with a central, slightly elongated pit; two other pits lie on the line of the ditch on the south-east arc.

8 The three ditched sides of what may be a square barrow with a pit in the interior; the ditches, which do not meet at the corners, indicate dimensions of about 10 m east/west.

9 What is probably a second square barrow, measuring some 5 m across within a relatively broad ditch. Within the interior, aligned roughly east/west, there is an elongated feature, possibly a grave pit. A linear cropmark is visible extending for about 25 m to the north-east. Faint traces of what may be a second square barrow lie on the north-west side, with another possible example on a different alignment about 3 m to the south-east.

10 The indistinct cropmark of what may be the eastern part of a curvilinear enclosure with a diameter of at least 7 m. The mark of a pit in its presumed centre suggests that it might be interpreted as a barrow.

11 A circular ditched enclosure about 7 m in diameter, with the cropmark of a pit in the northern part of the interior, should probably be identified as a barrow.

12 An area of amorphous cropmarking, possibly incorporating a linear feature.

A A possible alignment of at least five small pits, running from north to south for about 25 m.

B Two large pits and a number of smaller examples, which may form a pit-alignment. A curving linear feature, about 10 m in length, lies immediately adjacent. Geological cropmarking makes identification of archaeological features difficult in this area.

C A series of large pits forming an irregular alignment at least 45 m in length; two of the pits either underlie or cut the ditch of (7). The pits may be linked with others further to the east.

D A line of at least five small pits, aligned north and south, and extending for at least 18 m. A minimum of two additional pits are situated some 2 m to the east of the alignment. Geological cropmarking in this area makes it difficult to trace further pits with any certainty.

E A possible alignment of at least five pits aligned NE/SW and extending for about 20 m in an area of predominantly natural cropmarking.

COMMENTARY ON THE CROPMARK INDICATIONS

Leslie Alcock & Elizabeth Alcock

In chronological terms, the key site among those east of Forteviot village is 5(b), two conjoined square-ditched barrows with the ditches interrupted at the corners. Similar monuments are seen as standing remains at Garbeg, Inverness-shire: for instance the pairs 2/3, 10/11, and 20/21 (Stevenson 1984, fig 9.1). Comparable features may be seen in square-kerbed cairns at Ackergill, Caithness, also attributed to the Picts (Close-Brooks 1984, fig 5.5). While Forteviot 5(b) is the clearest example, especially because of the sharing of the ditch, Forteviot 5(a), 8 and 9 are probably in the same category. Moreover, the existence at both Garbeg and Whitebridge of penannular- and square-ditched barrows in the same cemetery (Stevenson 1984) leads us to regard some of the penannular ditches with central black marks, suggestive of burials, as also being Pictish: certainly Forteviot 4, and probably 7 and 11 as well.

The appearance is, then, of a Pictish cemetery with a rather scattered array of square and circular grave mounds. The parallels just cited suggest a date range from the sixth through perhaps to the early eighth century AD. In addition, at no 6 there is a compact cluster of fleck-like marks oriented east/west, and apparently about 2 m long. In both size and orientation, these suggest a cemetery of Early Christian dug graves. Had these been recorded at a distance from the known burial mounds, the suggestion would have carried little weight, especially because random flecks and blobs of unknown significance are common on the Forteviot aerial photographs. In the observed circumstances, however, it is very reasonable to believe that we have here a mixed cemetery of simple dug graves alongside two classes of mound burials.

Despite the advances in Pictish studies registered at the conferences in Glasgow (Friell & Watson 1984) and Dundee (Maxwell 1987), it is not possible to point to another Pictish cemetery of such mixed composition: nor even to be certain that such is the correct interpretation of the Forteviot cropmarks. It is none the less of interest to turn briefly to analogies among other nations. Among the Britons of Wales, a mixed cemetery of unenclosed Early Christian graves, together with other burials set within square-ditched enclosures, has been excavated at Tandderwen, Denbighshire (Brassil & Owen 1988). Again, at Plas Gogerddan in Cardiganshire, two rather elaborate oblong-ditched burial enclosures accompanied a number of simple dug graves, in an area already sanctified by an alignment of standing stones, annular ditches with no apparent burial function, and both Bronze and Iron Age burials (Murphy 1986; 1987).

Among the Angles, at Spong Hill, Norfolk, is a cemetery which consists chiefly of some hundreds of cremations. In addition, there are a few inhumations set within ring ditches, (and therefore presumably covered by round barrows), together with a larger number of simple dug graves. Two of the ring ditches enclosed burials in wooden chambers (Hills & Penn 1981, 3–4, with fig 1); and of one of these it has been said that it 'clearly contained a person of some local importance' (Hills 1977, 176).

On the Continent, a mixture of large round barrows and burials covered only by low sub-rectangular mounds (such as may have been present over the dug graves at Forteviot) is seen, for instance, among the Alamanni at Fridingen (accessible in Christlein 1979, 57; 60 with *Abb* 34). There is a marked physical segregation of the two types of burial, with the low mounds clustering at one end of the cemetery. Since the barrows are seen as noble graves (*Adelsbegräbnisse*) there is evidently considerable social significance in the different types of grave monument; but there may be a chronological element as well. Both of these factors may also apply at Forteviot.

In making such interpretations in terms of a social hierarchy, whether at Forteviot, Spong or Fridingen, a recent paper by E James on burial and status in the early medieval west is particularly relevant (James 1989). He draws attention to the possibility that 'the grave itself can indicate privilege, if it is exceptionally large, made with a wooden chamber, placed under a barrow . . . ' (James 1989, 29). On the whole, however, the conclusions of his paper are cautious, even perhaps pessimistic, about the possibilities of establishing either social or legal status on the basis of burial practices and grave goods (James 1989, espec. 38–9).

Turning back to Forteviot, it must be said that none of the other cropmarks east of the village has such clear chronological indicators as those already discussed. The east/west layout of the rectangular enclosure, no 3, may suggest that it had surrounded a church; but nothing of the kind has so far been recognized in the cropmarks. The slightly wavy ditch, no 2, though obviously a strong feature, is quite enigmatic in both date and purpose. Finally, in earlier accounts (Macinnes in Alcock 1982a, fig 2; Alcock 1982b, fig 14.6) much had been made of an apparent alignment of large pits, suggesting a double palisade, roughly at right angles to the ditch no 2. All that now survives of this is the pit-alignment D; but certainty of interpretation in this area is made difficult by geological cropmarking.

At this point, the southerly cropmarks deserve further consideration. A new transcription of these, showing also their relationship with the northerly group, appears here in illus 10. Among them is an apparent pair of small square ditches which appear to contain burials (18). These were compared originally with the pre-Roman Iron Age series, well seen, for instance, at Carnaby in the former East Riding of Yorkshire (St Joseph 1978b). On the other hand, a Pictish attribution for similar square-ditched burials elsewhere in eastern Scotland is argued by Maxwell (1987, espec. figs 3 & 7), as it is here for 5(a) & (b), 8 and 9 in the northerly group. On balance, therefore, 18 should probably also be considered as Pictish. There are also burials within a penannular ditch (20), comparable with some in the northern Forteviot group.

However that may be, a date in the Late Neolithic or Early Bronze Age is clearly indicated for most of the southern group. These include at least one penannular ditched monument (16), and another with two opposed entrances (13), both readily attributable to the henge-monument class. (The latest survey of the class, which unaccountably ignores the Forteviot group, is in Wainwright 1989.) In terms of size, the largest of the presumed early monuments appears to be a roughly oval palisaded enclosure (F), up to 265 m in diameter, which is approached from the NNE along a timber avenue. The parallel with the Neolithic palisaded enclosure at Meldon Bridge in the Tweed Valley (Burgess 1976) was suggested by Dr St Joseph in publishing the

Forteviot example (St Joseph 1978a); though on the new transcription it is rather less clear than it was in 1978.

The possible significance of these prehistoric monuments for our understanding of Forteviot in the Early Historic period will be considered in the final section of this report.

SUMMARY: A WIDER PERSPECTIVE FOR FORTEVIOT

It was said earlier that the expectation of an archaeologist engaged in palace-research in an Early Medieval context would be to uncover traces of two major buildings, whether of stone or timber: a large feasting and audience hall, and a church. It will be evident from the two preceding sections that nothing of the nature of a royal hall has been discovered, whether by excavation or by aerial photography, at Forteviot. None the less, the carved stone arch from the Water of May on the west, and the cropmarks of a Christian-Pictish cemetery east of the modern village, bracket between them an unexplored area some 200 m or more long where a hall and other secular buildings may lie concealed. This is especially likely given the known dispersed layout of the palace complexes of barbarian kings: Milfield (Gates & O'Brien 1988) and Yeavering (Hope-Taylor 1977) are apt examples here. Certainly we may identify in this area an objective for future research.

Moreover, the discussion of the carved arch has defined its iconography, structural function, and chronology more precisely than seemed possible 10 years ago (Alcock 1982b). Despite the total disappearance of the building itself, the arch is sufficient evidence for the erection of a masonry church above the May in the early decades of the Picto-Scottish kingdom: that is the middle or later decades of the ninth century. Its construction may be attributed most likely to Kenneth or Donald, sons of Alpin; and in that sense there is no doubt that we are dealing with a royal foundation. This raises the further possibility that the arch may have come from a chapel-royal; and that there may have been another church, still to be located, further to the east.

Finally, the prominence of the cross and paschal-lamb on the arch suggests that the church may have had a particular connection with Easter: that it may, indeed, have been where the king was accustomed to celebrate the major festival of the Christian year. This, however, is to take speculation to its furthest limit.

Turning now to the cemetery of dug graves and square- and penannular-ditched barrows: this is likely to have been distinctly earlier than the time of Kenneth son of Alpin. Though the chronology of such burial-forms is far from established, the sixth and seventh centuries seem the most likely time for their flourishing, probably running on into the eighth century (Ashmore 1980; Barclay 1983; Close-Brooks 1984). If the possibly associated rectangular enclosure seen on the aerial photographs (illus 10, no 3) is a church enclosure, then it may mark the site of the eastern church suggested above. Furthermore, if the church founded on Haly Hill by the Alpin dynasty was more than a chapel-royal, then we may be seeing evidence for a westward shift in the religious focus of Forteviot between the eighth and the mid-ninth centuries.

Certainly, if we take religious and ceremonial monuments in the widest sense, then we may see, on the present cropmark indications, evidence for an overall northward shift in focus away from the southern group. This consists principally of pre-Christian monuments of the second and third millennia BC, with only a minor scatter of round- and square-ditched barrows, possibly attributable to the sixth to eighth centuries AD.

Despite the difference in date and the shift in focus, it is relevant to consider the possible significance of the earlier monuments for Early Historic Forteviot. Before any of the Forteviot

cropmarks had been recorded, M O Anderson presciently posed the question whether Pictish (and presumably Scottish) places of inauguration had 'ancient associations that made them sacred, going back to the Bronze age' (1973, 203–4). In 1982, the question was answered too emphatically (Alcock 1982b, 232–3). Attention was drawn to 'the known associations of henge monuments and Early Christian cemeteries', and even, at Llandegai, a square-ditched enclosure like Forteviot nos 5 & 8 (Houlder 1986, fig 1).

Other examples of probable Christian burials within henges were cited at Strathallan (Barclay 1983, 145, 188), where a radiocarbon age-estimate of AD 760±60 uncal was obtained from a cemetery of 13 oriented graves; and at Cairnpapple, where four oriented dug graves are more likely to be Early Christian than earlier (Piggott 1948). It was recognized that we cannot know whether the buriers of the dead regarded the henges as places of ancient sanctity, or merely as convenient enclosures, like certain derelict defended sites, such as Camp Hill, Trohoughton (Simpson & Scott-Elliot 1964; for a wider review, Thomas 1971, 50–90). In truth, these examples are irrelevant to what we know of practices at Forteviot, because none of the henges there is known to enclose burials.

Another series of parallels was sought in Ireland, where associations may be cited between passage graves and Early Historic royal sites, for instance at Tara, Cruachan, and Knowth. More recent studies of the royal sites of Early Historic Ireland, by Wailes (1982) and Warner (1988) suggest that the relationships are rather complex and subtle, and that we should be hesitant about too readily seeking parallels between Ireland and Scotland.

At present, the best analogies for Forteviot are provided by the two Bernician palace-sites of *Ad Gefrin*/Yeavering and *Maelmin*/Milfield. Bede regarded these as successive locations of a Northumbrian *villa regia* (HE II 14), but recent work at Milfield suggests that there was considerable chronological overlap between the two sites (Gates & O'Brien 1988). At both, there were one or more henges in the vicinity, and at Yeavering there were also ring ditches and a stone circle all of prehistoric date (Hope-Taylor 1977; Harding 1981). At Milfield, the Early Medieval period is known principally from aerial photography; but at Yeavering extensive excavations have demonstrated that there may have been almost continuous usage, over several millennia, of a gravel terrace similar to that at Forteviot.

In fact, literal continuity in the use or occupation of a specific area is irrelevant, provided that the early monuments themselves remained visible. Given the substantial size of the encircling earthworks of a henge, this is extremely likely, especially at Forteviot, where there is no evidence of cultivation or occupation in the millennia between the building of the henges and the beginning of the Pictish cemetery. Nor was it necessary that later centuries should have known or surmised that the earlier monuments had been sacred places. It was enough that they should be perceived as the great works of ancestors: ancestors who, from our own historical perspective, appear as wholly mythological.

Richard Bradley (1987) has recently re-examined, in the light of interpretations derived from social anthropology, the kind of associations across a long time-gap which we see at Yeavering, Milfield and Forteviot, and again in Ireland. He dismisses explanations in terms of 'ritual continuity' across the gap. Instead, he sees new social élites actively using physically impressive monuments of the past – a past about which they could have known nothing which we would regard as historical – in order to promote or protect their emerging interests in the present. He considers this to be 'one of the major strategies by which groups in a traditional society could impose their version of reality' - presumably social and political reality 'on others and at the same time protect it'.

All this is relevant to the establishment of a Pictish royal centre at Forteviot, in the seventh

or eighth century AD. The new political and social realities would be marked by an emergent and strengthening kingship, in a relationship simultaneously of alliance and of competition with an emergent and strengthening Christian church.

But we must recognize that the Scottish take-over of the Pictish kingdom created a special crisis for royalty in eastern Scotland. In part this was met by taking over, as part of a going concern, a pre-existing Pictish power centre, just as the Bernician Angles seem to have taken over pre-existing British centres at Bamburgh, Doon Hill, Dunbar, Lindisfarne and Yeavering (Hope-Taylor 1977; Alcock 1988a). Moreover, if the church with its sculptured arch was founded by one or other of the sons of Alpin, then that too could be construed as an affirmation of the new royal power. But a more public monumental statement was also needed; and that was made by the erection of a carved high cross at Dupplin (illus 13 & 14; Allen & Anderson 1903, 319–24 with figs 334 A–D, which are very incomplete and inaccurate; Walker & Ritchie 1987, 133–4); and also possibly at Invermay (illus 12).

The Dupplin cross stands at Bankhead (NGR NO 050189), at a height of about 85 m OD, on the slope leading up from the river Earn to the Gask Ridge. From here it looks south across the river towards Forteviot. It is set into a massive plinth on which is cut an Irish/Scottish ogam inscription. Unfortunately this is unintelligible in a literal sense; but its symbolic reference to the coming of the Scots is plain. The cross itself (illus 13 & 14) is a free-standing ringless high cross, carved from a single block of sandstone, a little over 2.5 m high. The cross-form may be regarded as probably Northumbrian in inspiration; but both the cross and its richly carved ornament are highly eclectic, and the decoration includes much that is of Celtic/Ultimate La Tène derivation. Regrettably, the Dupplin cross has never received the full study which it deserves. The present account is confined to those figural panels which seem relevant to our study of the royal centre at Forteviot. (For recent epigraphic work, see the Postscript.)

All the figural – as opposed to the decorative – panels are statements about kingship. Two of them are scenes from what has been called the 'David Cycle', which is especially prominent in Pictish sculpture (Henderson 1986). At Dupplin we have a full panel with David the harpist enthroned; and a slightly damaged panel in which he is rending the jaw of an animal which is usually interpreted as a rather poor lion, but which would make a more realistic bear. Either would be possible in a Davidian context (I Samuel XVII 34–7); and a bear would at least have been a familiar animal to a local sculptor and his viewers. But these should not be regarded as realistic images, of a subduer of dangerous beasts, or of a musician capable of refreshing a king troubled in mind (I Samuel XVI 16, 23).

They may indeed be icons of David as ancestor and pre-figurer of Christ (Bailey 1978, espec. 4–5). In the context of the Dupplin cross, however, they are more likely to be icons of a divinely sanctioned king. It has been well demonstrated that Bede saw the warrior kings of Judah and Israel as models for the English kings of his own day (McClure 1983, espec. 87–8). Eddius Stephanus has a revealing comment on Ecgfrith of Northumbria sallying forth against the Picts 'trusting in God like Judas Maccabaeus' (VW chap 19). David was annointed king of Judah and of Israel; his whole career, from simple shepherd to triumphant king, shows him to have been 'a mighty valiant man, and a man of war' (I Samuel XVI 18); 'and the Lord God of hosts was with him' (II Samuel V 10). The David theme, then, refers to the divine sanction of royal power.

Three other panels stress its material sanction, in naked armed might. If the *Senchus fer nAlban* has been interpreted correctly, then the army of the Scots mustered every able-bodied adult male in Dalriada (Alcock 1988b). At Dupplin we see the over-king, heavily moustached like the king on the Forteviot arch, armed and riding to battle. But his horse, far from trotting realistically
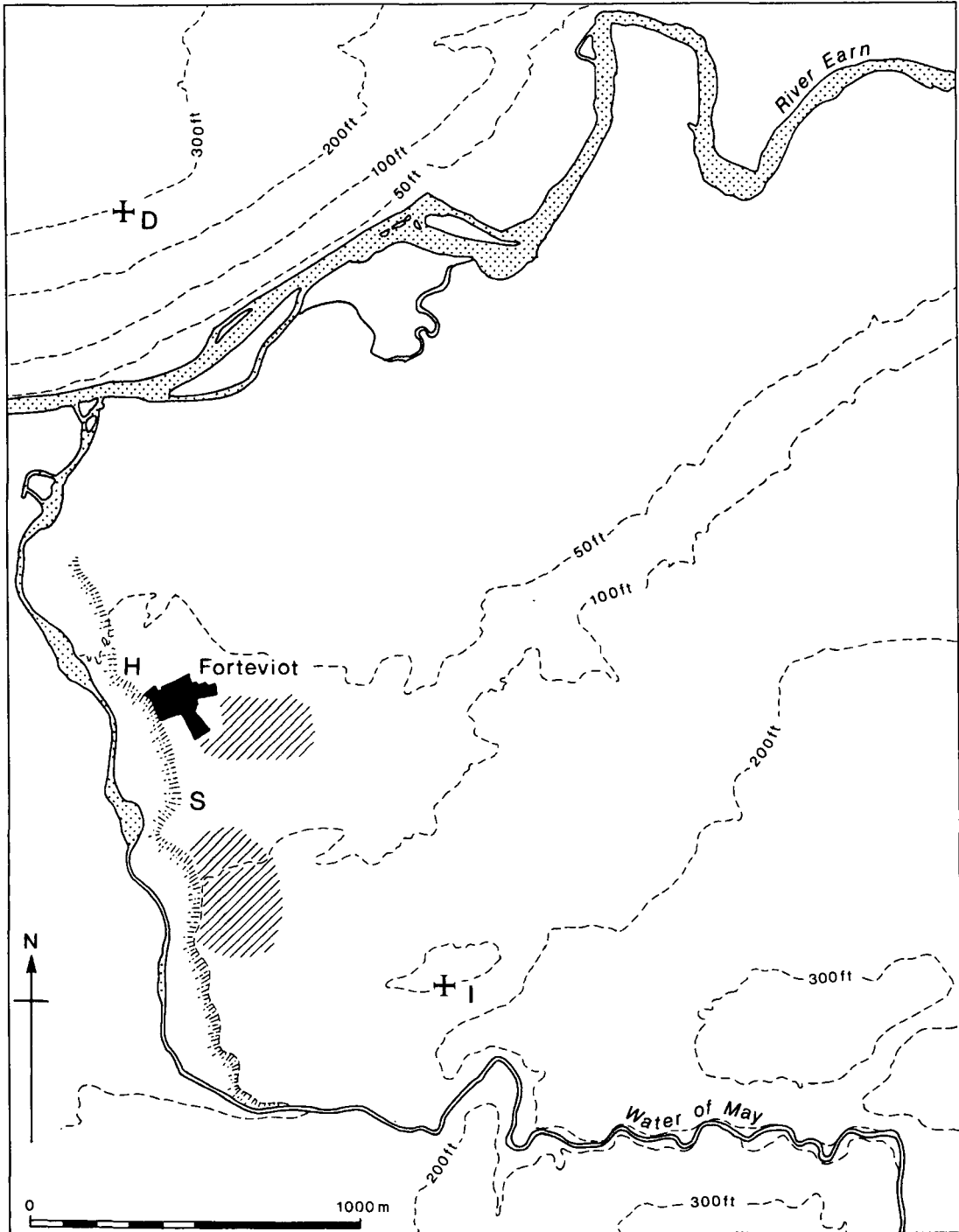
ILLUS 12 Location of the Dupplin and Invermay crosses in relation to Forteviot. D, Dupplin cross; I, site
of Invermay cross; H, Haly Hill; S, scarp of former course of the Water of May. Hatching marks
areas of cropmarks; for details, see illus 10 & 11

ILLUS 13 Dupplin cross: David scenes: left, west face, at base, David and the lion (or bear); right, north face, David enthroned and playing the harp (*Copyright: National Museums of Scotland*)

like those on Pictish Class II stones, has all four feet on the ground: it is not a naturalistic image, but a symbol of royal permanence. Another panel shows two moustached foot soldiers, perhaps under-kings or leaders of septs. Finally there is the mass of foot soldiers, young clean-shaven warriors. On these three panels is presented the military sanction of kingship, reinforcing its spiritual and ecclesiastical justification. Equally – and not necessarily alternatively – these martial scenes at Dupplin may depict Kenneth son of Alpin's victory parade, after the remote model of Roman Imperial triumphs, and the more immediate example of Frankish kings (for this large topic, see McCormick 1986; predictably, 'Picts' and 'Scots' do not appear in the index).

The Dupplin cross, it seems, did not stand alone. Dr M Spearman has kindly reminded us of the observation of Allen & Anderson (1903, 328 with fig 341) that from Invermay came sandstone fragments with a band of square key-pattern, and more importantly a panel of 'diagonal key-pattern, double-beaded (as on the cross at Dupplin)' (illus 15). These fragments are from the sadly vandalized and dispersed Invermay cross, which formerly stood at NGR NO 166059, overlooking
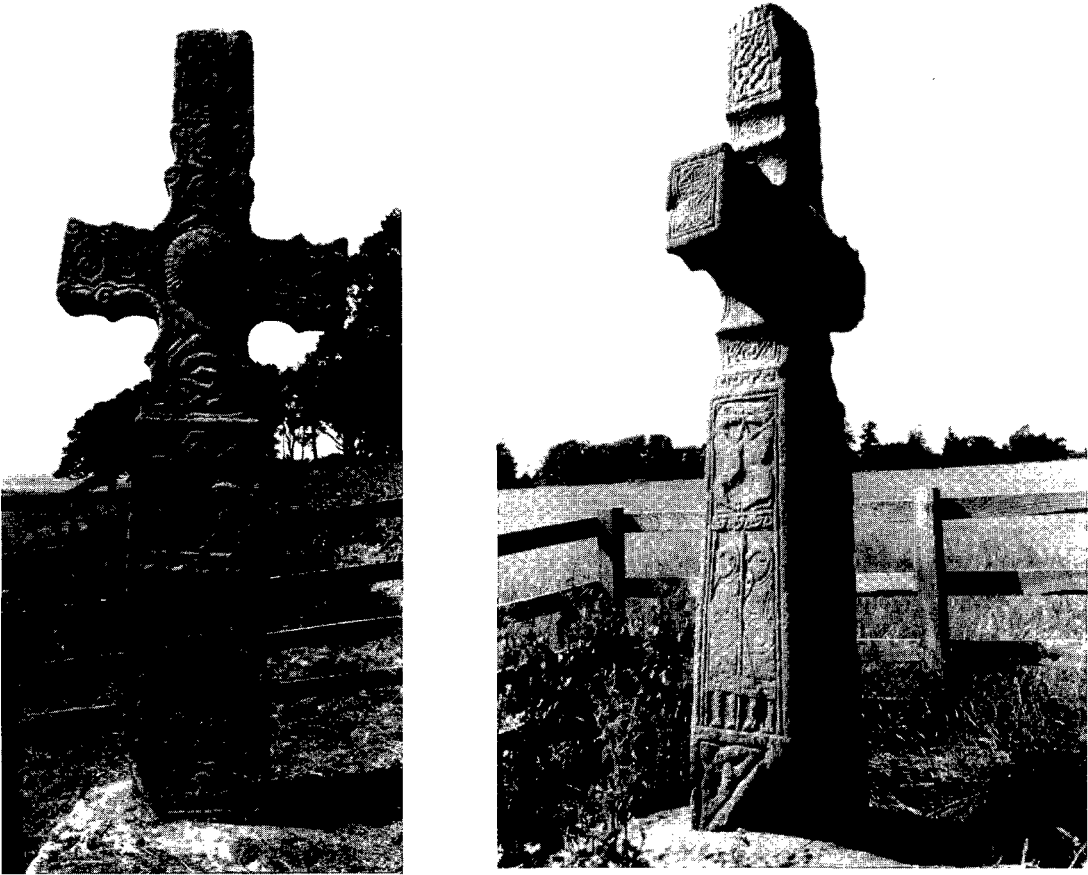
ILLUS 14 Dupplin cross: east and south faces with martial arrays. Height of cross, 2.5 m (*Copyright, left, Trustees of the National Museums of Scotland; right, authors*)

the Forteviot palace-site from the south just as Dupplin overlooks it from the north (illus 12). The striking similarity between a decorative panel from Invermay and one from Dupplin is no guarantee that the two crosses bore closely comparable figural and iconographic programmes; but the probability is high that they did. (It should be noted that Stuart suggested (1856,17; 1867, 59–60) that our Forteviot no 1, illus 4 above, had probably formed part of the Invermay cross. The suggestion can be dismissed on the grounds that it is plainly from a cross-slab, not a free-standing cross.)

These two crosses, with their permanent and monumental statements about kingship, were set up in locations which overlooked the royal centre of the sons of Alpin and of their Pictish precursors. In both their sculpture and their siting, they provided the symbolic basis for Kenneth mac Alpin's 16 years of felicitous rule over Pictland: *rexit feliciter istam annis xvi Pictaviam* (Anderson 1973; 1980, 249; for the wider historical background, Anderson 1982). They are, indeed, major documents for the founding of the kingdom of the Scots.
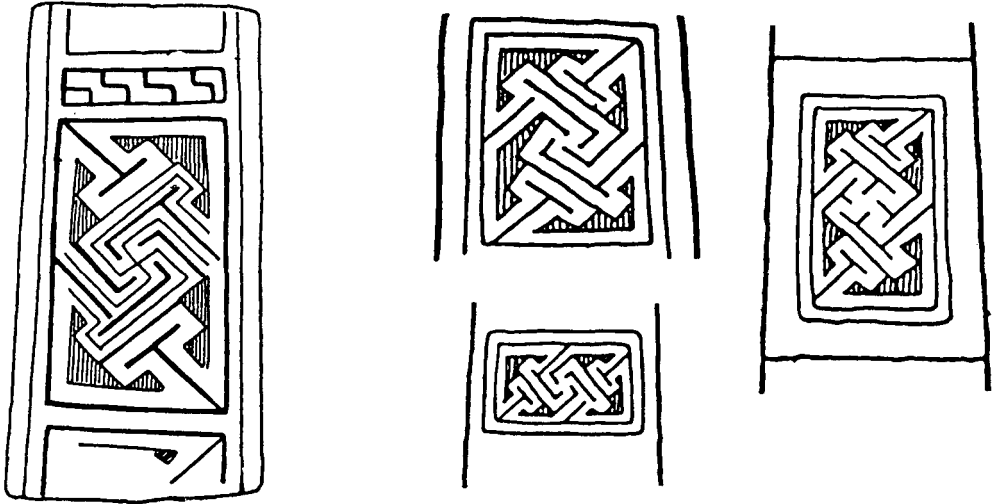
Illus 15   Diagonal key-patterns : left, from the Invermay cross; right, from the Dupplin cross (after Allen & Anderson 1903)

B: **Excavations at Urquhart Castle, 1983**

HISTORY, IDENTIFICATION & SETTING

In the original policy and discussion document for our progamme of research (Alcock 1981, 159–61), the view was strongly promoted that the medieval masonry castle of Urquhart (illus 1:3), beside Loch Ness, overlay the fort of Bridei son of Maelchon, king of the Picts north of the Mounth. Adomnan, in his *Life* of Columba, had related how the saint had visited (perhaps more than once), *Brudei munitio*, the fort of Brude (*recte* Bridei), in his mission to the northern Picts (VC 40a; 79b–82b). The date implied lies between AD 562, when Columba went to Iona, and 586/587, when Bridei died, but it cannot be defined more closely (discussion in Anderson 1973; 1980, 116–18; Anderson 1991, espec. xxxiii–xxxv). If our location of Bridei's fort at Urquhart should have proved correct, then a site of outstanding importance in early medieval Scotland would have been identified for archaeological examination. Especial interest attached to Adomnan's references to the king's house (*domus*) and hall (*aula regia*).

While the historicity of Columba's visits to the fort of Bridei cannot be seriously doubted, it is quite another matter to establish its location. It is no matter for surprise that Adomnan displays no exact knowledge of either Loch Ness or the River Ness; nor indeed of the geographical details of a mission which had taken place a century before he wrote the *Life*. In particular, it is unclear whether Adomnan thought that Bridei's fort was beside the river or beside the loch. If the former, then the most likely location might be on the Castle Hill of modern Inverness (illus 16) (Henderson 1975; and see below, p 265). If the latter, then there were three possible pointers to Urquhart.

First, as long ago as 1906, M'Hardy had found on the shore below the castle 'several pieces of water-worn vitrification which had formed part of a fort which must have been removed when the castle was built' (1906, 149). M'Hardy's inference was reinforced when clearance and consolidation of the masonry by the Office of Works in the 1910s and 1920s yielded vitrified
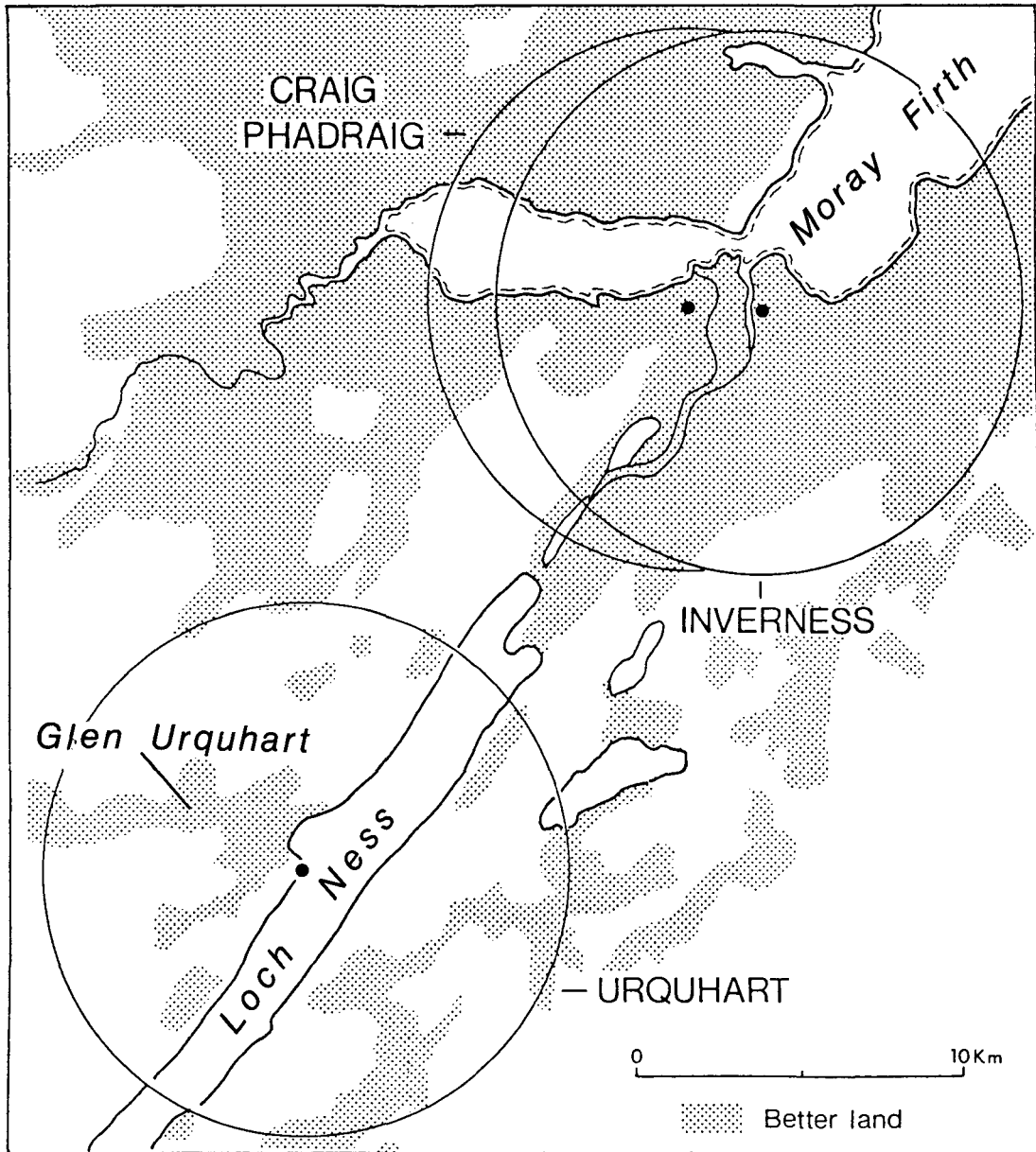
ILLUS 16 Location of Craig Phadraig, Inverness and Urquhart in relation to the Great Glen and to better land. The circles, 5 miles (about 8 km) in radius, define an area readily cultivable from each centre (after Small 1987)

rubble on the north-east slopes of the citadel (Simpson 1929, 3 & fig 15; illus 17 B here): powerful evidence for the former existence of a prehistoric or early medieval fortification on the site. Secondly, Urquhart Castle was claimed as the find-spot of a terminal from a silver pennanular brooch of the St Ninian's Isle type, attributed to Pictish workmanship, and datable to the late
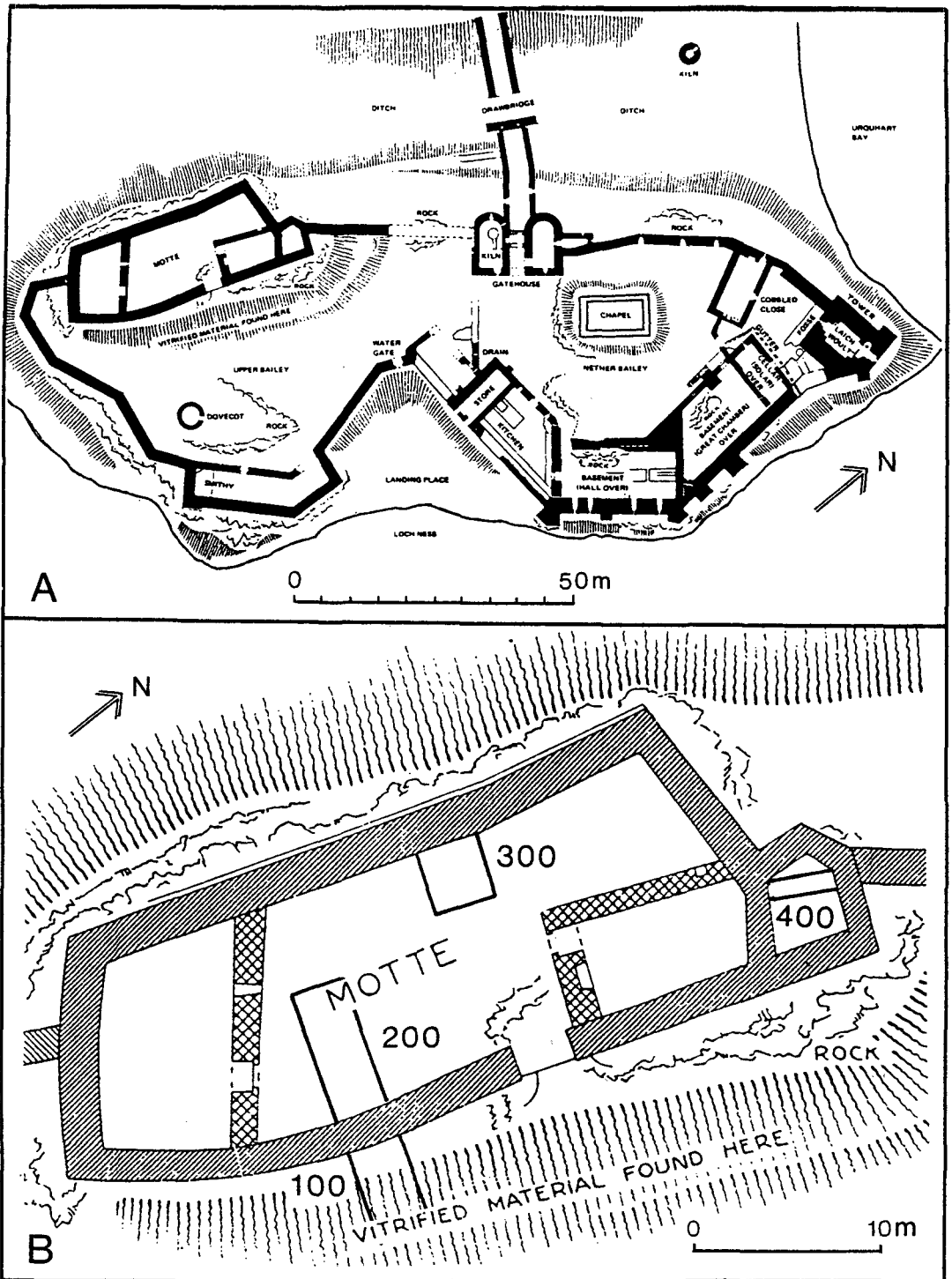
ILLUS 17 Urquhart Castle. A: general plan, after a survey by Simpson & Calder, 1928–9; B: Simpson's plan of the citadel (so-called Motte), with the 1983 cuttings superimposed

ILLUS 18 View of Urquhart Castle from the west, showing the high rock boss of the citadel to the right, with the ground dropping towards the left to the end of Strone Point

eighth century (Wilson 1973, 90). Finally, the masonry castle of Urquhart is set on a craggy promontory, with a higher rock boss at the landward end (illus 17 A & 18): topography very suitable for a citadel with lower, subordinate, enclosures, of the form regarded as characteristic of early medieval royal fortifications (Alcock, Alcock & Driscoll 1989, 206–14).

A further literary reference suggested that in Columba's day Urquhart had been the residence of persons, if not of royal, then at least of noble status. Adomnan relates that, in the course of his mission to the northern Picts, Columba came to a place referred to as *agrum qui Airchartdan nuncupatur*, 'the estate which is called *Airchartdan*'. Here he baptized a Pict named Emchath and his son Virolec *cum tota domu*, 'with (his) whole household' (VC 115a). (The translation given here differs from that of the Andersons (eg Anderson 1991, 201–3) for reasons which are discussed below, p 261.) The implication is that Emchath was a landowner and householder of some rank, the kind of person we have elsewhere called a potentate ; and such a person would probably have lived in an enclosed or defended place. The recorded form *Airchartdan* is equated with Urquhart by Watson (1926, 95) and Anderson & Anderson (1961, 157–8); so it seemed likely that excavation of an apparent vitrified fort might reveal there the stronghold of the noble Emchath, even if not the *munitio* of King Bridei.

So far as the High and Later Medieval history of Urquhart is concerned, there appears to be no evidence to support the speculation that there had been a royal castle there in the reign of William the Lion (1165–1214). Indeed, the first reliable documentation for the castle comes with its capture by Edward I in 1296. It is likely, however, that there had been a castle at Urquhart from about 1229, when the lordship was granted to the powerful Durward family (Simpson 1929, 4).

At this point, both the local and the wider topography should be outlined (illus 17 A & 19). Urquhart Castle stands on a slight promontory, Strone Point (a tautology from Gaelic *sron*, promontory, spur) protruding north-east into Loch Ness, with the supposed citadel boss, rising at its landward end about 27 m (85 ft) above the original level of the loch. In the angle between the
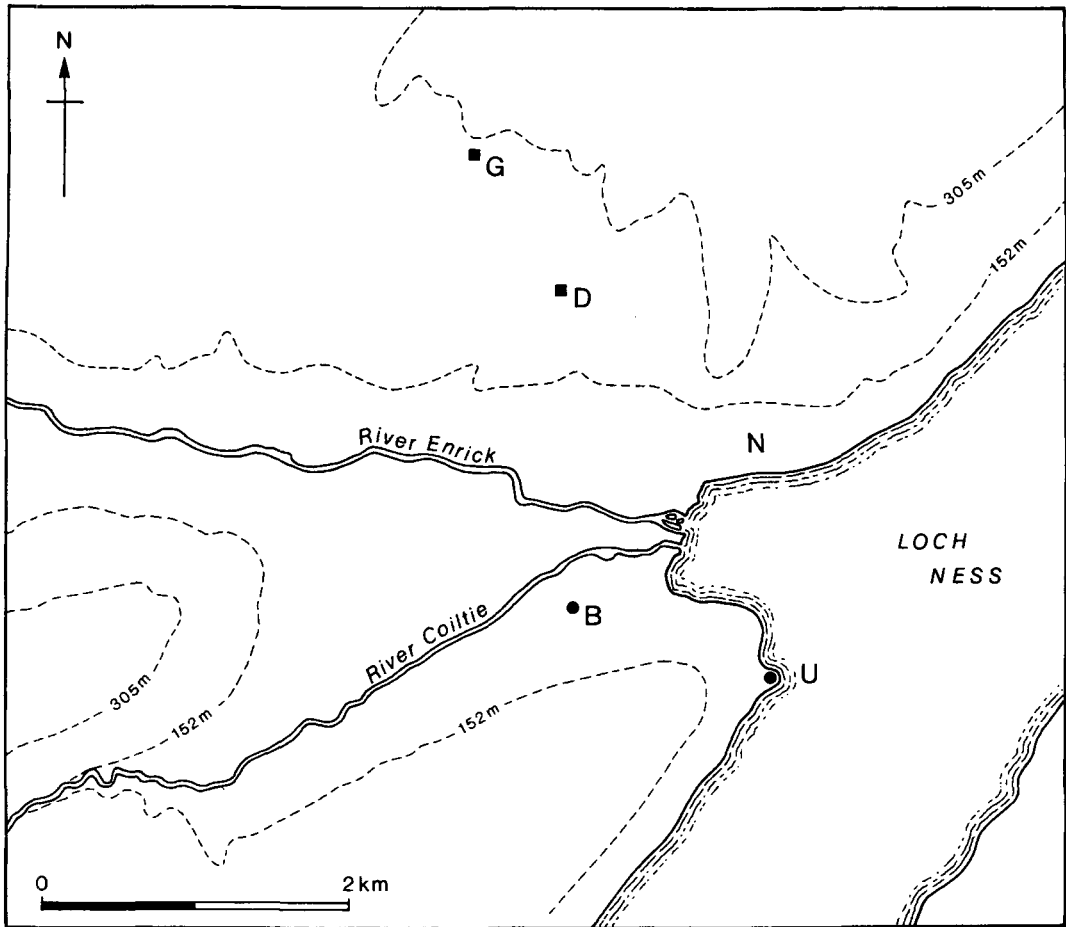
ILLUS 19 The environs of Urquhart Castle: B, Borlum; D, Drumbuie; G, Garbeg; N, St Ninian's; U, Urquhart Castle. Contours at 152 m and 305 m

promontory and the main coastline there is a slight embayment, capable of providing anchorage for small ships. Slightly further north, Urquhart Bay, about 1 km x 0.5 km in extent, provides access into the lands north-west of Loch Ness by the rivers Enrick in Glen Urquhart, and Coiltie in the glen of that name.

Inland from Urquhart Bay is an area of good land, capable of producing crops of barley and oats as well as grass, which extends up Glen Urquhart for some 13 km (illus 16; for details see below, pp 261–2). This may have provided the agricultural base for the actual *ager*, estate or territory, of Urquhart. That the bay was a focus of Pictish activity is suggested by the occurrence, on the uplands to the north, within 4 km of the castle, of Class I Pictish inscribed stones, and a cemetery with characteristic square- and circular-ditched grave-mounds (Close-Brooks 1984; Stevenson 1984; Wedderburn & Grime 1984). On the north side of Urquhart Bay, at St Ninian's, an Early Christian presence is demonstrated in the eighth/ninth centuries by a cross-incised slab (Simpson 1951, fig 66; but rejecting here any association with the saint himself).

Simpson, in a chronologically wide-ranging paper (1951), has explored the lines of communication to which Urquhart lay open. Chief of these was the Great Glen itself, cutting through *Drumalban, dorsum Brittanniae*, the ridge or spine of Britain. This was the route of Columba's missions to the northern Picts, as well as that which encouraged interchange between the animal art of the Picts and that of the Irish manuscripts; or between the eastern and western strongholds of Craig Phadraig above the Beauly Firth, and Castle Tioram in Moidart – the former yielding a mould for a hanging bowl escutcheon comparable, though not exactly similar, to those on a bowl found at the latter site (Stevenson 1976, fig 2). Apart from the main SW/NE route, Simpson also maps somewhat circuitous east/west routes (1951, fig 64), but curiously ignores the more direct line along Glen Urquhart and Glen Affric, and so by Glen Licht to the western sea at Loch Duich.

This, then, is the background to the limited excavations carried out at Urquhart Castle in 1983.

EXCAVATION RESULTS (illus 17 B & 20–5)

Excavations were carried out from 3 to 24 September 1983 by a team of 10–12 diggers. The layout of the cuttings was determined by two major considerations: if Emchath had been powerful enough to possess a fortification at Urquhart, then the rocky boss at the inner end of the castle promontory was the most likely site for it; Simpson's report of the recovery of vitrified stones in quantity along the north-east slopes of the rock boss also argued for the existence there of a fortification earlier than the masonry castle.

In order to test the existence of the supposed vitrified fort, a substantive trench, 7 m long by 3 m wide, was laid out across the masonry curtain wall and down the eastern exterior slope (Cutting 100). This was extended for a distance of 7.5 m into the interior (Cutting 200) in the hope of locating traces of buildings. In order to gain more information about the interior, especially adjacent to the rear of the rampart, a 3 m square (UR 300) was also opened against the masonry curtain on the west.

CUTTING 100 (Illus 20)

Immediately under the turf on the slope was a layer of rubble with much intermixed mortar (UR 102). This appeared to have been mortar-slop from the Office of Works consolidation of the castle wall, together with loose rubble pulled out in the process. Below this was the main collapse from the curtain wall: large tilted blocks in a mortary soil, often with mortar still adhering to the stones (UR 103). Below that again was a tip of earthy rubble without mortar, but with fragments and flecks of charcoal, UR 104. Both 103 and 104 lay in places against the surface of the rock scarp; but elsewhere bedrock was overlain either by chippy, fragmented rock, presumably the result of natural weathering (UR 105); or by a brown loam, free of both stones and mortar, which represents the ground surface at the time when the wall collapsed (UR 106).

In these terms it is possible to give a reasonable account of two events: the collapse of the curtain wall, and the consolidation work by the Office of Works. Two interlinked anomalies remain, however. Firstly, statements by Simpson (eg 1929, 3; and plan, fig 15; extract reproduced here as illus 17 B) had led to the expectation that vitrified stones would be found in quantity on the slope; and secondly, if that evidence had been interpreted correctly, then there was the further expectation that underlying the collapse of the masonry wall there would be further vitrified material from the pre-masonry fort. In particular, looking at the profile of the scarp slope, vitrified
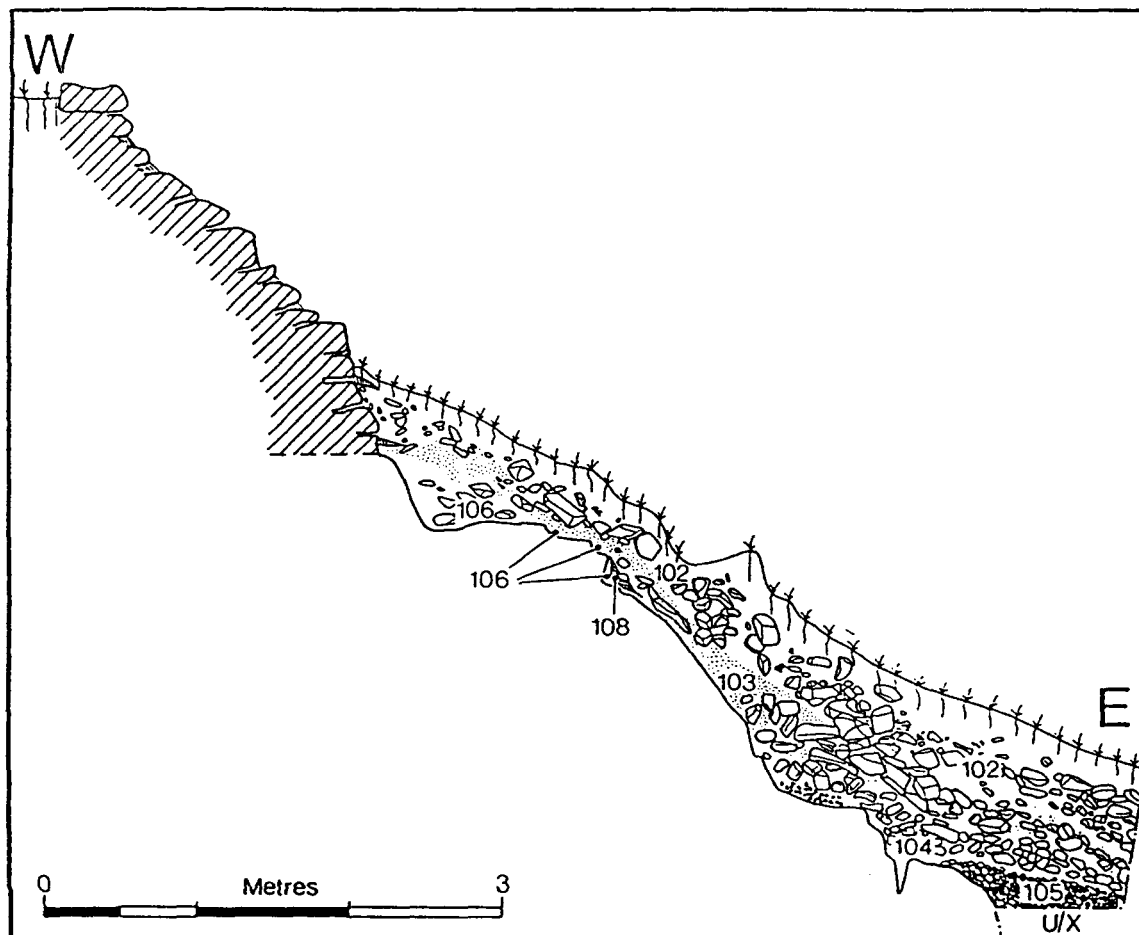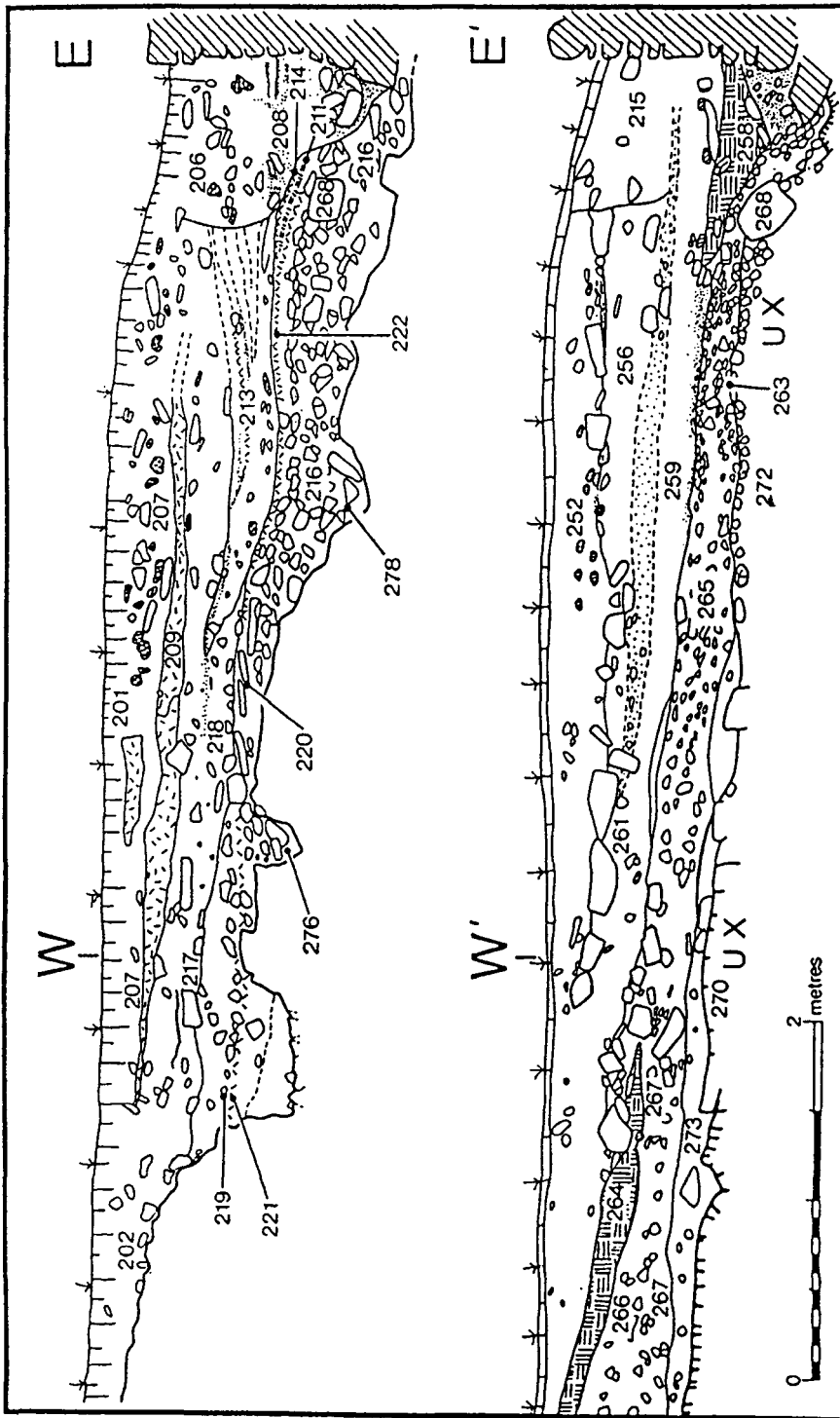
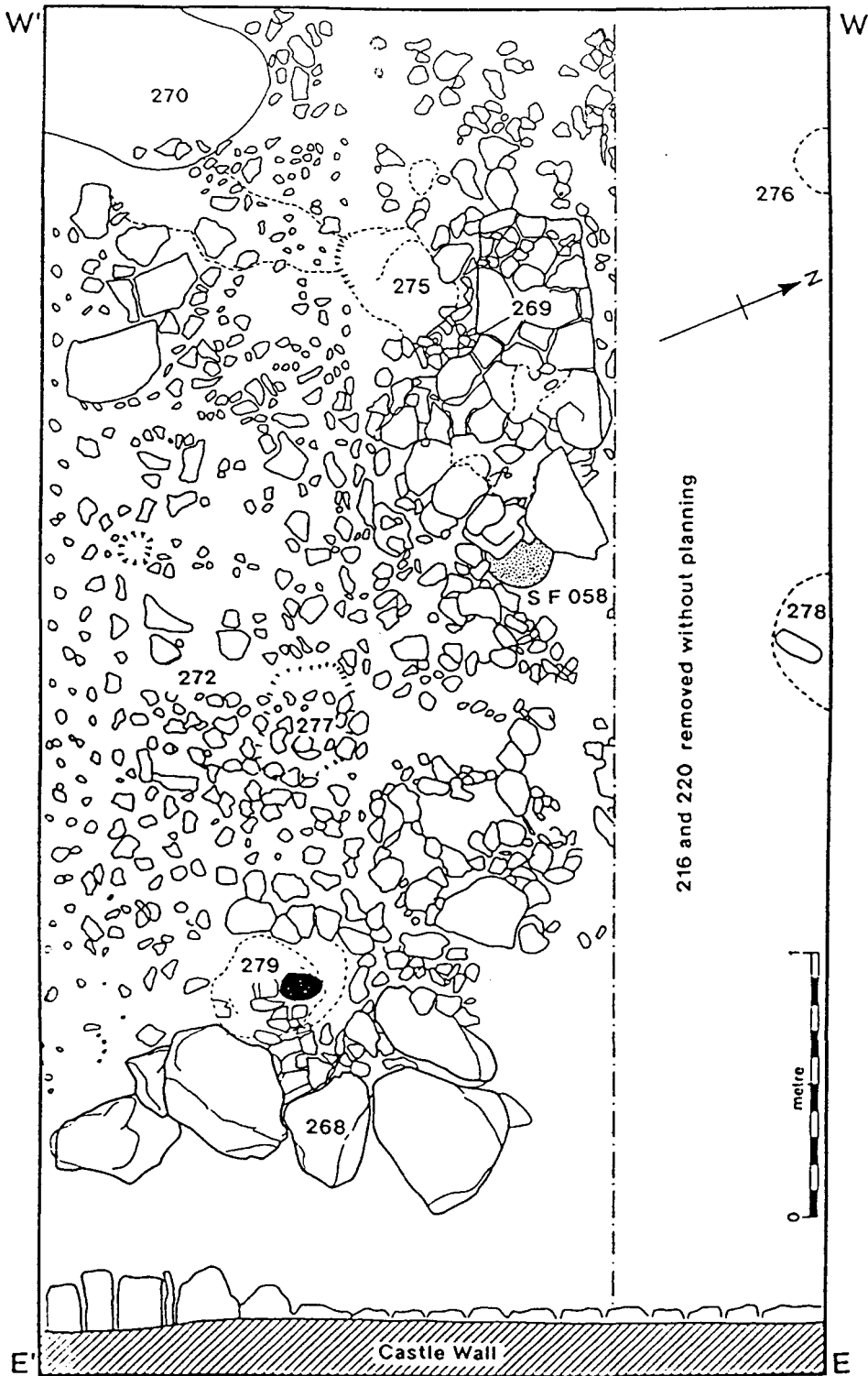ILLUS 20 Urquhart Castle, Cutting UR 100, section

rocks should have lain on the ledges of the bedrock. In fact, both these expectations proved to be incorrect. No vitrified material at all was recovered from Cutting 100, despite the fact that the diggers were looking out for it. We must conclude that all such material had been cleared away, perhaps as a result of cutting back the scarp in order to steepen it when the masonry castle was built.

CUTTING 200 (Illus 21–2)

This was laid out on the same line as Cutting 100, continuing it for 7.5 m from the inner wall face into the interior up to the centre line of the castle. Beneath the level and immaculate greensward of the Guardianship monument, it was found that the bedrock fell off in an easterly direction at an angle of about 10°. This had led to the formation of an elongated wedge of deposits, almost 1.5 m deep against the wall face. Because of the depth and complexity of levels producing medieval pottery, and in order to complete one longitudinal section down to bedrock, the northern 1 m wide strip of the trench was pushed forward as a trial trench, at some sacrifice of early features.

ILLUS 21 Urquhart Castle, Cutting UR 200, sections

ILLUS 22 Urquhart Castle, Cutting UR 200, plan

Over the trench as a whole the deposits could be divided into two major phases: Phase 2, that of the masonry castle, with much pottery ranging from the early 13th to the early 16th centuries; and Phase 1, pre-masonry and pre-ceramic – in short, a prehistoric or an early medieval phase of direct relevance to our research programme.

In more detail, Phase 2 is represented over most of the cutting by the layers down to and including UR 213 = 259. UR 213 = 259 contains much powdery mortar, and also a few lightly vitrified stones. Undoubtedly it marks the building level of the masonry curtain wall. Against the wall itself there are clear traces of a construction trench cut down into earlier levels: UR 258. At a higher level, a later cut also parallel to the wall face (UR 206/208/215) marks either (or indeed both) the find-a-wall-and-follow-it technique of the Office of Works excavations, and the need to gain access to the wall in order to consolidate it.

The terminus of Phase 1 is marked by a layer of burning, containing plentiful charcoal, which runs over much of the cutting: UR 211, 214, 222, and possibly, but more doubtfully, 221, 262, 264 and 265 as well. (Note that not all of these layers appear on the recorded sections.) This is interpreted as a deliberate destruction layer. Below it is a cobbled floor, with built hearths and areas of paving: a deliberate levelling-off above the slope of the bedrock, retained at its outer end by a revetment of large cubical boulders (UR 268). These, the only known structures of Phase 1, are described and discussed more fully below.

Pending the full analysis of the pottery of Phase 2, an outline chronology for the sequence as a whole is provided by a series of seven radiocarbon age-estimates. These have been very kindly calibrated by Dr Gordon Cook of the Scottish Universities Research & Reactor Centre on the basis of the Stuiver & Pearson (1986) calibration curve. For the sake of simplicity, they are quoted here using the Intercept method.

The results are cited in date order:

Date Cal AD	GU Lab no	Site ref	Comments
450–660	1768	UR 221	charcoal, incl Betula sp.
670–948	1769	UR 262	charcoal, unspecified
650–1010	1837	UR 263	charcoal, unspecified
690–1160	1836	UR 214/1 }	charcoal, split
970–1160	1835	UR 214/2 }	sample
1030–1270	1924	UR 259/1 }	split sample,
1030–1270	1925	UR 259/2 }	animal bones,
1066–1280	1926	UR 259/3 }	domestic, unspec.

It is recognized that the charcoal provides no more than an indication of the felling date of the relevant timbers. However, no large pieces of charcoal, derived from substantial beams (which were such a feature of the timber-reinforced rampart at Clyde Rock: Alcock & Alcock 1990) were recognized at Urquhart, so it is not necessary to apply the 'old-wood' correction suggested by Warner (forthcoming); these dates may indeed be very close to the actual felling date. Moreover, the apparent absence of large timbers from the overall burning layer (UR 211, 214, 222) suggests that the charcoal does not come from the wooden frames of buildings, nor from a timber-laced rampart, but rather from brushwood and branches gathered with the intention of destroying the site by fire. (On this, see further below, p 259.) If this chain of argument is sound then the dates GU 1835 and 1836, from the split sample UR 214, probably date the destruction of the early fort.
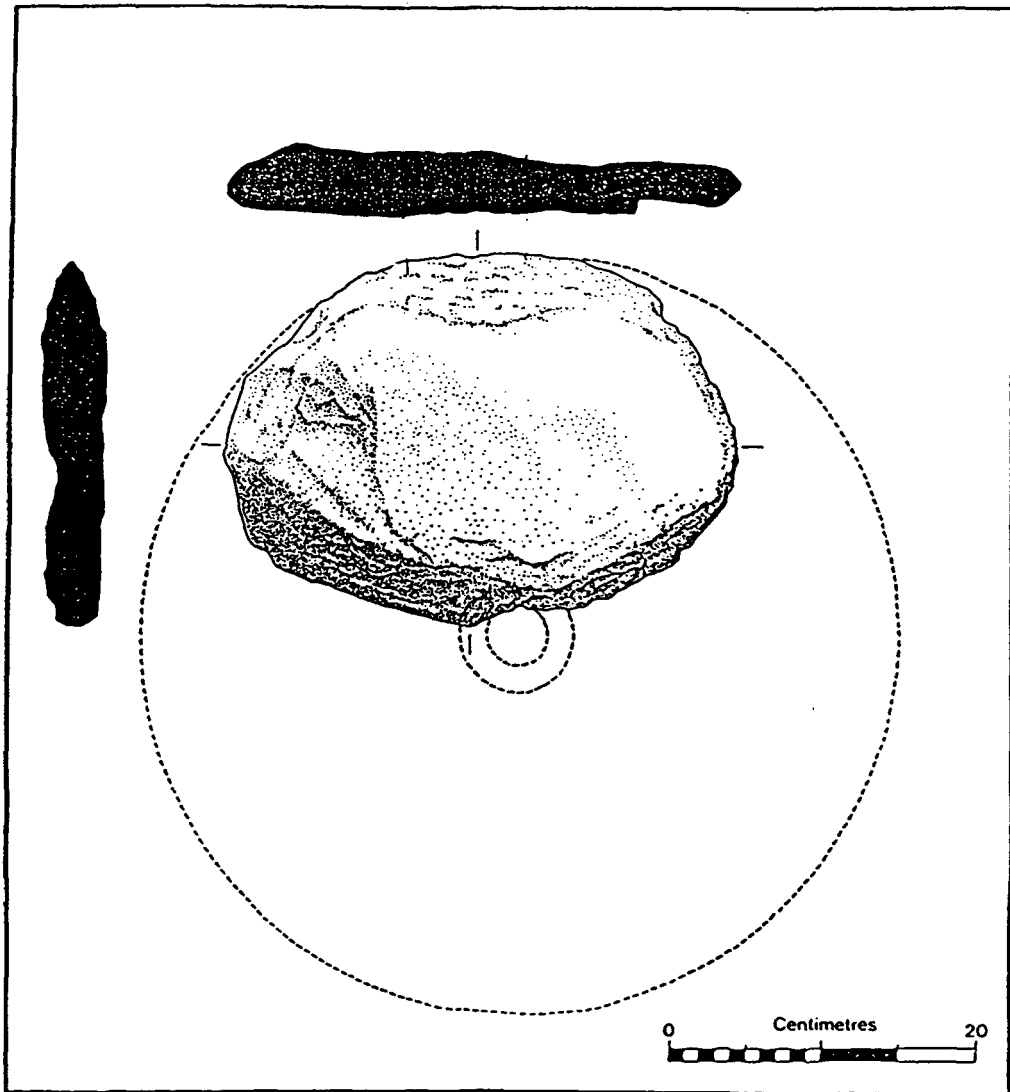
ILLUS 23 Urquhart Castle, Cutting UR 200, fragment of micaschist rotary quern, SF 058 (see illus 22)

Despite the overlap, especially at the 2 σ level, between the dates GU 1924/25/26 and GU 1835/36, the two dating brackets are clearly distinct. The later series probably represents the reoccupation of the site, and the building of the first masonry castle, one or two centuries after the destruction of the early fort. Going back before that destruction, the earliest date, GU 1768, even at the 1 σ level (cal AD 550–640), allows the rocky boss at Urquhart to have been in occupation before the missions of Columba to Bridei son of Maelchon in the later sixth century. The other dates span succeeding centuries, but lack the precision for any historical correlations to be made. None the less, the date for UR 263, charcoal immediately overlying the cobbled floor, marks a major occupation phase at cal AD 650–1010.

We may now turn to the structural features in the interior of the early fort, as they were uncovered in Cutting 200 over an area 4.5 m long by 2 m wide (ie allowing for the sacrifice of the northern 1 m strip to the major objective of completing the section down to bedrock (illus 22)). The overall feature, UR 272, was a very compact layer of roughly fist-sized angular cobbles; the section shows this, as UR 216, deepening to the east so as to produce a fairly horizontal surface. At its eastern edge, it has a very rough revetment of large boulders up to 500 mm in maximum dimension, UR 268. This may also have served as the rear foundation for a defensive wall.

Resting on the cobbles, or let in to their surface, were large flat slabs such as 269 and 270, and areas of paving such as 220, or the rather rougher area of un-numbered paving east of the slab 269; this incorporated what may be interpreted as part of the upper stone of a mica-schist rotary quern, SF 058 (illus 23), in a very battered condition. This interpretation is based partly on the roughly concentric inner and outer curves, but more particularly on the fact that mica-schist is a rock foreign to the geology of Urquhart, whereas it was very commonly used for querns. The original would have been about 500 mm in diameter and 50 mm thick. It is noteworthy as the only artefact to have been found stratified in a Phase 1 context. Its only chronological relevance is to demonstrate a date for the cobbles UR 272 in or after the 2nd century BC (Armit 1990, 64); indeed, in view of the condition of the quern, long after that date. The slabs 269 and 270 were both very badly heat-shattered, and it is reasonable to believe that they had been used as hearth-stones over a long period.

In the surface of the cobbled floor were a number of gaps, which may have been post-pits, though only UR 279 had a suggestion of a post-pipe, and only 278, apparently a double pit, had a possible packing slab. In the actual circumstances of excavation, UR 276 and 278 were seen in section, but not in plan; and none of the others was examined in section. The recorded dimensions in mm are: UR 275, 450 x 300, 230 deep; UR 276, 300 x ?, 260 deep; UR 277, 400 x 350, 120 deep; UR 278, 540 x ?, 200 deep, double hole with dividing slab; UR 279, 500 x 400, 270 deep, with signs of post-pipe, 150 x 100.

Any or all of these pits could have held timber uprights more substantial than that suggested by the apparent post-pipe in UR 279. On the assumption that posts were set into a pre-existing deep layer of cobbles, UR 216 = 272, then this would have provided a sufficiently firm packing. UR 279 – 277 – 275 constitute a line roughly at right angles to the revetment UR 268. All this suggests the possibility of a roofed building, with a cobbled floor and built hearths within it, against the rear of the supposed rampart of the early fort. Only considerable lateral expansion of Cutting 200 could verify the truth of this, and tell us more about its structure.

A remarkable characteristic of the building and its floor was their cleanness. Not a single fragment of bone, sherd of pottery, or other artefact was found in the make-up of the cobbles or on their surface, with the exception of the quern SF 058, which was in any case part of the make-up of the rough paving beside the hearth-slab UR 269. This cleanliness was in striking contrast with the layers of Phase 2, which contained many potsherds, and extraordinary quantities of animal bones. The lowest occurrence of the latter was 'very few bone fragments', recorded in the site book in UR 265, which had almost certainly been disturbed during the destruction event. The absence of bone fragments was the more surprising because the rough surface of the cobbles would have provided an ideal lodgement for them. The cobbles, however, were covered overall by a thin layer of charcoal, UR 222=263, which was assumed to be derived from the hearths UR 269 and 270. It cannot be ruled out, however, that this really derives from the burning which brought about the destruction of the Phase 1 building.

CUTTING 300 (Illus 24 & 25)

Ideally, Cutting 300 should have continued the line of Cutting 200 up to the west wall of the castle. However, in order to assist visitor circulation, it was displaced 6 m to the north, and laid out as a 3 m square butting against the inner face of the wall. After the removal of the turf, it was immediately apparent that the metre strip against the wall was different in character from the rest of the square. That difference persisted down to the bedrock.

At the base of the stratification was a rather irregular rock surface. In the eastern 2 m, this ran level at the north side of the cutting, but towards the south side it dropped at an average angle of about 7 degrees. In the western strip, however, it fell more or less sharply, losing 350 mm in the horizontal distance of a metre. It is not clear whether this was a natural drop, or whether it had been quarried to make a foundation trench for the masonry curtain wall; in either case the wall-foundations had certainly been bedded down into it.
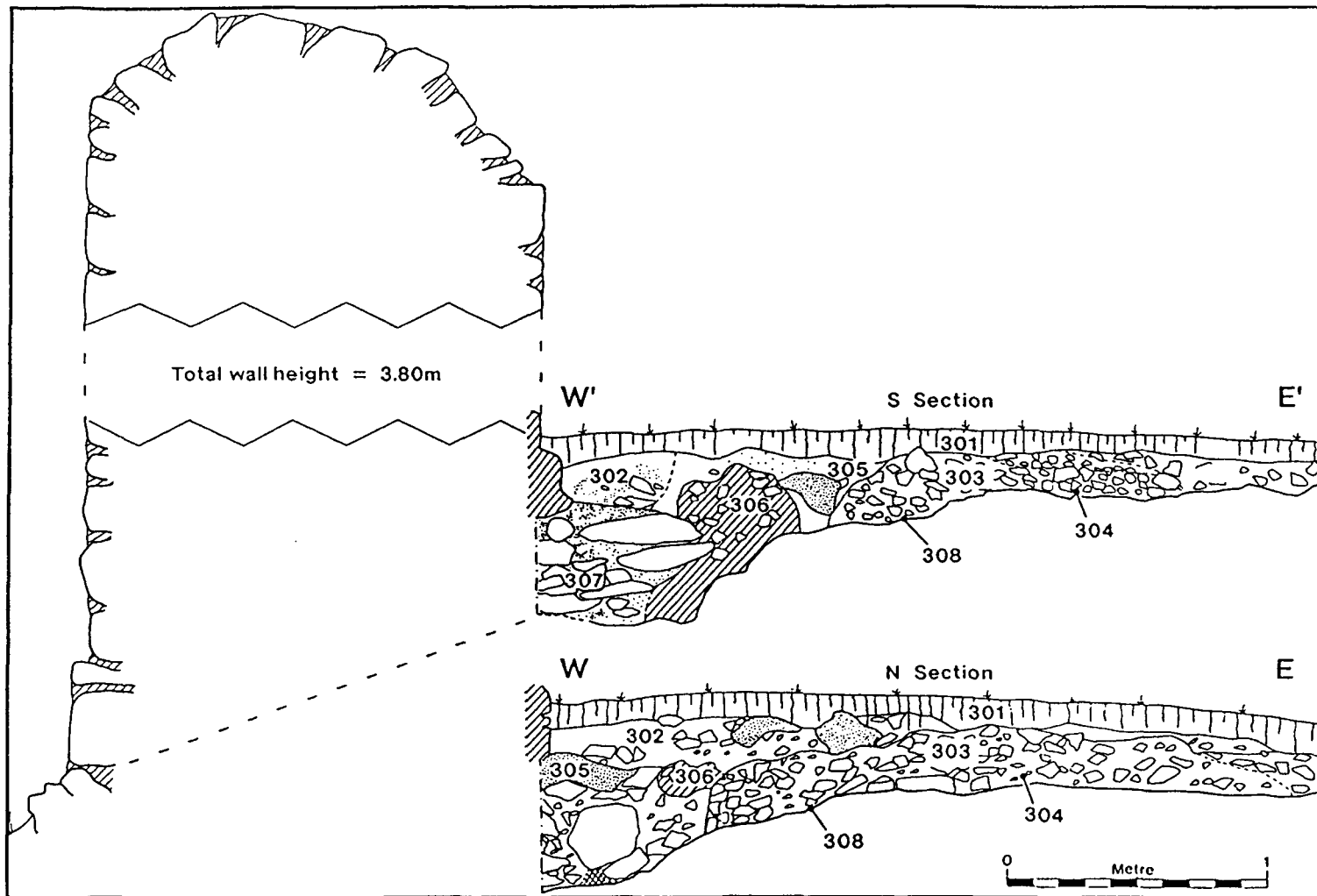
There was no trace of a soil layer or old ground surface on the more or less level bedrock, UR 308. Instead, directly on the rock were patches of burnt clay and fire-reddened bedrock, UR 309. Flat slabs of rock, UR 310, were also laid on the rock, in no apparent pattern. Cut in the rock was an oblong hole, 200 x 230 mm (depth not measured), UR 311, filled with soot, and with an upright slab, suggesting a post-packer, in one corner. This may confidently be interpreted as a post hole. There were also two well-defined circular soot-filled pockets, respectively 80 mm (UR 312) and 120 mm (UR 313) in diameter, apparently small post- or stake-holes.

The overall appearance of this early phase in Cutting 300 was that a wooden structure had been built close to the west scarp of the rock boss. Within it, fires had been lit; but it is not possible to say whether these had been domestic or industrial.
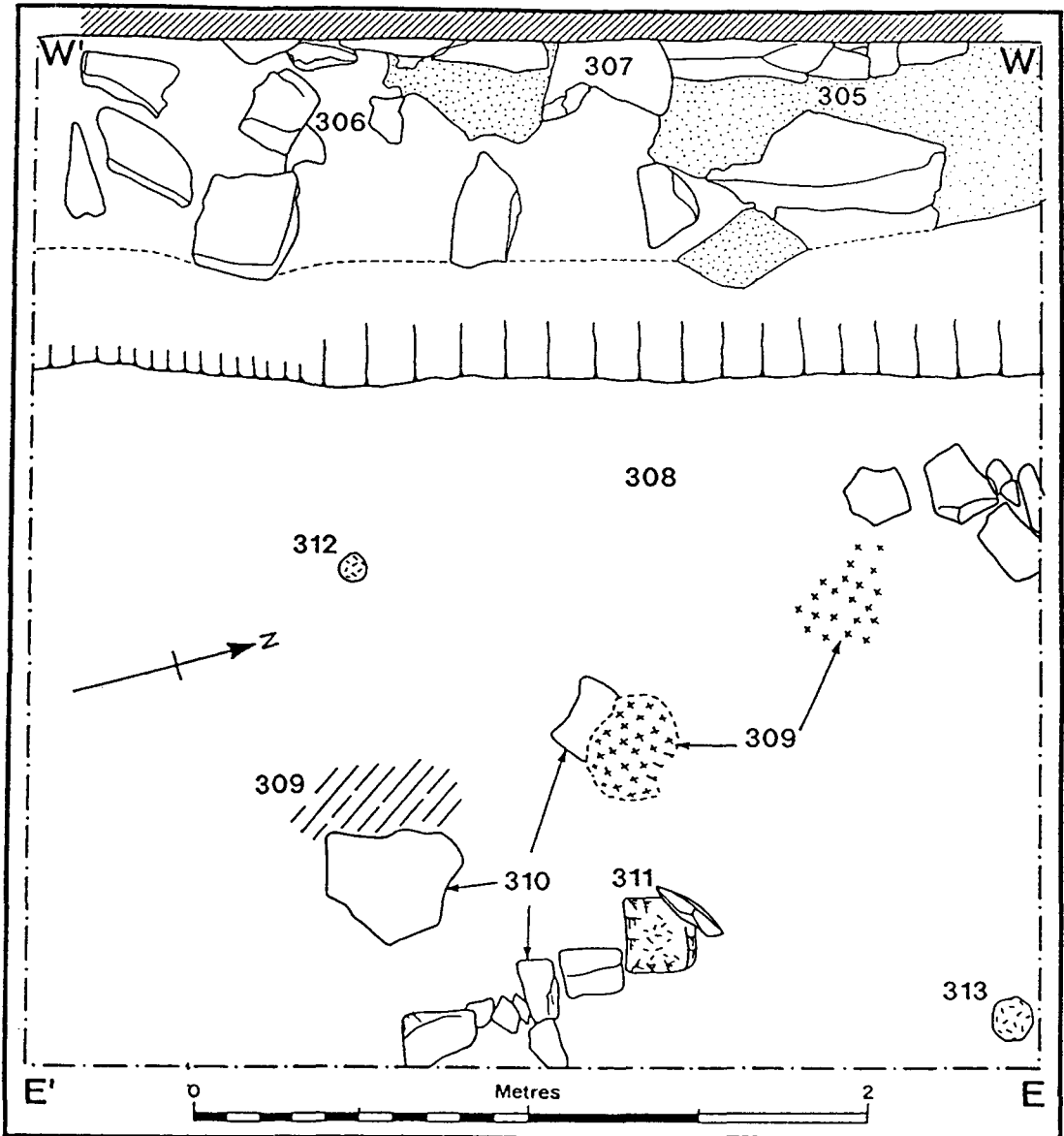
The bedrock itself, and the features just described, were overlaid by a sooty-looking soil, UR 304, which, as has been seen, penetrated into features 311, 312 and 313. It seems unlikely that the sooty layer was derived solely from the hearths or fires on the bedrock: more likely, it resulted from a destructive conflagration which ended the early phase in Cutting 300.

The main evidence for this conflagration was a bank of heat-affected stones, UR 303, up to 250 mm deep and 2 m wide, which ran across the cutting parallel to the wall. The stones were in a sooty matrix, which at the base was distinguished as UR 304. On excavation, the stones were found to consist of a dense pack of angular fist-sized cobbles of coarse sandstone. Many of them had been heavily heat-affected, to the extent that cracks had opened up in their surfaces, their shapes had become distorted, occasionally separate stones had fused together, and some surfaces bore blobs or poppling of a glassy appearance. These are all evidences of a high degree of heating, leading in some cases to vitrification. They recall MacKie's observation at Finavon and Dun Lagaidh 'that vast quantities of heated, not fused, dry rubble had collapsed on to the occupation layer within the fort' (1976, 209). They provide the best excavational evidence of the former existence of a stone-built fort on the rock boss at Urquhart: a fort destroyed by that same conflagration of which clear traces were recovered in Cutting 200.

Subsequently, it seems, the west edge of UR 303 was cut back, and loose cobbles were cleared away, to make a construction trench for the curtain wall, and to provide a firm bedding for its foundations. These, UR 307, consisted of massive blocks, with some mortar, but also many air-spaces, among them, as well as some vitrified cobbles. Between the wall and its foundations, to the west, and the edge of the bank of heat-affected cobbles (UR 303), to the east, was an infill of brown soil (UR 306) and mortary soil with soft lumps of mortar (UR 305). These had been cut by an ill-defined intrusion (UR 302), which probably marks the activities of the Office of Works, since it correlates with the extent of modern mortar in the wall face. In contrast with Cutting 200, pottery occurred only in the topsoil, UR 301.

Total wall height = 3.80m

W'   S Section   E'

302   305   301
306   303
307   308   304

W   N Section   E

302   301
305   303
306   304
308

0   Metre   1

ILLUS 24 Urquhart Castle, Cutting UR 300, sections

ILLUS 25 Urquhart Castle, Cutting UR 300, bedrock plan

CUTTING 400 (Illus 17 B)

This was a 1 m wide cutting in the small room at the north end of the so-called 'Motte'. It was laid out on a roughly north/south line in the hope of picking up traces of the expected vitrified walling running round the north end of the citadel boss. No such traces were uncovered.

## INTERPRETATIONS: EARLY MEDIEVAL URQUHART & ITS COMMUNITY

1: A HYPOTHETICAL RECONSTRUCTION OF THE EARLY FORT AT URQUHART (Illus 26 & 28)

It cannot be doubted that on the rocky, citadel-like boss at the root of the Urquhart peninsula, there had been a pre-ceramic, pre-masonry, occupation, datable by radiocarbon between the fifth and 11th centuries cal AD. There is also good reason to believe that this early occupation, with its cobbled floor, hearths, and post-built structures, was set within a fortification on the rock boss. It is indeed likely that it extended over two or more lower platforms to the north-east tip of the promontory (illus 17A & 28). Obviously the boss, with its craggy sides rising about 27 m above the level of Loch Ness, would have been very suitable for a citadel. Seen from its southern tip, it is visually as impressive, for instance, as the rock on which the Dal Riata stronghold of Dunollie was built.

It is true that no evidence for such a fortification was found in position in our excavation. Given that it was not permissible to link up Cuttings 100 and 200 by removing a section of the masonry curtain wall, it is reasonable to surmise that the crucial evidence still lies buried in that unexcavated zone some 2 m wide. While this is clearly insufficient for the width of a substantial defence, it is commonly observed on vitrified forts that the solid remains of vitrifaction may be restricted to a fused core no wider than this; the core itself is likely to be embedded in a wider spread of stones, which may or may not be heat-affected, but which are certainly not fused into a
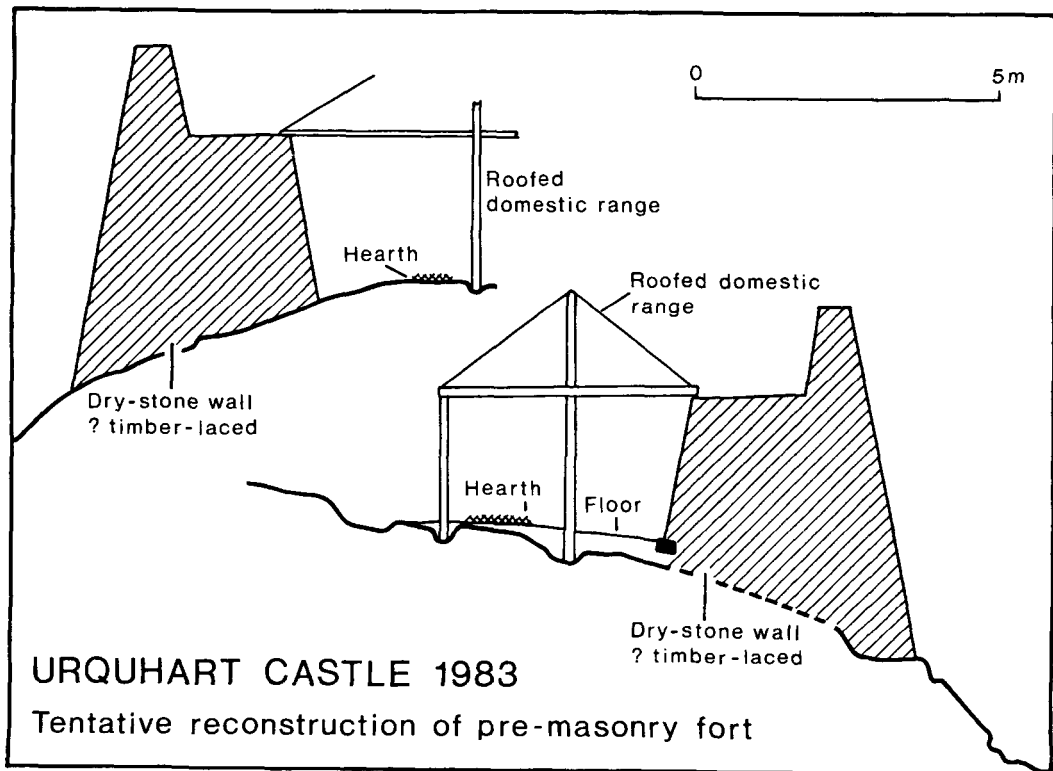
ILLUS 26 Tentative reconstruction of the pre-masonry fort, suggesting internal ranges of buildings
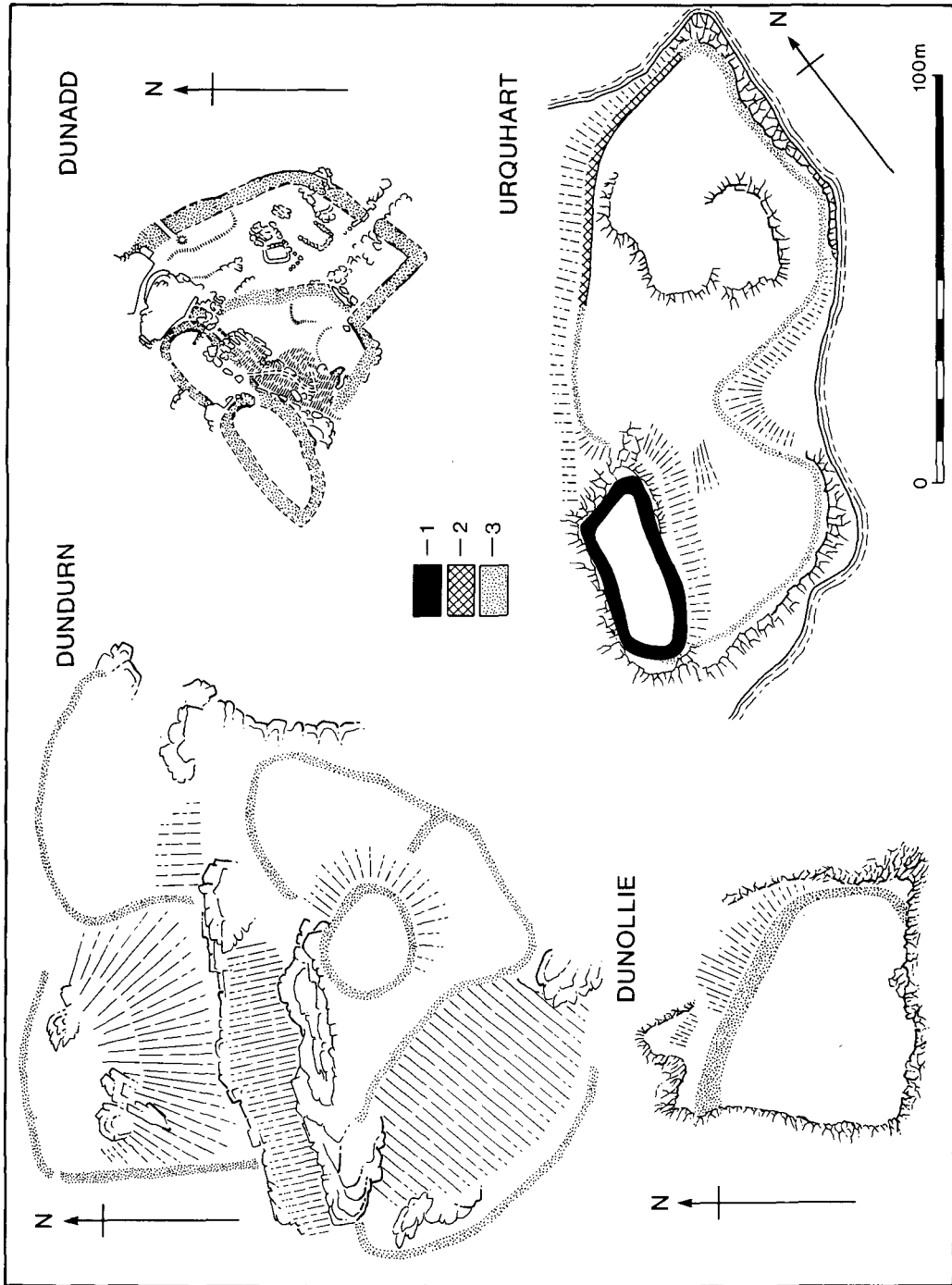
ILLUS 28 Simplified comparative plans of Dundurn (after Alcock, Alcock & Driscoll 1989), Dunadd (after RCAHMS 1988), Dunollie (after Alcock & Alcock 1987), and Urquhart. Key for Urquhart: 1, vitrified fort; 2, traces of drystone wall; 3, possible outer enclosure

solid mass. At Urquhart, such stones are probably represented by UR 303 in Cutting 300, as well as by more scattered heat-affected stones in Cutting 200. The great mass of them, however, are likely to have been cleared away by the castle builders in order to provide a firm base on which to raise their walls. If we accept that the row of large boulders, UR 268, formed the ground course for the wall, then on the east side of the fort it may well have been up to 5 m wide.

One further question may reasonably be asked about the character of the wall: was it timber-framed? MacKie, in a major study of British vitrified forts (1976), has advanced the broad conclusion that a vitrified rampart must necessarily have been a timber-framed one. Indeed, he proposes that the term 'timber-framed fort' may be used consistently in preference to 'vitrified' (1976, 205). Against this, we would stress the total absence, from both Cutting 200 and 300, of large blocks of charcoal derived from sizeable timber beams. So far as the recovery of evidence for large beams from a burned fort is concerned, we may recall Dr Camilla Dickson's calculation that the rampart-timbers at Clyde Rock had been derived from trees up to 400 mm in diameter (Alcock & Alcock 1990). Nothing remotely approaching this in size was recovered at Urquhart. Two qualifications, however, must be entered here. First, no intact timbers of such a size were actually recovered at Clyde Rock: Dr Dickson's figures are estimates based on the curvature of the growth rings observable on charcoal fragments of less than fist-size. Secondly, as Dr Ian Ralston points out to us, the remains of the Urquhart rampart had been severely disturbed during the construction of the masonry castle, so the chances of recovering large beam fragments were necessarily very slight.

It must indeed be recognized that the common view, to which MacKie has given the clearest expression, is that the relationship between timber-framing and vitrification is one essentially of cause and effect. It is believed that the firing, at the rampart face, of the ends of transverse timber beams was followed by the spread of flames along the beams into the interior of the wall; that this created cavities, which in turn acted as flues, generating a fierce draught; that this again produced a great heat, especially in the interior of the wall; and that this well explains the observed phenomenon that the greatest vitrification is concentrated in the wall core.

Several comments can be made on this model. We may begin with the contemporary account given by Caesar of one, admittedly specialized, form of timber-framed wall: *ab incendio lapis defendit*, 'the stone protects from fire' (DBG VII,23). This seems a poor recipe for vitrification. Various experiments, by M'Hardy (1906), Childe & Thorneycroft (1938), and Ralston (1986) have emphasized that, whatever the combustible properties of internal timbers might be, it may still be necessary to pile up externally a great deal of additional timber, including brushwood, in order to produce vitrification. This prompts the question, in that case, was internal timber needed at all? Moreover, there is some evidence to show that long, slow heating is one of the most potent causes of vitrification. Finally, in at least one classic case, that of Finavon, there is no evidence for timber slots in the rampart, nor of timber beams at all; rather, the evidence suggests the external application of a mass of boughs and brushwood (Childe 1935; 1936). Against this interpretation of Finavon, however, Dr Ralston has suggested to us that timber-lacing may have been confined to the upper part of the wall, perhaps in the form of a wooden superstructure; and in this case, all evidence for timber-slots may have been lost when the upper walling collapsed.

In fact, the aetiology of vitrification has never been adequately discussed; nor have experimental firings proceeded beyond the anecdotal to the scientific level. Given the existence of vitrified (or in some instances, calcined) forts very widely across Europe and into Scandinavia, it would be appropriate to set up, at international level, a series of carefully designed replicate experiments. These should vary such parameters as presence/absence of internal timber beams in various structural forms; use of, and quantities of external combustible materials; and use of

different types of rock for the rampart make-up. It would be especially important, in the light of some of M'Hardy's 1906 results, to monitor the development of internal heat at numerous points in the rampart over a period not of hours, but of days or even weeks. All this is far removed from the small-scale field and laboratory tests which have been conducted so far.

In general, then, if we avoid the logical fallacy of the undistributed middle, we may conclude that some vitrified forts had indeed been timber-framed; but the readily observed evidence cannot amount to proof of original timber-lacing in all cases. In the specific example of Urquhart, even taking account of the qualifications that were entered above, the absence of large burned timbers may lead us to doubt whether this had been a timber-framed fort at all.

We must recognize at this point in the discussion that a contributory factor in vitrification may also be found in the burning of ranges of timber buildings set against the rear face of a rampart, perhaps with some of their timbers keyed in to the stonework. This might be regarded as a special case of the application of an external source of heat; or alternatively, as Dr Ralston points out, a special case of timber-framing, if the horizontal beams penetrated the wall to any distance. This could certainly have been so at Urquhart, given the evidence for wooden post-built structures immediately inside the presumed rampart on both east and west. The hearths or fires in these buildings may in themselves have created a fire-hazard. Despite this, the comprehensive destruction of the early fort appears more likely to have been deliberate, rather than accidental.

On present evidence, nothing can be said about the structural features of the internal buildings, nor about the activities which had taken place there. Consequently, only a very schematic reconstruction can be proposed for the appearance of the early medieval citadel (illus 26). Nor have we any information about possible activities upon the lower platforms or terraces of the Urquhart promontory. So far as defences around those terraces are concerned, we may note that at the lip of the ditch on the north-west there is a clear line of stones which seems to mark the rear face of a collapsed drystone wall. This is not shown on Simpson's 1929 plan, nor on subsequent versions; and our resources in 1983 did not allow of its excavation. None the less, with the citadel-boss standing at the root of the promontory, it is reasonable to suggest that the subordinate terraces were included in the area of occupation and in the overall defensive scheme. In that case, Urquhart belongs to the class of hierarchically organized forts which we have discussed in earlier *Proceedings* (Alcock, Alcock & Driscoll 1989, 206–14).

2: *AGER QUI AIRCHARTDAN NUNCUPATUR*: AN EARLY MEDIEVAL COMMUNITY (Illus 19 & 27)

Limited though our account of the early fortification at Urquhart has necessarily been, it is possible to comment usefully on its wider setting. This is made possible by two factors. First, Glen Urquhart is a well-defined geographical feature, with the castle at one end; moreover, it is separated from other cultivable areas by the steep hillsides which plunge into it. Second, in the valley and immediately above it, we have evidence not only for natural resources, but for a fortification with contemporary burials and other monuments in the vicinity. It is difficult to match this range of evidence in any similarly well-defined area on the Scottish mainland.

It must be recognized, however, that any attempt to use this varied evidence to compose a holistic account of the early medieval community of Urquhart must necessarily be diachronic. Its validity depends, therefore, on the principle of the inertia of history. In the present case, this is based, at its simplest, on the fact that, over the period involved, there is no geological movement; no great change in the climate; and no known change in farming practices, so that the means of production, and more importantly, the potential level of production remained constant. At more intangible levels, the period saw the introduction of Christianity, and the replacement of a Pictish

dynasty by an Irish one, which presumably involved some social changes. These, however, are likely to have been minor; and, in any case, the major focus of this account must be on the Pictish period.

Our discussion must necessarily start from Adomnan's own words (VC 114b, 115a). Columba, travelling beside Loch Ness, was inspired by the Holy Spirit to baptize a pagan who was on the point of death. He therefore hastened ahead of his companions *donec in illum devenit agrum qui Airchartdan nuncupatur*. There he found an old man called Emchath, to whom he preached the Word of God. Emchath believed and was baptized, as was his son Virolec *cum tota domu*. The critical words for the present discussion are *agrum* (nominative *ager*) and *domu* (nominative *domus*).

One of the earliest translations of this passage is in *Historians of Scotland*, 6 (Skene 1874): 'he came to a district called A-'. The Andersons, however, translated this as the 'farmland that is called A-' (1961, 492–3; 1991, 200–3). The *Oxford Latin Dictionary*, in summary, gives the following meanings for *ager*: 1, territory, country, region; 2, a piece of land privately owned; 3, a landed estate; 4, land in relation to cultivation. From this it would appear that 'farmland', with a specifically agricultural connotation, is very much a subsidiary meaning. In Bede's *Ecclesiastical History* it is sometimes used in contexts where 'lands', in the sense of landed properties or estates, seems appropriate (for instance, HE v 19).

The primary meaning of *domus* is house or home, especially in terms of a building, but this is extended to embrace the human occupants: the household or dependents of the head of the house. In the present context, where Emchath and Virolec are plainly successive heads of the house, 'household' is the appropriate translation. Bede uses it specifically of a focus for evangelization, with the high-status head of the house as the first person to be converted. For instance, the reeve of the city of Lincoln was converted *primum cum domu sua* (HE ii 16).

In the light of this discussion, it seems not inappropriate to think of Emchath and Virolec as two generations of a potentate family, and proprietors of the estate called Urquhart. They were, as their names show, Brythonic speakers, and therefore, in the context of the Great Glen, Picts.

One other point may be made about this passage. Apart from the implication that Emchath (and subsequently his son Virolec) was head of a household, Adomnan merely describes him as *senex*, old man. This is the more disappointing in view of other occasions when the rank or status of a named person is clearly stated: for instance, the old man on Skye described as the leader of Geon's warband, *Geonae primarius cohortis* (VC 34b; discussion, Dumville 1981); or the subject-king of the Orcades, *Orcadum regulo* (VC 95a; Anderson's translation). Bridei son of Maelchon is regularly designated *rex* by Adomnan, while to Bede he was a (or the) most powerful king of the Picts, *rege potentissimo*. We shall return later to the possible status of Emchath and his household. Meanwhile, we must consider the territory or estate which was called Urquhart.

It is one thing to postulate the existence of such an estate on the basis of a brief written mention; it is quite another to establish its physical extent in default of either man-made boundaries or documentary evidence, such as that of contemporary charters or estate plans. As long ago as 1955 an attempt was made to equate the territory of the Saxon village and later manor of Withington in the Cotswolds with that of a preceding Romano-British villa estate, largely on the basis of natural features (Finberg 1955). The watersheds of the valley of the River Coln are insignificant, however, compared with those which delimit the possible territory of Urquhart. Loch Ness to the east, and steep hillsides to north and south, clearly define Glen Urquhart itself. This is further distinguished from a wide tract to both north and south by the superior quality of the land along the glen.

The soil maps of the Macaulay Institute's Soil Survey, Sheets 4 & 5, show, at the head of

Urquhart Bay, an area of alluvial soil (Soil 1) with a vegetation of arable, permanent pasture and broadleaved woodland. Beyond this the soils (Soil 20) consist of 'humus-iron podzols, with some brown forest soils, noncalcareous gleys and peaty gleys'. The vegetation is arable and permanent pastures, dry Boreal heather moor, and acid bent-fescue moorland. This extends along the River Enrick (that is, in Glen Urquhart itself) for a distance of some 13 km, interrupted only by a narrow gorge towards the upper end of the glen. This soil lies both in the valley bottom itself, and also up the lower hillsides, where it would have been cultivable by *caschrom* (foot plough). Similar soils are to be found along the valley of the River Coiltie for a distance of 3 km. At higher levels, however, the vegetation is principally of heather moorland and bog (Soils 28; 29), emphasizing the richness of the lower land, especially in terms of arable farming (Bibby *et al* 1982; Walker *et al* 1982).

The soil maps merely suggest the farming potential of Glen Urquhart. In the present case it has not been considered helpful to cite the Macaulay Institute's Land Capability for Agriculture map (Sheet 5), because this is based on modern agricultural techniques, and is therefore largely inappropriate to a period before the introduction of modern drainage, improved stock and crops, and mechanized equipment. To get back more closely to the farming possibilities of Glen Urquhart in the time of Emchath and Virolec, we may cite the map resulting from William Roy's Military Survey in 1747–55 (illus 27: colour). The plotting of arable fields and settlements on this shows the climax of pre-Improvement farming; in other words, the maximum capability of Glen Urquhart and the tributary valley of the Coiltie. This climax probably exceeded the extent of cultivation and settlement which had been attained in the late sixth century. None the less, it demonstrates the potential that was then available. It also serves to emphasize the starkness of the physical bounds of the arable land in the glen.

Other evidence may be cited in order to fill out the picture. Traditionally, in medieval times the valley was divided into ten davochs (Mackay 1914, 440). This is obviously not the place to enter into the debate about the term *davoch*, its derivation, and the size of land-unit which it implied in different regions of Scotland (on which, see especially Barrow 1973, chap. 9). It is at least clear that if the ten davochs of Urquhart and *ager qui Airchartdan nuncupatur* are in any sense equivalents, then a very large unit is implied for the estate of Emchath.

On soil of type 20 to the south-west of Urquhart Bay stands the farm called Borlum (illus 19). In a charter of 1509 this appeared as 'Bordlande of Urquhart' (Mackay 1914, 78). Simpson drew attention to this as a reference to 'the "board-land", that is, the *terra mensalis*, the demesne land that supplied the household in the castle' (Simpson 1951, 325). He is here describing late medieval economic arrangements, and we do not know how early their origins are, nor how relevant they might be to the early medieval fort at Urquhart. On the other hand, the character and productivity of the soil cannot have changed significantly between the earlier and later Middle Ages; a similar relationship between the fort – which stands on poorer soil – and the arable land at the back of Urquhart Bay may reasonably be inferred.

In addition to the arable potential of Glen Urquhart, the wide, rolling uplands, to a height of some 500 m to both north and south, would have provided summer grazing for cattle, sheep and goats, as well as unquantifiable resources in the form of deer and the other wild mammals recorded, for instance, by Boece in 1526: wild horses, together with beavers, foxes, martens and weasels (ermine?), all sources of valuable furs (Mackay 1914, 444 n2). Beaver, marten and ermine are specifically mentioned in relation to the tribute due to medieval Welsh kings, 'since the ornamentations of the king's clothing are made from their skins' (Jenkins 1986, 188), and it is not unreasonable to suppose that this was also true for Pictish kings.

The uplands, despite their poorer soils, had also, at some earlier time, been cleared for

agriculture and intensively occupied. This was demonstrated by Feachem (1973). Historical records, none the less, suggest that considerable forests, with their varied resources, still remained into the Middle Ages. Another important harvest was no doubt that of Loch Ness itself, which is still noted for salmon, sea trout, brown trout, eels and lamphreys (Weir 1970, 181). But it has been emphasized elsewhere that the mapping of locally available resources is an inadequate guide to the full range available to a family high in the social hierarchy of a developed Celtic society, such as we may postulate in the case of Emchath and his *domus* (Alcock 1987a, 83).

Turning now to the Early Medieval archaeology of Glen Urquhart and its surroundings, the most important monument is undoubtedly the Garbeg cemetery. This lies at NGR NH 5132, on rolling uplands, at about 300 m in altitude, and some 1.5 km back from the steep northern slopes of the glen. Neither the floor of the valley nor Loch Ness and Urquhart Castle are visible from this position (Stevenson 1984; Wedderburn & Grime 1984). As surveyed by the Royal Commission on the Ancient and Historical Monuments of Scotland, the cemetery comprised 21 ditched mounds (as well as one outlier); of these, nine are roughly circular, 11 are square or at least rectilinear, and one is more ambiguous. The area within the ditch ranges from as little as 3 m to as much as 8 m across. Rarely, two or more of the low mounds share a length of ditch, which may suggest consecutive building, perhaps over a period of time, and perhaps by a single family.

Four of the mounds, two circular and two rectilinear, have been partly excavated by Wedderburn & Grime (1984). Each contained a single central grave, with an inhumation burial, to judge from 'a very badly decayed skull and what appeared to be the shaft of one human femur' from cairn 3. The orientation of the grave pits was roughly SW/NE, but there is no evidence to show at which end the head lay. The only relevant find was the fragment of a Class I Pictish stone in the cairn material of no 1. The possible chronological significance of this is discussed below.

Square-ditched and square-kerbed cairns and barrows, and apparently cognate circular ditched barrows, are now widely known in assumed Pictish contexts, and have been much discussed (eg Ashmore 1980, Close-Brooks 1984, Maxwell 1987, and discussion above of Forteviot, pp 234–5). The special features of the Garbeg cemetery are the number of graves; and the possibility of relating it to a definite community.

In the absence of preserved skeletons, it is impossible to say anything about the demography of the cemetery: for instance about the age and sex of the burials. It would have been particularly interesting to know if the distinction between square and circular barrows was gender-related. But even without this skeletal evidence, it is reasonable to suggest that a cluster of 21 burials represents a single family, burying over four to six generations. The relative elaboration of the burials (as compared with unenclosed dug-graves or cists: above pp 234–5) would also suggest a family of some wealth; and the albeit crude east/west orientation would indicate a Christian group. The only relevant date for a comparable Pictish burial comes from Dunrobin, Sutherland: a radiocarbon date for the weighted average of two samples from the skeleton there gave a bracket of cal AD 653–782 at two standard deviations (Close-Brooks 1980). This is fully consistent with a Christian burial.

Fragments of three Class I Pictish stones, and a simple incised cross-slab, have been found at various times above the north shore of Urquhart Bay. The most reliably reported example was a fragment of a slab with a crescent and V-rod design, discovered in 1974 in cairn no 1 of the Garbeg cemetery (Wedderburn & Grime 1984, 160 with fig 10.7). Two other fragments had been found not far away, in 1864, at Drumbuie (possibly Upper Drumbuie, NH 5131, rather than Lower Drumbuie). One bears a serpent and Z-rod and a double-disc design, the other a fish (salmon?), mirror and comb, and a second, unusually elaborate, mirror (Allen & Anderson 1903, 98–100). The Drumbuie stones were uncovered while ploughing around an old grain kiln, as capping to a

'cist-like construction'. The full account makes it clear that this was some form of kiln or flue, and not a burial cist.

Possible relationships between Class I Pictish stones and burials have been much discussed (eg by Ashmore 1980; Close-Brooks 1984). The present fragmentary examples can add nothing to the discussion: given their shattered condition, all three are in secondary, if not indeed tertiary, positions. None the less, it is reasonable to suppose that they were originally part of a group of Class I stones on the uplands above Urquhart Bay, with a date-range perhaps from the sixth into the eighth century AD.

There is nothing explicitly or necessarily Christian about the Class I stones, but the fact that their symbols continued to be used on Class II cross-slabs has reasonably been taken to imply that there was nothing incompatible with Christianity about them. In any case, we should remember that there is nothing expressly Christian about the large number of so-called Early Christian monuments of Group I in Wales which are inscribed with the religiously neutral formula 'of A son of B'.

In contrast, the Christian significance of the Glen Urquhart cross-slab is unambiguous. This bears an unringed outline incised cross of the broad type of Henderson's Class IV (1987). The arms of the cross expand slightly and the lower shaft tapers to a rounded foot (Simpson 1951, fig 66). Broadly, though not in every detail, it resembles a cross-incised slab, no 53 b, from Iona. A date in the eighth century or later is suggested (RCAHMS 1982a, 16, 183, 187–8). The Urquhart slab was recovered 'from the ruins of The Temple' some time before 1914 (or perhaps before 1893; we have not seen the 1st edn of Mackay 1914, 385).

Simpson has made much of this stone in relation to a supposed 'Ninianic church site at Temple' (1951, 320–1 and elsewhere). Modern opinion would dismiss the dedication evidence suggested by Kill Saint Ninian and its variants as indicating an historical visit by that saint. That the name Temple derives from Irish *teampull* is no indicator of date. Mackay refers to an early 17th-century account of a 'litle Chappell' called Kil Saint Ninian which, with its holy well, was still a place of resort at that time; but by 1763 this had been reduced to 'the ruins of a church' (Mackay 1914, 321, n1). None of this is evidence for the date at which such a church or oratory might have been founded. The cross-slab itself remains as firm evidence for a Christian presence beside Urquhart Bay in the eighth or ninth century.

Apart from the monumental remains just described, only one artefact of possible relevance has been recorded from Glen Urquhart. This is a terminal fragment from a silver penannular brooch of the St Ninian's Isle type (Small *et al* 1973, 90, 95, 98; pl xliv b). These are silver brooches, intermediate in size and in the elaboration of their decoration between the richest examples such as the Tara and Hunterston brooches and simple penannulars of Fowler's type G. Presumably they are appropriate to a patron with a middling degree of wealth. A date in the eighth, more particularly the later eighth, century has been argued (Wilson 1973, 147–8). Although Wilson attributed the example under discussion to Urquhart Castle, there is no evidence, other than hearsay at several removes from the original finder, to establish whether it was found 'at' or 'in the vicinity of' the castle. None the less, it can be taken to indicate a degree of wealth in the Urquhart area in the eighth century.

Finally in this review, there is the fort itself (illus 17, 26 & 28) to provide a military, political and social focus, as the good land of Glen Urquhart forms an economic one. As we have seen, there is good evidence for a stone-walled fort, standing as a citadel on the dominant rock boss at the southern end of the Urquhart promontory. To the north, the lower terraces of the promontory may have been enclosed with drystone or timber defences. Indeed, possible ruins of a drystone wall may be seen along the north-west edge of the promontory, but it has not been possible to test

these by excavation. Within the citadel, timber ranges were set against the inner wall-face. Because of the cleanliness of the inhabitants, we can say nothing about their activities, crafts, or even eating habits. On the evidence of radiocarbon dates, the occupation began in the sixth century or later, and ended, after a destructive fire, in the ninth century.

The size of the fort provides a possible hint about the political and social status of Emchath and his household (illus 28). Assuming that the citadel wall ran along the edge of the rock boss, then it enclosed about 375 sq m. This is the upper limit of area used in the RCAHMS Argyll *Inventories* to distinguish what they classify as duns from forts. As we have shown previously (Alcock & Alcock 1987, 132–6), the *Inventories* do not use size wholly consistently as a criterion of status: it is indeed only one of a series of interrelated characteristics; in Argyll it does not provide a satisfactory basis for attributing duns to a particular rank in society.

In any case, at Urquhart, we appear not to be dealing with a simple dun, because the terraces below the citadel boss must be taken into account as probable outer enclosures. In that case, the site should be classed as a dun-with-outworks; an example, that is, of what has formerly been called a nuclear fort or, as we would prefer, a hierarchically organized fort (Alcock, Alcock & Driscoll 1989, 206–14). It is therefore useful to compare Urquhart with the two classic examples of such forts: Dunadd and Dundurn (illus 28).

The apparent area of the Urquhart citadel is certainly larger than that at Dunadd, and probably as large as the ill-defined citadel at Dundurn. In terms of overall ground plans, the terraces at Urquhart are markedly more extensive than the lower enclosures at Dunadd, but to the same degree are less extensive than those at Dundurn. It should be noticed, however, that at Dunadd, and especially at Dundurn, a significant area within the enclosures is too steep or too craggy for occupation, whereas at Urquhart the area of the terraces is mostly level enough to build upon. In this respect, Urquhart must be considered as the largest of the three.

Dunadd has been regarded as the chief seat of the Cenel nGabrain, or even of Dalriada in general (eg Bannerman 1974, 112–13; Anderson 1991, xxxiii with n 70). Essentially its claim to royal status rests on its capture by the Pictish king Oengus son of Fergus in AD 736. A royal interest in Dundurn is reflected in the statement in Regnal Lists D, F and I that Girg son of Dungal died there, probably in 889 (Anderson 1973; 1980, 44 ff, 267, 274, 283). A major difference is that, whereas Dunadd is geographically central in Dalriada, Dundurn can never have been anything other than peripheral to southern Pictland (or even, as we have suggested (Alcock, Alcock & Driscoll 1989, 195), to Dalriada or Strathclyde).

Another useful royal analogy is provided by Dunollie 2, which is certainly the fort built by Selbach of Lorn in AD 714. Its shadowy precursor, Dunollie 1, may have been the *caput regionis* where Columba encountered sailors from Gaul (Alcock & Alcock 1987). Notwithstanding its undoubted royal status, the internal area of Dunollie 2 is only about two-fifths that of Urquhart.

Despite the royal status which we may infer from the relative size of Urquhart, it would be unreasonable to consider it as *the* major royal centre of Bridei's realm. Adomnan's account, no doubt based on the traditions of Iona, plainly dissociates the location of Emchath and Virolec from *Brudei munitio*, the fortress of Bridei son of Maelchon. Bridei appears in the pages of Adomnan as eminently regal; and Bede knew of him as *rex potentissimus* (HE iii 4). Having given further consideration to the Castle Hill of Inverness, we now believe that its large size, dominating aspect rising about 25 m above the river, and command of the strategic lowest fording place on the Ness, all combine to make it eminently suitable to have been the principal stronghold of an important king *(contra* Alcock 1981, 160). It would be inappropriate to expect a second major seat of kingship within a day's march (ie 25 km/15 miles: illus 16).

Another useful analogy may be found, however, in the Bernician province of Northumbria.

There the principal fortified royal centre was at Bamburgh, which Bede describes alternatively as *civitas* and *urbs regia* (HE iii 6, 12 & 16). Campbell suggests that Bede 'is using *civitas* here for a particularly important kind of urbs , the main royal fortress' (Campbell 1979, 37). In the vicinity of Bamburgh, there appears to have been another major royal centre, referred to by Eddius Stephanus as *urbs regis Inbroninis* (VW cap 36). This has been reasonably identified by G R J Jones (1990) with Holy Island, Lindisfarne, and may be specifically located at Beblowe Hill, later the site of Lindisfarne Castle. If this identification is correct, then it is on a tidal island within sight of Bamburgh, but something like 25 km/ 15 miles distant by dry land.

A second Bernician stronghold classed by Stephanus as *urbs regis* was at *Dynbaer*, that is, Dunbar (VW cap 38). Barrow has suggested that *urbs regis* in these and other similar cases has the meaning of a royal centre as well as the administrative district around it. As used by Stephanus and Bede it thus prefigures the later term 'shire'. For instance, Dunbar 'was almost certainly a shire-centre in the eleventh and twelfth centuries' (Barrow 1973, 66–7).

According to Stephanus, both of these fortified places were in the charge of a *praefectus*, a title sometimes translated as 'reeve'. In each case, however, the context demonstrates that they were powerful royal officials. We may reasonably infer that the *praefectus* was in effect a royal official in permanent charge of a royal centre which was visited periodically by the king in the course of his circuits or progresses. In later centuries, such an official might have been designated 'thane'.

The relevance of the royal administrative arrangements of Anglian Northumbria to the Pictish realm of Bridei must seem obscure indeed, but it is based on more than vague assumptions about parallels between the organization of the several Insular barbarian kingdoms. The three places, Bamburgh, *(In)Broninis* and Dunbar, all originally had British names and, in two cases, these included the element *din* implying a fortified place. This, and other evidence, has been taken to imply that in Bernicia, the incoming Angles took over a British system of administration, including a number of fortified royal centres, as a going concern. A further step in the present discussion then argues that, as a Brythonic-speaking people, the Picts are likely to have had a social and political system which closely resembled that of the Britons (Dumville 1981), especially those across the Firth of Forth in Bernicia. (For an expanded treatment of matters summarily dealt with in the last three paragraphs, see Barrow 1973; Alcock 1988a; and, especially on circuits, Charles-Edwards 1989, 28–33.)

Moreover, the Anglo-Saxon title *thane* may be equated with the Celtic title *toisech*, which occurs among the Gaelic notes of mid-12th-century date in the *Book of Deer*. Here the term appears to be used for a royal official, as well as for the leader of a noble kindred or of a petty kingdom, as was customary in Ireland. This may suggest that the *toisech* as official was a characteristic element of Pictish social organization (Jackson 1972, 110–14).

It must be stressed that, when it appears thus in a 12th-century Scottish source, it has behind it a long history. It first appears in Britain in an Irish/British context on a bilingual memorial stone at Clochaenog in Denbighshire. This reads, in the British/Latin version and in good Roman script, SIMILINI TOVISACI; and in the Irish/Ogam version, likewise Similini (or possibly Subilini) Tovisaci: '[of] Similinus/Similinos Toisech' (Macalister 1945, no 399; Nash-Williams 1950, no 176). Jackson (1953, 186–7) dates the memorial to the late fifth century, and derives the genitive *tovisaci* from the Common Celtic inferred word, in the nominative **touissacos*, 'prince'. In Early Welsh it might also mean chieftain or leader, especially in a military sense; and we have seen how in Pictland it came to acquire also the meaning of royal official. This might already have become appropriate, by the late sixth century, for the person in charge of a subordinate royal fortress such as Urquhart.

To summarize this necessarily speculative discussion. The fort at Urquhart, some 25 km/ 15 miles from the major royal centre at Inverness, would seem appropriate for an *urbs regis* in Bernician terms, and probably therefore in British terms as well. In that case, it may be that Emchath was a royal official, the equivalent of a *praefectus*. If we could infer that Virolec succeeded him as head of the household, then it may be that the family also held the position of *praefectus* on a hereditary basis. This would be characteristic of a barbarian nobility of service and of birth. We might think of the lord of the Urquhart fort in Welsh (ie P-Celtic) terms as *tywysog* in Irish as *toísech*, or in Scottish Gaelic as *toiseach*.

'The estate called Urquhart' may have provided the economic basis for the early medieval fort on Strone Point. The fort itself may have been the political and administrative centre of a large area, perhaps extending, as did the later parish, into Glen Moriston as well as Glen Urquhart. *Brudei munitio*, located probably at Inverness, would have been the chief political centre of Bridei's kingdom. It would have exploited as demesne the high-quality land around Inverness (illus 16), but it would have been equally dependent on twice- or thrice-yearly circuits or progresses, to receive tribute and taxes in kind at dependent centres, among which Urquhart may have been included. In the same way, the lord of Urquhart would have progressed around his own lands.

It must be recognized, however, that there is nothing explicit in the description of Emchath and his household to justify such equations, other than the apparent territorial implication of the term *ager qui Airchartdan nuncupatur*, and its probable association with the Urquhart fort. Inevitably, therefore, this attempt to write a holistic account of early medieval Urquhart and its community is based on increasingly speculative inferences. The excuse for this – if excuse be needed – is, first, that the unusual range of evidence available at Urquhart and in its vicinity immediately prompts a holistic approach. Second, it is only by occasionally pushing inferences to their limits that we can begin to discover the strengths as well as the weaknesses of our knowledge, as a basis and inspiration for future explorations.

c: Excavations at Dunnottar, 1984

HISTORY & TOPOGRAPHY

Attention was drawn to Dunnottar (illus 1:6) as a probable fortified site of the Early Historic period by two references in the Annals of Ulster (MacAirt & MacNiocaill 1983):

AD 680 (for 681) *Obsessio Duin Foither*
AD 693 (for 694) *Obsesio Duin Fother*

These entries may be regarded as deriving from annals originally compiled contemporaneously on Iona (Bannerman 1974), and may therefore be accorded a high degree of reliability. In contrast, an account in the Scottish Chronicle of the destruction of *Opidum Fother* by the Vikings during the reign of Donald son of Constantine (AD 889–900) (Anderson 1973; 1980, 251) cannot be a contemporary entry in the form in which we have it. It may none the less be derived from a set of original Gaelic annals, and hence it could well refer to a genuine historical event. (For the Scottish Chronicle, see Cowan 1981; and also the discussion in relation to Forteviot, above p 221.)

The fortified place known as Fother was identified by Watson (1926, 510–11) as Dunnottar, on the coast a little south of Stonehaven (NGR NO 8883: illus 29). Professor William Gillies has kindly confirmed for us the linguistic basis of this equation. If a strategic purpose is sought for the siting hereabouts of a fortification significant enough to be mentioned in the Iona Annals, it must
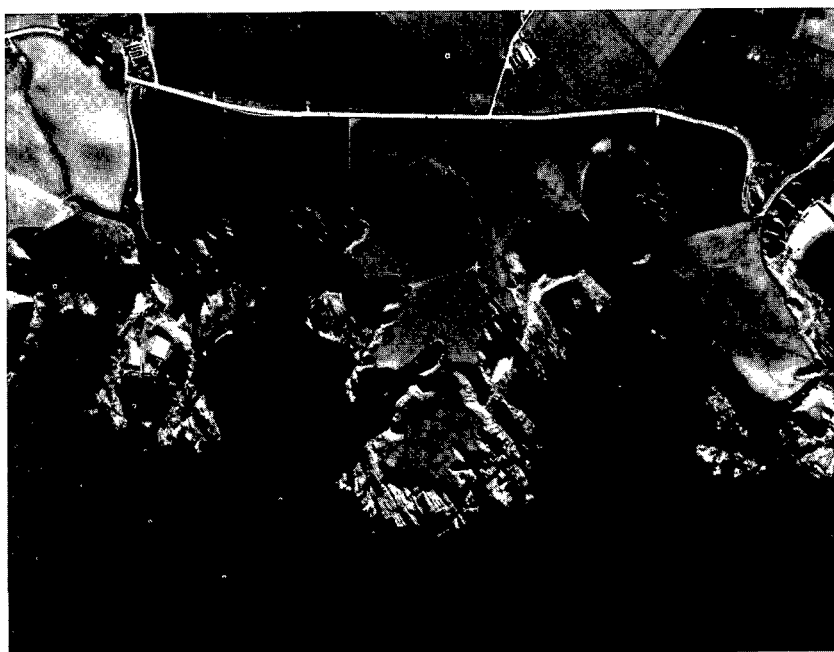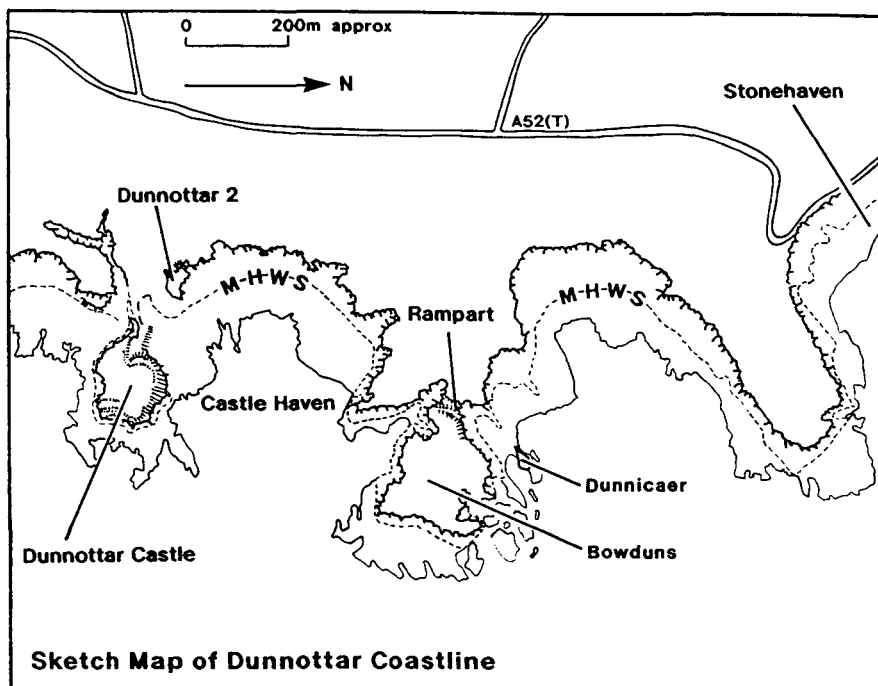
Illus 29 The Dunnottar/Bowduns coastline: vertical aerial photograph (*Copyright: Aberdeen Archaeological Services*); and sketch map showing principal features

be that it lies in the gap where the Grampian mountains approach most closely to the east coast. In fact, hills up to 152 m (500 ft) OD rise within 3.5 km of the sea. Conforming in broad terms to the relief, the exceptionally good lands of Strathmore and the Mearns (Land Use Classes 3 and even 2: Walker *et al* 1982) narrow in towards the Stonehaven gap, and then widen out northwards through Mar, The Garrioch, and Buchan.

This narrow corridor between the Mounth and the sea linked the two major regions of Pictland. Moreover, M O Anderson has suggested (1973; 1980, 174–5) that the siege of Fother in 681 was an attempt by King Brude, son of Bile, of Fortriu (ie south-west Pictland) to assert his authority over the kingdom of Circhenn along the east coast north of the River Tay. Such an interpretation reinforces the importance of Dunnottar for the control of southern Pictland as a whole.

Today, Dunnottar refers most obviously to the impressive remains of a masonry castle of the 14th-17th centuries AD (illus 30 & 31). This has peripheral earthworks, some of which may be earlier, while others are contemporary with the masonry castle (Simpson 1941; Alcock 1981, figs 38: 9 & 40). The castle occupies the 3.5 ha summit of a promontory of the eponymous Old Red conglomerates of the Dunnottar group: a headland made formidable by its 49 m high cliffs, often vertical if not actually overhanging. This headland forms the south side of Castle Haven, a bay about 450 m across by 400 m deep, with its north side defined by the promontory of Bowduns

ILLUS 30 Dunnottar Castle from the air, showing the character of the Dunnottar headland, and the cliffs and shingle beaches at the back of the adjacent bays; also the fertile coastal plateau.
The Bowling Green is the level square on the right-hand side of the castle; Cutting 100 was sited at its far right-hand corner. The cliff castle, DO 200, is indicated by marginal arrows (*Copyright: Aberdeen Archaeological Services*)
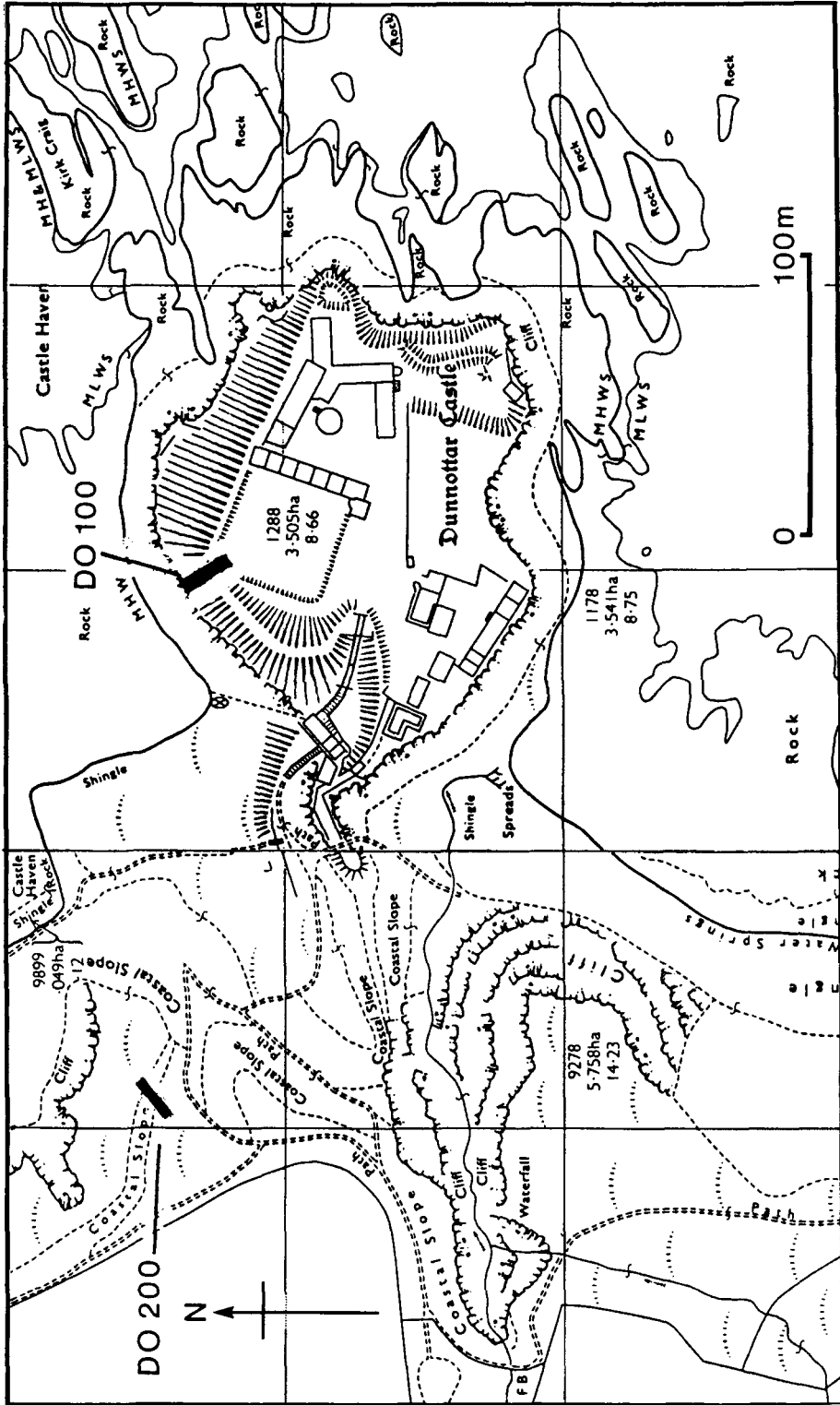
LLUS 31 Plan of Dunnottar and adjacent cliffs, showing the location of Cuttings DO 100 and DO 200. *Reproduced from the Ordnance Survey 1:2500 map with the permission of Her Majesty's Stationery Office. © Crown Copyright*

(NGR NO 8884). Sheltered especially from the north and north-east by these headlands, boats of shallow draught might be drawn up on a shingle beach at the back of a rocky, but gently shelving, shore (illus 29 & 30).

The basic assumption of the excavation was that, despite the unscalable character of the cliffs, an early medieval *dun* or *oppidum* would nevertheless have been enclosed within a wall or bank; and that any such defensive work would have been encapsulated in the later earthworks, rather than having been destroyed in their construction. In more detail, it was expected, from observations both at Dunnottar itself and of the neighbouring headlands, that the conglomerate bedrock would be overlaid by a metre or more of till; that on this, defences of Pictish date might have been raised; and that traces of such defences, however denuded, might therefore be recovered beneath the visible earthen banks. On the north-west front of the castle, immediately facing the mainland, the bank presented a daunting task for a would-be excavator; but at the north corner it declined sufficiently as to suggest that the natural alluvium might be no more than 2 m below the highest part of the bank. A major cutting was therefore laid out here.

In addition to the excavation on the actual Dunnottar headland, preliminary fieldwork had led to the discovery of a minor enclosure on the edge of the mainland cliffs to the WNW of the castle (NGR NO 879839). Here a short length of ditch combined with natural gullies and cliffs to form a trapeziform enclosure roughly 25 m wide by 50 m long: in effect, a small cliff castle (illus 30 & 31). Since such enclosures are known to have been occupied, and even built, in the Early Historic period (Shepherd 1983, 329–31), it was decided to examine this in Cutting DO 200, with the intention of establishing its date and possible relationship with the occupation of the castle-promontory itself.

EXCAVATION RESULTS

Excavations were carried out with a team of 12–15 diggers, from 2 to 23 September 1984, on both the castle itself (Cutting DO 100) and the possible cliff castle (DO 200). In addition, before the start of the excavation, Ian Ralston and Harvey Ross, then of the Geography Department, Aberdeen University, made a resistivity survey of a 10 m square in the interior of the cliff castle, with a Martin-Clark IV resistivity meter. No clear anomalies were detected, no doubt because of the very mixed character of the alluvium. The area surveyed, however, is marked on the site plan (illus 33), and the plot of the survey has been placed in the site archive.

CUTTING DO 100 (Illus 32)

This cutting was located at the north angle of the peripheral earthworks, at a point where the bank was standing less than one metre above the level interior of the castle, in the area known as the Bowling Green. Initially the trench was laid out as 8 m long by 3 m wide; but as the true depth of bedrock came to be appreciated – about 4 m below the crest of the bank – it became necessary to extend the cutting to a total of 16 m in length. It was also necessary to reduce the width of the trench as actually excavated to 1 m, along the east section. At the same time, the west side of the trench was dug so as to form a flight of access steps. Even with these restrictions on the floor area of the trench (and the consequent reduction of the volume excavated), excavation resources were insufficient to allow bedrock to be reached throughout the trench. Enough was exposed, however, to make it possible to project its slope. It should also be noted that the outermost end of the trench terminated some 4 m short of the cliff edge.

The results of three weeks of strenuous excavation were surprising, and even perplexing. No
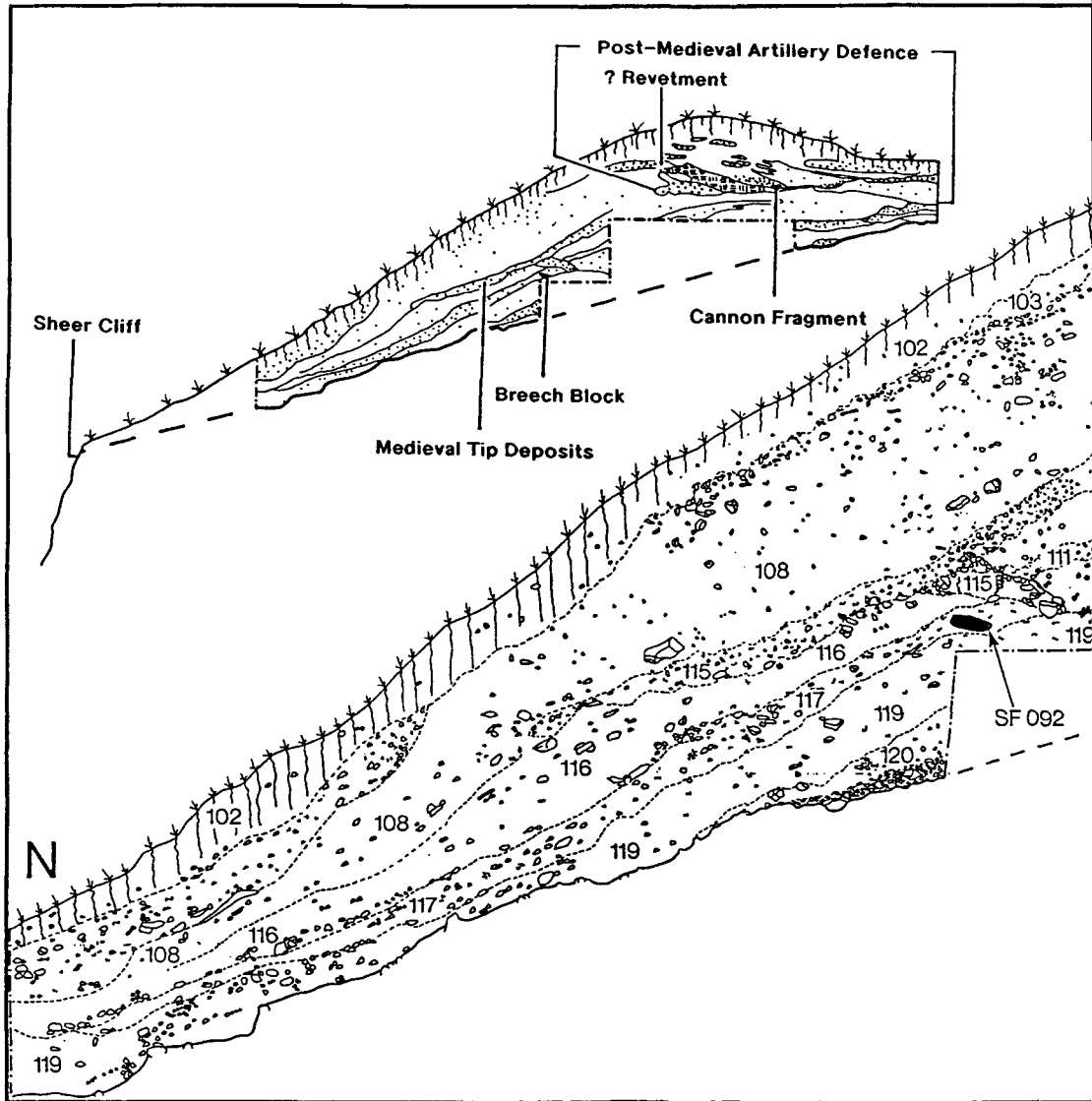
ILLUS 32 Dunnottar, Cutting DO 100, detailed section, with interpretation

finds or structures of early medieval date, or indeed earlier than the late 12th century, were discovered. No trace of a Pictish defence had been encapsulated in the later bank; and even the expected metre or more of alluvium was absent. Instead, a series of fills consisting of varied mixes of red and brown clays, dark loamy or humus-like soils, and stones, mostly small and angular, lay directly on the conglomerate bedrock. These deposits (layers DO 109 and below) were reasonably clear in bulk, though they tended to merge at their interfaces. They also contained localized deposits, such as concentrations of stones. They had accumulated more or less in conformity with the angle of slope of the bedrock to a height of some 2 m above its projected level. The scanty
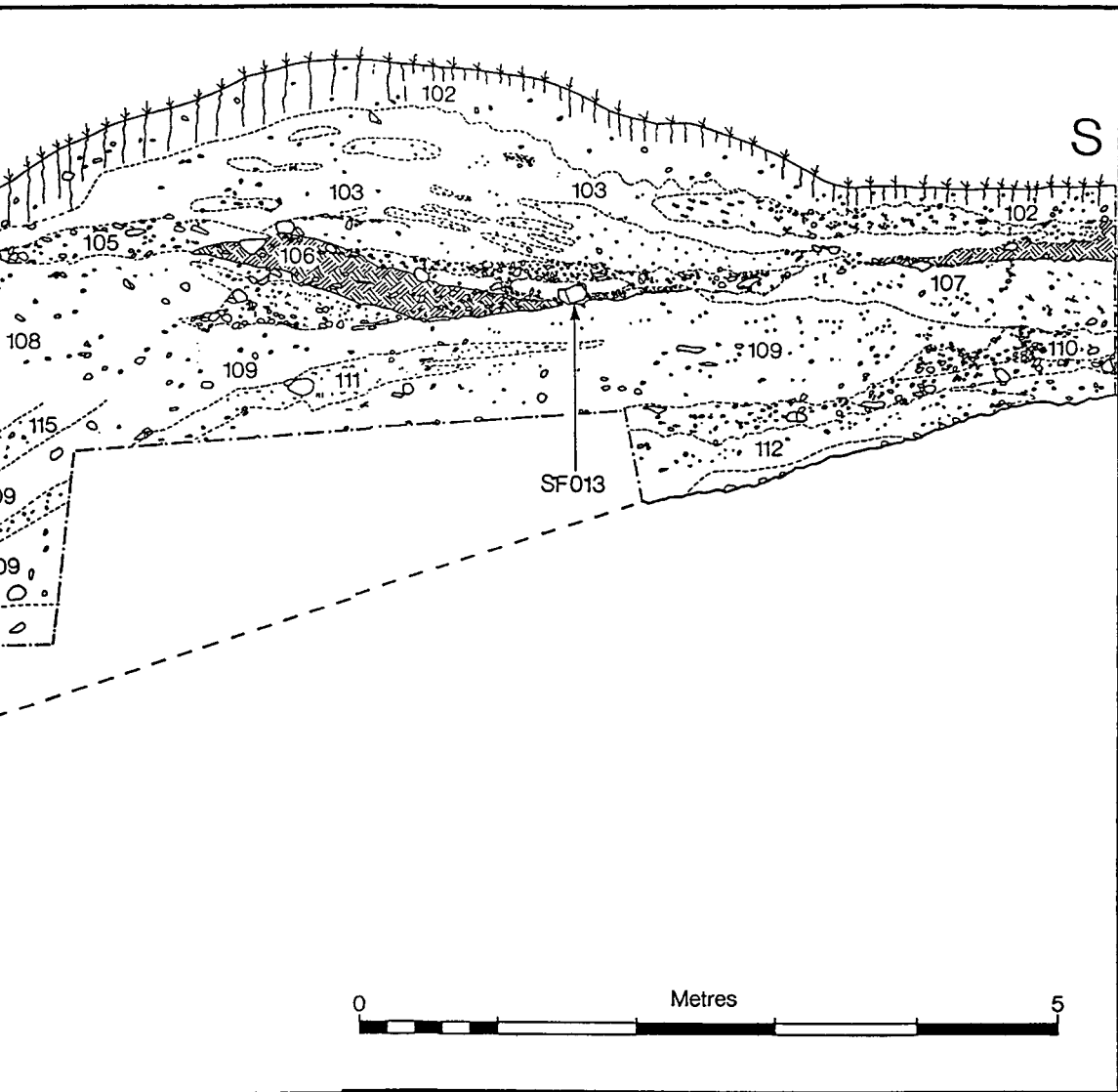
evidence of stratified finds, set out below, suggests that these deposits had been accumulating from the end of the 12th century, through the 13th to 16th centuries.

At the height of 2 m, the surface of the aggrading deposits had been levelled off, and their character changed significantly. Upon a base of hard-tamped red clay (DO 106) and densely packed cobbles (DO 105) was raised a bank (DO 103). The rear of this consisted of layers, or at least horizontally laid patches, of pink clay in a matrix of loam, which also incorporated some stones, roofing slates, and mortary concentrations. The appearance was that of a bank which had utilized any available material in its construction, but which had also been deliberately stiffened at

the rear with lacing layers of turf. In front of the summit of the bank, there was no such clear stratification. During the excavation it was considered that this was perhaps the result of weathering caused by the decay of a front revetment of timber; no better explanation is suggested on mature reflection. To the rear of the bank, a layer of cobbles (DO 107) appears to mark the first laying out of a level cobbled area in this part of the castle interior. Given that Cutting DO 100 was sited immediately adjacent to the North Battery of the castle, it seems reasonable to interpret this bank as an artillery defence associated with that battery. On the other side (ie west) of the cutting, the peripheral earthwork of the castle rises steeply to its maximum height, most probably in order to protect the palatial but vulnerable domestic ranges in the interior of the castle against artillery bombardment from the mainland cliff-top.

The chronology of this sequence is based on a small quantity of pottery, supplemented by two coins and two fragments of artillery. The pottery was kindly examined by Mr Charles Murray on a visit to the excavations. Predominantly it is local medieval coarse ware of the 13th–15th centuries. This was found from the bottom (DO 112) almost to the top of the section (DO 105). There was also a probable French import of 13th-century date from DO 112. A 17th-century date is indicated for the artillery defence by green-glazed pottery of the medieval/post-medieval transition, and more significantly by a German import of that period, from DO 103.

Dr Donal Bateson has reported on the two coins:

1   SF 117 DO 100 Unstratified (ie from backfilling)
    England Edward I silver penny London
    class uncertain (minted 1280-1302)
    wt 23.0 gr (1.49 gm) die axis 0°
    corroded, degree of wear uncertain
    lost first half of 14th century

2   SF 104 DO 117 Cannon Clay
    Scotland James IV billon penny Edinburgh
    first issue (with heavy groats) 1489–96
    most of legends illegible but saltire before BVR in 4th quarter
    cf. Burns 654 (1b) wt 7.0 gr (0.45 gm) die axis 0°
    corroded but appears to have little wear
    probably lost about 1500

Of these two coins, no 1, although unstratified, usefully confirms activity at Dunnottar in the early 14th century. No 2, from DO 117, provides a chronological marker in the build-up of medieval deposits, and is especially relevant to the date of the earlier of the two artillery pieces.

Dr Colin Martin has kindly commented on these. The earlier, SF 092, from the same layer as the James IV billon penny, is a wrought-iron breech block in a badly corroded but none the less intact state. 'Such pieces could be knocked together by any competent blacksmith', and consequently 'they have a wide date range spanning the fourteeth to seventeenth centuries'. Given the stratification and the James IV penny, the present example should date to the late 15th/early 16th centuries.

The other piece, SF 013, comes from the surface of DO 107, at the tail of DO 106; that is to say, at the very base of the artillery defence. In appearance it is a jagged lump of rusted iron, and only the fact that it exhibits concentric inner and outer curved surfaces shows that it is from the

barrel of an exploded cannon: in fact 'a presumably fragmented muzzle-loader of the early modern period (probably post-1600)'. This conforms well with the pottery evidence.

We must now return to the most perplexing problems of the DO 100 sequence: why is there no alluvial layer on the conglomerate bedrock; where has it gone; what was the function of all the layers below DO 106; and where did the material in them originate? It is not possible to answer these questions within the limits of Cutting DO 100; though it is possible to speculate that any deposits earlier than c AD 1200, whether natural or artificial, may have been scraped up to provide material for the motte which Simpson has postulated (1941, 88), on no convincing evidence, as the earliest element in the defences of Dunnottar.

It should be stressed, however, that the absence from this limited cutting of any diagnostically 'Pictish' or early medieval artefacts is no obstacle to a belief in an occupation of that date. It has become increasingly clear as our reserach programme has developed that the trade which brought pottery and glass vessels from Gaul into Britain and Ireland in the seventh and eighth centuries AD was a feature of western waters, in which the North Sea played no part (Alcock & Alcock 1990). Consequently, sites such as Craig Phadraig, Dundurn, and Clatchard Craig have nothing like the richness of Dunollie, Dunadd, Dumbarton, and the Mote of Mark. Dunnottar, if it had been occupied in the early medieval period, would obviously have belonged, not in the second, richly supplied group, but rather in the first category, with only a few imports.

As the evidence stands at present, however, there is an alternative explanation for the absence of early medieval artefacts and structures from Dunnottar; and this leads to a possible alternative identification for the Dun Fother of the Annals. These interpretations will be discussed after the evidence from the cliff-castle, DO 200, has been presented.

CUTTING DO 200 (Illus 33 & 34)

This was intended to examine the structure and date of the apparent cliff-castle on the mainland opposite Dunnottar Castle. Accordingly it was laid out as a trench 3 m wide by 15 m long, across the visible ditch and the slight internal bank. It rapidly became apparent that the natural alluvium, into which the ditch had been cut, consisted of intermixed sand, gravel and clay, often unstable, in which humanly created features were often extremely hard to distinguish from natural deposits. This made both excavating and recording unusually difficult. None the less, the main lines of the history of the site can be established with reasonable confidence.

The ditch had originally been cut to a depth of about 2.5 m, probably wih a U-shaped cross section (illus 34). Weathering of the sides had caused this to funnel out to a width of about 7 m, undermining the front of the bank, and thereby destroying any certain evidence of a front revetment. The alluvium into which the ditch had been cut had evidently been somewhat impermeable. An attempt, therefore, had been made to drain the ditch by means of a construction of stones covered with re-used roofing slates (DO 225). Moreover, the ditch-bottom was filled with water-logged organic material (DO 218) which had preserved worked timbers.

As excavated, the bank was a structureless feature (DO 220) rising only some 600 mm above a fossil soil (DO 214), and with an apparent width of about 4.5 m. Given the degree of erosion, we can be sure that it was originally significantly higher, even if no wider. The vertical height, ditch-bottom to crest of bank, may have been as much as 4 m: a significant barrier for such a small enclosure. Beneath the bank there were considerable signs of activity, including charcoal spreads (eg DO 252), and rough stone settings (eg DO 247/248). There were also roughly circular holes, up to 800 mm diameter and 350 mm deep. Some of these contained numerous stones, but these were never sufficiently close-set as to suggest post-packing. There was also a pit in which a sheep had
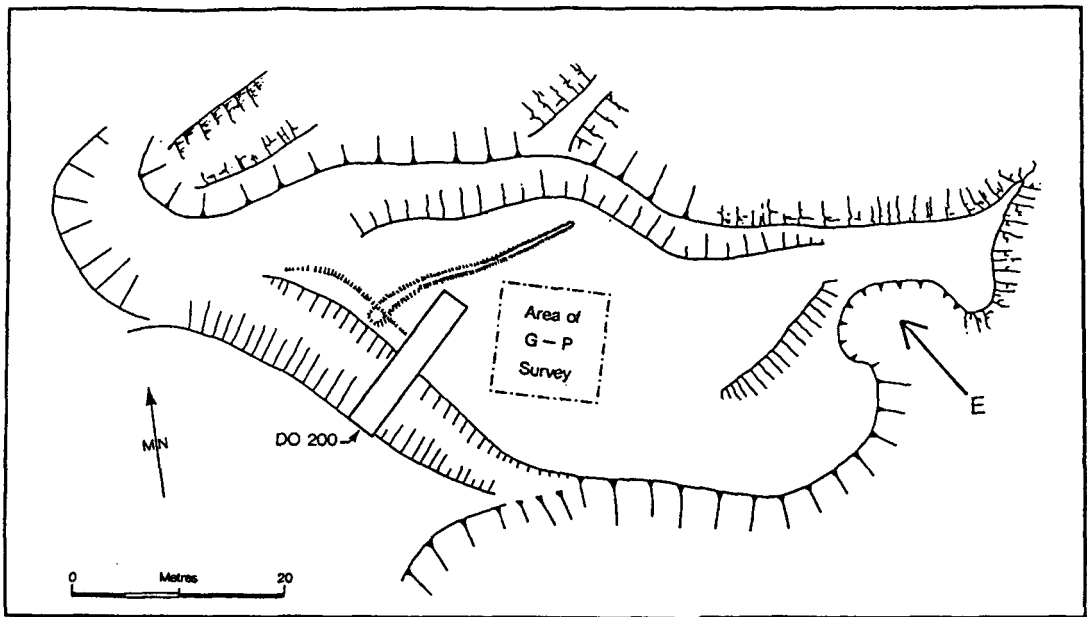
ILLUS 33 Dunnottar, Cutting DO 200, plan; E marks the possible entrance gully

been buried. Within the limits of the excavation, no explanation can be offered for these pre-rampart features, except that they seem more likely to indicate domestic rather than agricultural activity.

Most importantly, from beneath DO 214 came sherds of pottery which Mr Charles Murray kindly identified as local splash-glazed wares with a date range from the 14th to the 17th centuries, but definitely not extending into the 18th century. These obviously determine the earliest possible date for the bank, decisively ruling out the Iron Age or early medieval periods. In other words, the cliff-top earthwork is a construction of the later medieval or early post-medieval periods. Its function, therefore, must be considered in relation to the masonry castle of Dunnottar, more especially because it directly overlooks the main entrance to the castle.

While the dating is not sufficiently precise for certainty, it is inevitably tempting to relate the earthwork to the famous siege of 1651–2, when the castle, containing the Regalia of Scotland, was under siege by a Commonwealth army. In such circumstances, a strongpoint overlooking the landward access to the castle would have been invaluable whether to the besiegers or the besieged. Beyond this, speculation cannot go.

DUN FOTHER: TOWARDS AN ALTERNATIVE IDENTIFICATION

The most definite evidence for early medieval, Pictish, activity in the Dunnottar area is a group of five Class I Pictish stones (illus 36). These had been found in the early 19th century on a sea stack known variously as Dinnacair or Dunnicaer, which stands off the northern cliffs of Bowduns, to the north of Castle Haven, at NGR NO 883846 (illus 29 & 35). The best account of the circumstances of the discovery, and of the stack itself, was given by Alexander Thomson (1860) in these *Proceedings*. It appears that the stack had been climbed, 'an undertaking of
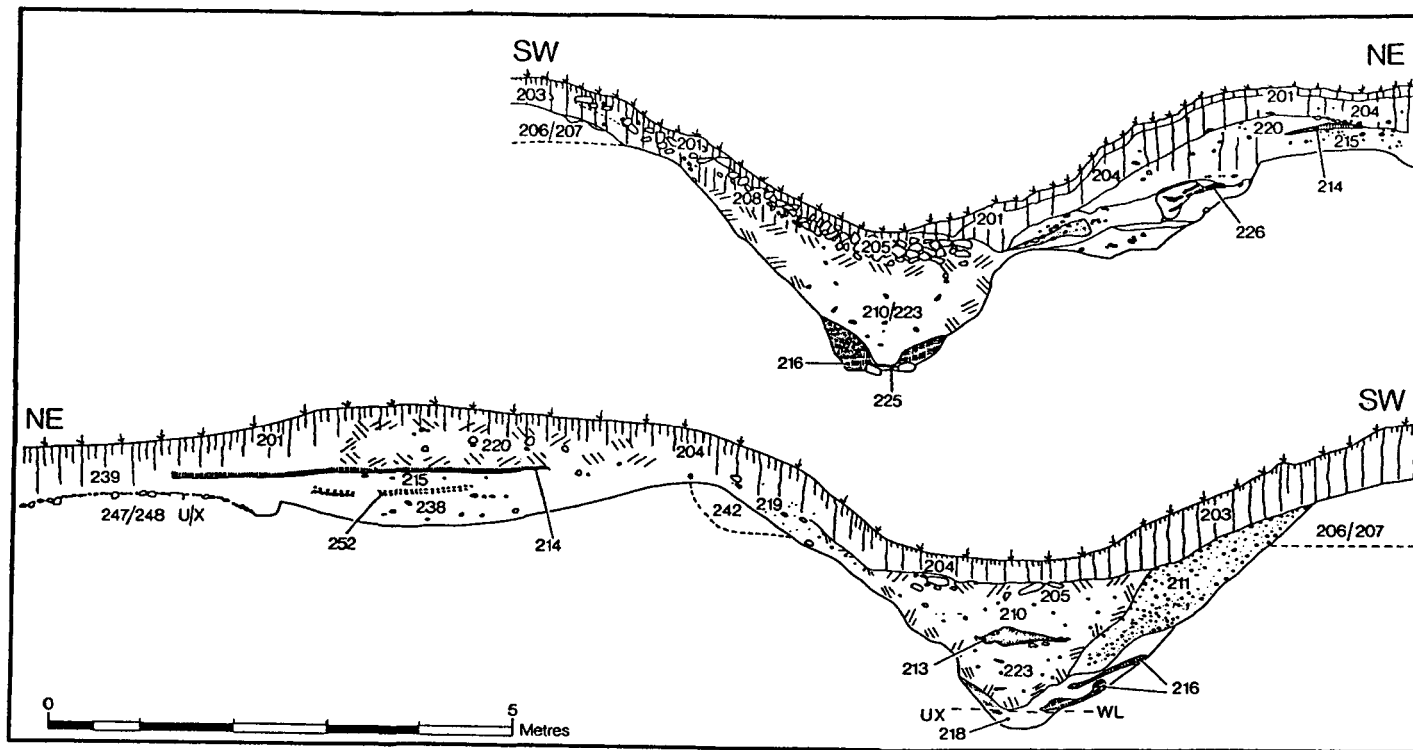
ILLUS 34 Dunnottar, Cutting DO 200, sections. WL indicates the water level in September 1984

ILLUS 35 The Dunnicaer stack, seen from the northern cliffs of Bowduns

considerable difficulty, and even danger', by three or four persons in 1832. 'They found a low wall along part of the edge, and amused themselves throwing the stones over into the sea'. One of these, apparently no 4 below, was immediately recovered from the sea. Four others were recovered on various occasions before 1856, of which at least no 2 below 'was completely covered with seaweed'.

All the stones were drawn for Thomson, and nos 3 and 4 of the present catalogue were illustrated in his paper; but unhappily the full portfolio of drawings has been lost in the Society's library. They also all appear in Stuart's *Sculptured Stones* (1856, pl xli; 1867, pl xv). Allen & Anderson (1903, 200–1) regarded the stones as having been lost, but it is clear that they had misunderstood their local informant. In 1914 Ritchie (1915, 34–7) demonstrated that they were still preserved in the grounds of Banchory House, Aberdeen (NGR NJ 915024), as indeed they are today, with the exception of no 4 which is in Marischal College Museum. Despite his failure to see the stones, Allen described them on the basis of Stuart's drawings. Apart, however, from Ritchie's 1915 paper, the interest and significance of the stones as a group, and their unusual location, has been largely ignored until recently, when Mr R Inglis examined and re-drew them.

In the following catalogue, Allen's numbering is used, as it is on illus 36 here, but the drawings are by Mr Inglis, and the descriptions are based on recent personal inspection by the authors.

1   Slab, 600 mm x 470 mm. The slab is remarkably unweathered, whether by exposure to the atmosphere, or by wave action after it had been thrown down from Dunnicaer. Presumably on the basis of Stuart's drawing, Allen describes the stone as bearing 'the double-disc and Z-shaped rod symbol very rudely drawn, and having several unusual flourishes'. As illus 36:1 shows, this description is quite inadequate. The two discs are decorated simply with central dots, and they are joined not, as is normal, with two parallel or inward-curving lines, but with two strongly outward curving ones. The Z-rod does not run centrally between the two discs, and in addition to its elaborate floriation, it has several linear extensions.
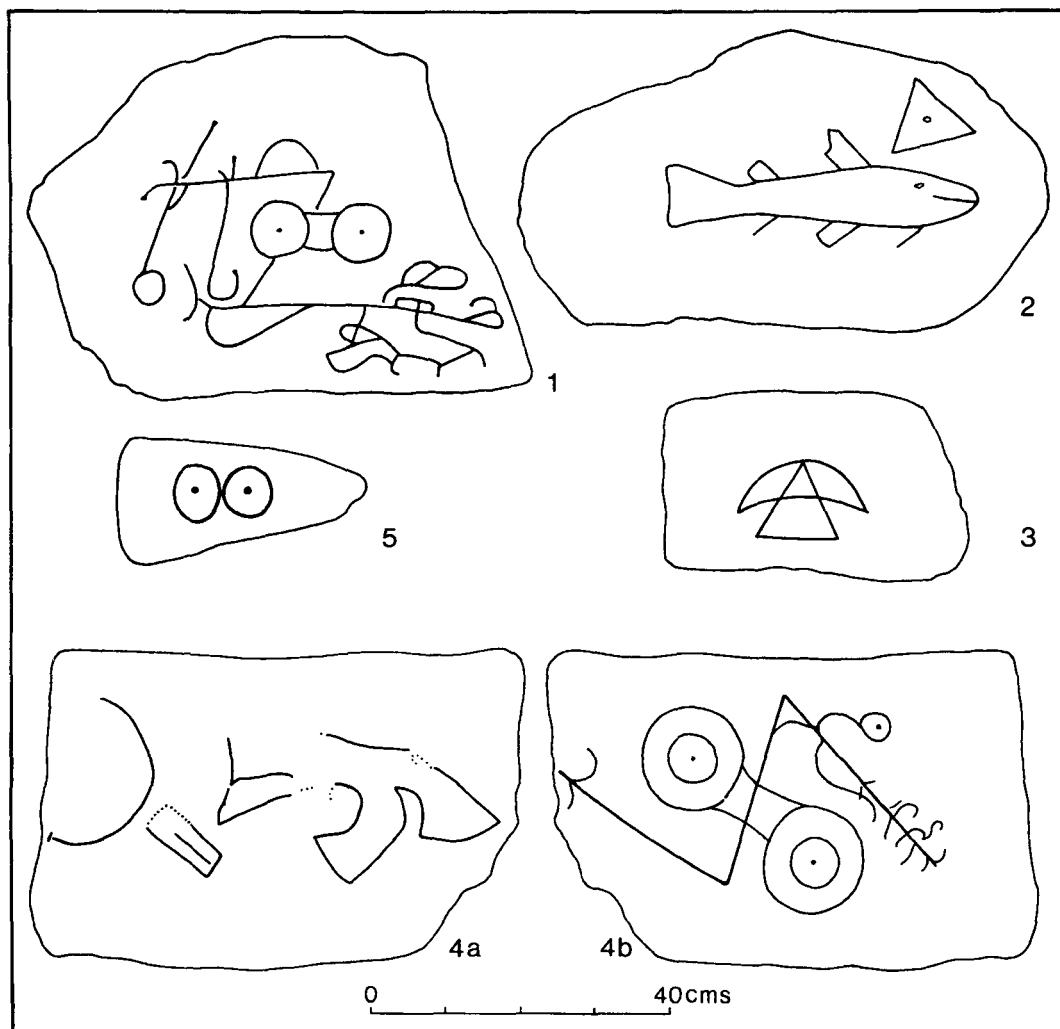
ILLUS 36 The incised stone plaques from Dunnicaer, after drawings by R Inglis and J Stuart (no 5)

It is difficult to dismiss this uncanonical design as the work of a bungling craftsman, because it is very confidently incised in a deep V-groove. This prompts the question whether it has been freshened up in recent times. Against this, the starkly defined highlights and shadows of Stuart's depiction suggest that he was attempting to represent a sharply cut groove. We must believe that we have here the work of an exuberant craftsman with original ideas. It seems useless to discuss further the typological question of whether its originality denotes a very early rather than a very late date.

Above the design itself is a rectangular slot (not shown in illus 36), equally sharply incised to a square bottom. In form it is reminiscent of a small ingot mould, but there is no reason to believe that this was its function.

2   Slab, 720 mm x 390 mm. This is very badly weathered, especially towards the top right, and is coated over most of its surface with lichen, so that it is difficult to make out details of the design. This consists of the outline of a fish, most probably a salmon, and an equilateral triangle with central dot. The curious shape of the salmon's head, as depicted by Stuart, can be verified by inspection, but it is uncertain whether it results from an irregularity in the rock or from the deliberate intention of the sculptor.

3 Slab, 410 mm x 240 mm. Outline equilateral triangle impaled on an outline crescent, both cut very regularly with a very thin, sharply incised line. The crescent is empty of decoration, as is not uncommonly the case when it forms an element in the normal crescent and V-rod design. The apex of the triangle is in the opposite direction to the point of the V-rod in the standard design. It is tempting to suggest that we have here a forerunner of that design (though Allen's attempt to promote such an idea by an appeal to the Golspie cross-slab is quite unfounded).

4 Slab, 650 mm x 400 mm. At least three phases of carving and use are represented.

    (a) A larger slab or stele, with pecked or drilled, not incised, designs, first recognized by Ritchie (1915, fig 4), consisting of the so-called flower design; an arc possibly from a mirror; and a comb, identified recently by R Inglis.

    (b) The stele was then cut down to the present slab, and incised, in a shallow groove unlike the sharp-cut V-groove of no 1, with a double-disc and Z-rod symbol. The discs have concentric circles and central dots, the Z-rod is floriated, but not so elaborately as no 1.

    (c) The slab was then used as a building stone, as is shown by the partial pecking away of the 4(b) symbol, the drilling of two holes in one edge, and traces of mortar. The recent history of the slab, before its removal to Marischal College, includes its use as a pig's scratching stone.

5 Small, elongated triangular slab, 380 mm x 170 mm. This bears an oval design and an adjacent circle, both with central dots, incised in sharply cut lines, though not so fine as those of no 3. The upper part of the design has largely flaked away, but enough remains to vindicate Stuart's drawing. Allen surmised that this was 'perhaps intended for the double-disc symbol', but given that the circle and oval are contiguous, rather than joined by a bridge, this is unlikely. The design may well be regarded, however, as an early stage in the development of the canonical double-disc symbol.

The first importance of these stones is that their size shows them, like those from Burghead, or the oxen-plaque from East Lomond, to have been plaques rather than stele. This point is emphasized by the cutting down of no 4 from a larger slab. They might even be regarded as panels with a height of 380 mm–400 mm in three cases, only no 1 being taller than this. With the exception of the fish (salmon?) of no 2, and the double disc and Z-rod of no 4(b), none of their designs can be described as mainstream or strictly canonical in the Pictish repertory. Indeed no 5 may be regarded as a forerunner of the double-disc motif, and no 3 may be an early version of the crescent and V-rod. On the other hand, the fact that no 4(b) is secondary to an apparently canonical group of flower, mirror and comb may argue for a relatively late date for Dunnicaer 4(b), and also for the plaque form of other Dunnicaer stones as well.

As a group, the Dunnicaer plaques constitute one of only two coastal clusters south of the Dornoch Firth, the other being at Burghead; in each case, the term 'coastal' does actually mean 'washed by the sea'. Moreover, even without allowing for the unsatisfactory circumstances of their discovery, and the possible loss of other stones, it is noteworthy that they form the only cluster south of the Mounth to contain more than three stones (E A Alcock 1989).

Finally, the stack on which they were found, (and which may originally have held yet more stones), is a most remarkable natural feature (illus 35). Its height has been estimated as about 30 m–35 m. In plan, it may be described as like a tadpole, with a subrectangular head about 10 m in diameter at the seaward end, and a tail some 50 m long pointing south-westwards, that is, parallel to the normal rock formation of the area. Thomson drew attention to the existence of a dyke with the same alignment, protruding from the mainland cliffs about 30 m south-west of the tail of the stack; and argued from this that 'at no very distant period it' – that is, the Dunnicaer stack – 'formed a part of the mainland'. By 'no very distant period', he meant 'when the sculptured stones were erected' (Thomson 1860, 73–4).

On this basis, Stuart speculated that 'the point of a projecting headland . . . had probably been fortified in the same way as Burghead' (quoted in Thomson 1860, 75). Given the difference in scale, the Burghead analogy is distinctly far-fetched. More recently, Simpson, having imagined a Ninianic missionary church on Dunnottar Rock, and having identified the salmon as the symbol

of Christ, and the triangle which occurs on the same stone as signifying the Trinity, suggested that Dunnicaer may have been a *disert* or place of retreat for the clergy of Ninian's missionary station (1971, 3). No weight can be attached to these suggestions.

Stuart's speculations about a fortified headland can be reinforced, as he dimly perceived (1867, 9), by an appeal to the place name as a tautology from Pictish *din or Gaelic *dun* and Pictish *caer*, all having 'fort' as a primary – though not exclusive – meaning. The collective weakness of these speculations is that Thomson's hypothesis, that the stack was part of a peninsula in the fifth and sixth centuries AD, cannot be supported by examination on the ground today. There is no evidence of a mass of collapsed material from an original continuous dyke. This suggests that the isolation of the stack goes back some millennia. Moreover, the present-day appearance of the stack is close to Thomson's own description, especially in relation to the irregular arch through which he was able to walk, and which led him to predict that 'ere long, Dinnacair itself will probably disappear'. It cannot be doubted that Dunnicaer is, and has long been, subjected to tidal erosion. The degree of that erosion cannot readily be measured, but it is reasonable to believe that those who originally set up the incised stones did so on a dramatic natural feature which was not substantially different from what we see today.

The earliest account of Dunnicaer reports the existence of a low wall along part of the edge of the stack. The incised slabs were discovered in the process of throwing the stones of this wall into the sea. What is not clear is whether they had originally been built into the wall in such a way that their designs were visible, or had merely been used as so much builders' rubble in its make-up. The latter is surely unlikely, given the effort which would have been involved in hauling them up to the summit in the first place. The observation mentioned above, that three out of the five plaques conform to a module of 380 mm–400 mm, would certainly fit the idea that they had been erected as panels on the inner face of an encircling bank or wall.

There are only two recent accounts of visits to the summit of Dunnicaer. The first, by I Ralston (1977), records that 'there were no masonry traces on its summit'. The second account is by the surveyors of the RCAHMS (1982b, 27), who ascended the stack in 1982. They report (item 209, p 27): 'the summit of the stack is covered in deep tussocky turf and, although there are a few loose stones around the edge, no trace of any structure is visible'. Despite this pessimistic account, it seems probable that the 'few loose stones' are the remains of the wall of the 19th-century account. In any case, the tussocky turf characteristic of cliff- and stack-tops is more likely to conceal than to reveal archaeological features.

Though it is necessarily speculative, it seems a reasonable hypothesis that the five stones known at present, and probably others now lost, had originally been set up in the inner face of a small walled enclosure on top of a stack which had been chosen, perhaps for its spectacular appearance, and quite certainly for its relative inaccessibility. We may see this as an early Pictish cult-focus, more likely pagan than, as Simpson had suggested, Christian.

Turning now from the detailed account of Dunnicaer to its wider setting: the stack stands within 50 m of the north-west edge of the more or less flat-topped headland (NGR NO 8884), which bounds Castle Haven bay on the north just as the Dunnottar Castle promontory bounds it on the south (illus 29). The headland, which has the suggestive name 'Bowduns', joins the mainland at a narrow isthmus, where there are strong traces of a ditch, and less clear signs of an internal rampart. This is noted as 'Rampart (Remains of)' on the 1868 Ordnance Survey 6-inch map, County Series, Kincardineshire sheet XVII (surveyed 1865; published 1868), but this designation *was not retained in subsequent editions. The headland is over 6 ha in area, or almost twice the usable area of the Dunnottar promontory. It is a legitimate speculation that at Bowduns we have the remains of a promontory fort contemporary with the cult focus on Dunnicaer.

If the steps of this argument have been accepted thus far, then several further suggestions may be advanced: that it is unlikely that there would have been two strongholds in occupation at the same time, one at either side of Castle Haven; that, on present evidence, Bowduns is a more likely site for an Early Historic fortification than Dunnottar Castle itself; and that it is therefore appropriate to identify it as Dun Fother. Acceptance of this entails, of course, acceptance that the place-name has shifted between the seventh and the 12th centuries. This is by no means an unknown phenomenon; the distance involved is no more than 0.5 km between two mutually visible sites. Rejection of it requires us to account for the co-existence of two power centres at no great distance apart: the one inferred from the Dunnicaer stack and its Pictish stones as well as the apparently embanked headland of Bowduns; the other based solely on the place-name itself.

If the arguments advanced in the last section are accepted, then the hypotheses generated deserve to be tested, most immediately and economically by a transect across the ditch and bank of the isthmus, and into the interior of Bowduns. Whether, in view of the pessimistic accounts given by those who have recently ascended Dunnicaer, there is any value in a further examination of its summit, is a matter which only they can judge. At least, further thought might be given to the existence and character of the wall which had been recorded in the early accounts.

If, however, an early medieval occupation and defences were to be sought at Dunnottar Castle itself, the obvious place to search would be beneath the exceptionally high bank which runs north from the entrance, tailing gently down in the direction of Cutting DO 100. Simpson regarded this as the location of the motte which he postulated as the first castle at Dunnottar (1941, 88 with pls II & III; the hachures on these give a misleading impression of the actual profile of the ground). It is conceivable that on this rocky headland, it would have been necessary to scoop up all available spoil – both natural alluvium and any man-made deposits on top of it – in order to win enough material for the motte. This would readily explain the absence of such deposits from the top of the conglomerate bedrock in DO 100. By the same token, such deposits would be preserved beneath the motte itself.

It should be said at once that, if the search for early medieval deposits beneath Simpson's supposed motte were to be carried through to the cliff edge, as would probably be necessary, then a very massive earth-moving exercise would be involved. This is one reason why, in 1984, Cutting DO 100 was placed where the large bank had tailed off. The other reason, which still applies, is a large doubt as to whether Simpson's motte had ever existed at all.

POSTSCRIPT

Since this paper was completed in November 1991 there has been further work on the Dupplin cross (see below), and two important excavations of early medieval cemeteries in northern Britain have been published. Because of their relevance both to Forteviot, and in the second case to Garbeg as well, it has been considered worth adding summaries of the excavation results together with publication details.

1   Scull, C J & Harding, A F, 'Two early medieval cemeteries at Milfield, Northumberland', *Durham Archaeol J, 6* (1990), 1–29. Excavations on two Late Neolithic/Early Bronze Age henge monuments revealed that they were still visible in the early medieval period, when they were used as burial grounds. At Milfield North, complete excavation of a small henge uncovered one certain grave within the circuit of the ditch and four others outside it; at Milfield South, partial excavation of the area within the ditch discovered 45 certain or possible graves. The North cemetery produced Anglo-Saxon objects of iron and copper-alloy, whereas only very rare iron objects came from the South one.

2   McCullagh, R J, 'Excavation at Newton, Islay', *Glasgow Archaeol J*, 15 (1988–9), 23–51. Rescue excavation of an area of cropmarks revealed three penannular ditches, each with a central elongated grave-pit, oriented east/west. No human remains or grave goods were found, but one pit had a drying stain suggestive of an extended burial, while another had a small upright stone slab at both the presumed head and foot of the corpse. The ditches appear from cropmarks to be part of an irregular linear cemetery with at least 17 annular or penannular ditches from 4 to 10 m diameter. Given the location in Dalriada, it may be suggested that these are an Irish-Scottish manifestation of a burial monument widely known in Pictland.

A LATIN INSCRIPTION ON THE DUPPLIN CROSS

On the front (west) face of the Dupplin cross is a panel about 300 mm square, with traces of carving which are decidedly more weathered than the other panels on the cross. Allen, who omitted much of the interlace in his illustrations of Dupplin, leaves this panel empty (1903, fig 334A); but Stuart's drawing hints at a simple, tight interlace (1856, pl lviii), perhaps even comparable with that on Forteviot no 1 (illus 4). When, however, the Royal Museum's new cast was presented at the 'Work of Angels' exhibition, the sharpness of the cast combined with the strong directional lighting to reveal suggestions that the panel actually bore an inscription. In particular, at top left was what might be read as a letter C (or following Stuart might have been the return of a strand of interlace). Immediately below this it was possible to suggest the reading FILIUS, 'son'. At that time no other readings could be proposed, and indeed further examination of the actual cross at Dupplin failed to confirm those suggested from the cast.

Recently, however, the cast has been intensively studied by Katherine Forsyth in association with Michael Spearman. From this it appears that the panel bears seven lines of text, of which the first begins CU and ends either N or H. The second reads FILIUSF[..]CU and the third begins S. It is tempting to identify this as a reference to Custantin (i.e. Constantine) son of Fergus (or Wuirgust). He assumed the kingship of Pictland in 789, and that of Dalriada by 811. If we are correct in suggesting that the Dupplin cross had been erected by Kenneth son of Alpin, or his sons, as a political statement about Kenneth's takeover of Pictland, then Constantine son of Fergus would have been a very suitable exemplar to commemorate.

We are most grateful to Katherine Forsyth for providing us with information. Her full report will be eagerly awaited.

particular individuals, mention must be made of the special responsibilities borne in the field by Jean Comrie, Stephen Driscoll and Sally Foster; and, in drawing the majority of the illustrations, by Lorraine McEwan and Sylvia Stevenson.

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