

A later prehistoric settlement at Balloan Park, Inverness

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ABSTRACT

The position of a circular enclosure identified by aerial photography was located on the ground. Trial trenching revealed that an extensive settlement, dating probably from the Late Bronze Age to the mid Iron Age, lay to the north and east of the palisaded enclosure. This project was funded by Morrison Construction and Historic Scotland. Three trial trenches, funded by Highland Region Roads along the line of the proposed Inverness southern distributor road, revealed traces of the same settlement and are also discussed in this report.

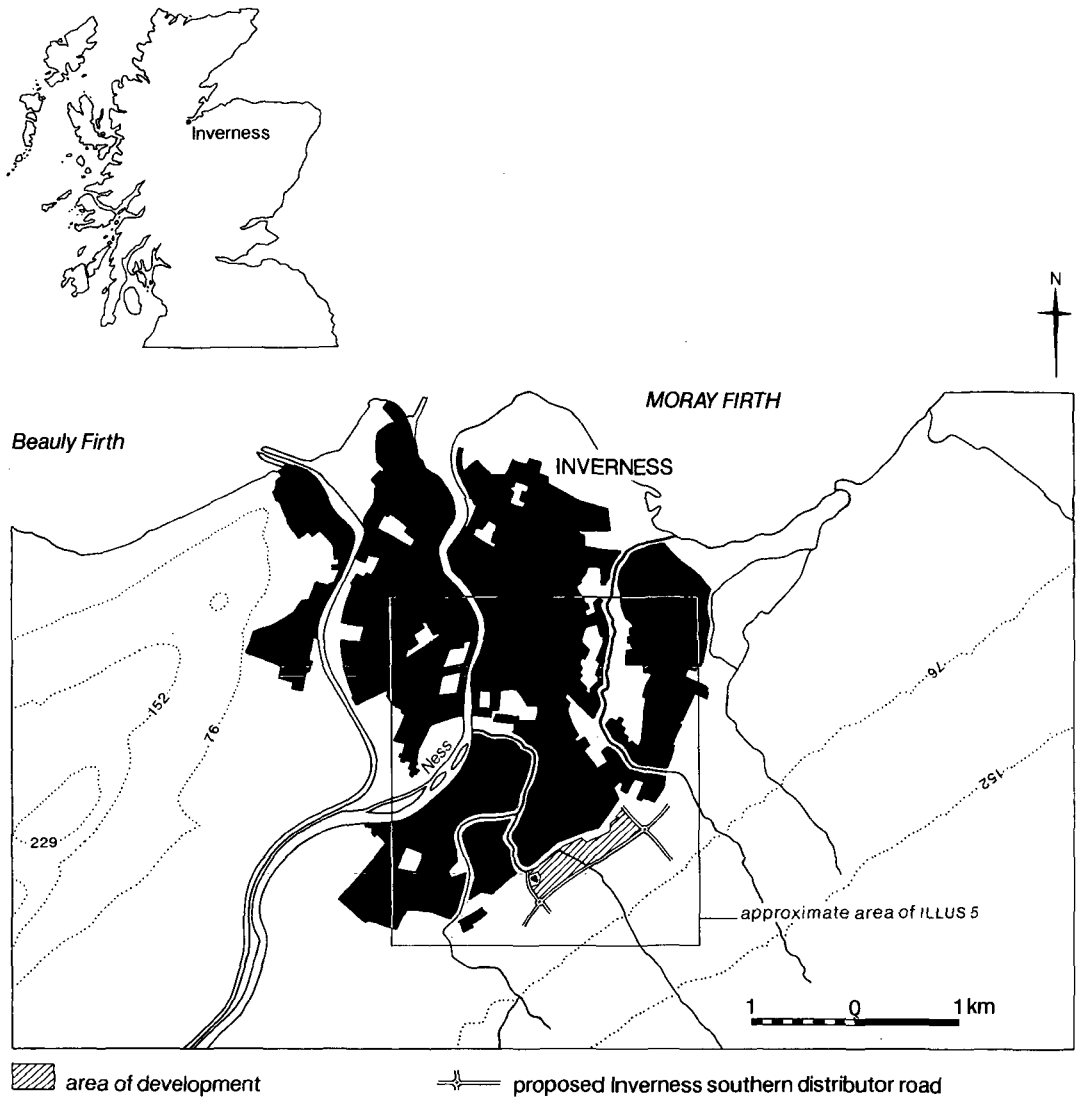
INTRODUCTION

When outline planning permission was granted for a major housing scheme at Balloan Park on the south side of Inverness (illus 1 & 2), the developers, Morrison Construction, agreed to preserve a cropmark enclosure (NGR: NH 673 427) identified by the Aerial Photographic Unit of the Royal Commission on the Ancient and Historical Monuments of Scotland in 1977 (negative nos IN/3116, illus 3; and IN/3118). They also agreed to fund an archaeological assessment, the aims of which would be to define the exact position of the enclosure on the ground and to test for the presence of archaeological deposits elsewhere within the development area. The assessment excavation was carried out in December 1990 by the Archaeological Operations and Conservation unit of SDD/HBM (now Historic Scotland). Copies of the archive report have been lodged with the National Monuments Record of Scotland and with Highland Region Sites and Monuments Record.

EXCAVATION

As the main aim of the assessment was to locate but not to excavate the enclosure, five large trenches were positioned radiating out from the estimated site of the enclosure, so as to avoid penetrating its interior to any extent (illus 2 & 4). Trench III, which ran east from the enclosure, was later extended to allow fuller investigation of the features revealed. Smaller trenches were also excavated, two at the north end of the site and two south-west of the enclosure, to assess the extent of any outlying or associated features. The modern ploughsoil and colluvial plough silts below it were removed mechanically and the exposed surfaces were cleaned manually prior to detailed planning and recording. Only limited excavation was possible within the remit of the assessment. On completion of the work the trenches were backfilled and the site reinstated.

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ILLUS 1 Location map (Based on the Ordnance Survey map © Crown copyright)

ENCLOSURE

The enclosure was slightly oval rather than circular in plan, and measured some 28–30 m in diameter. Its interior was not examined and no internal features are visible on the aerial photographs. Excavation confirmed that the cropmark represented the line of a palisade which enclosed a slight knoll. This knoll (or low hill) had been more pronounced in antiquity, before sustained ploughing eroded its profile. Colluvial flow had also obscured the lower portion of its original profile and produced extensive silts up to 0.7 m thick outside the enclosure. These silts also sealed a substantial charcoal-rich layer, especially to the north and east. The palisade trench itself, examined in detail in Trenches I and II (illus 4), was stone-filled, up to 0.6 m wide and some

0.4 m deep. Although individual post positions could not be identified, the disposition and density of the large stones in its fill suggested that posts may have been inserted some 0.5 m apart. However, closer spacing of posts or even a continuous palisade is also possible. No dating evidence was found.

EXTERNAL SETTLEMENT

Traces of a settlement outside the enclosure were evident in Trenches II and III, both of which were subsequently extended. Limited excavation was carried out to allow for fuller interpretation of the buried features and for the recovery of datable samples. In Trench II the most significant discovery was that of a sub-rectangular building, one end of which was more rounded than the other; the building measured 3 m by 2 m and was aligned WSW/ENE. The walls of this structure had been contained within a continuous stone-lined slot, 0.14 m wide by 0.2 m deep. Part of a shale bracelet (illus 6) was found in its fill.

Where it was expected that the palisade trench would be located in Trench III, an area paved with sandstone slabs was found instead. This represents either the remains of a paved entrance to the enclosure or, more probably, the relict floor of a later building erected over the line of the palisade. The paving was not removed. Fragments of ferruginous slag found in a charcoal-rich layer over the paving suggest a domestic or industrial use for this tentatively identified building but, as this layer was directly under the modern topsoil, its context is not secure.

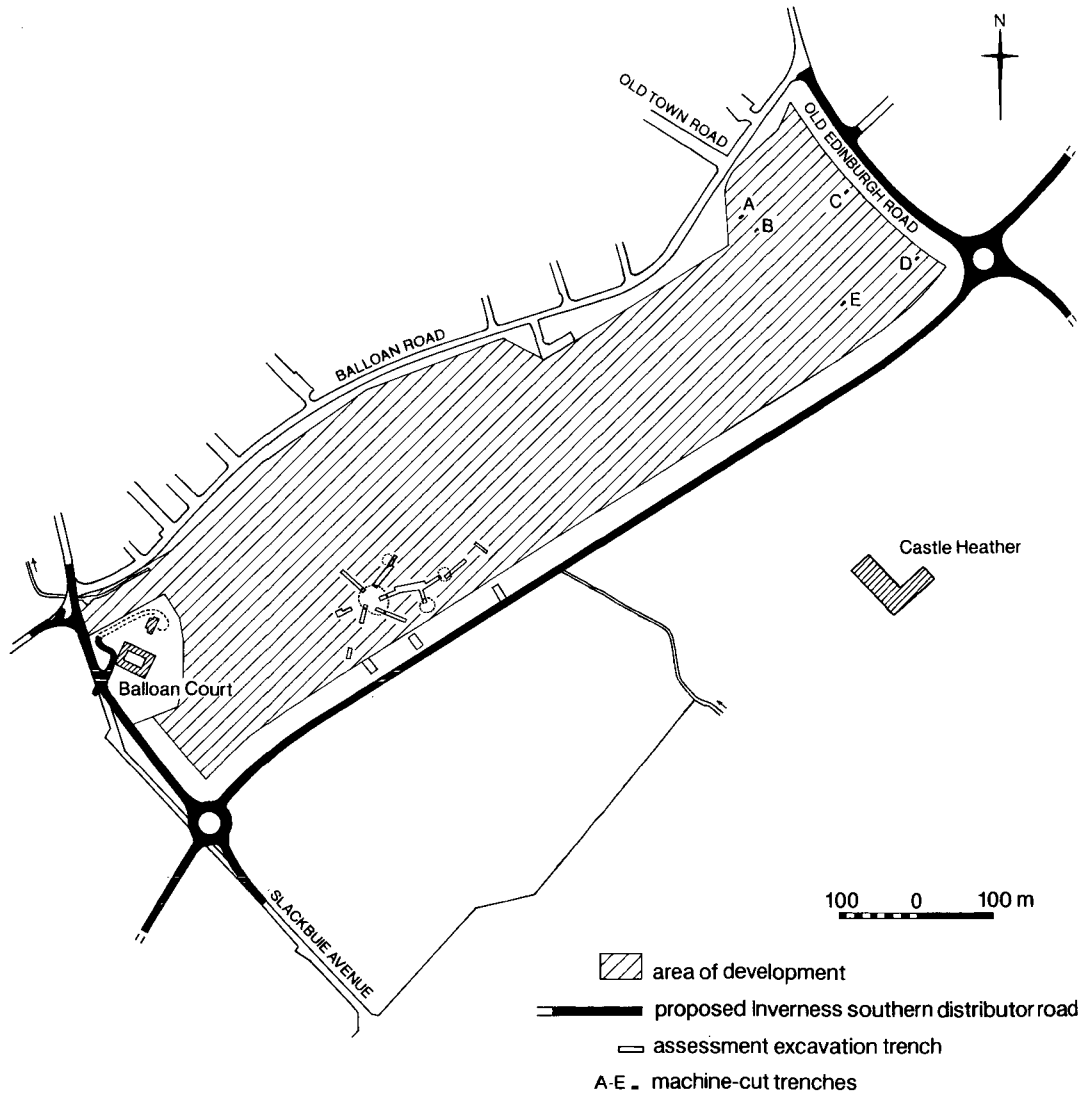
Further east in Trench III, extensive settlement remains were noted, represented variously by areas of paving, stone-lined slots, curving trenches and charcoal-rich deposits. The nature, date and function of these features could not be ascertained without fuller excavation; nevertheless, it is worth noting that the presence of both circular and rectilinear structures may be deduced with reasonable confidence.

A fragment of another palisade line, this time packed with gravel rather than stones, was found in the south extension of Trench III. Immediately to the north and running parallel to it was a line of large but shallow post-holes. Analysis of the aerial photographic evidence suggests that this fragmentary palisade may have formed part of another circular enclosure; alternatively, it may have been part of a linear feature or structure associated with the line of post-holes.

The northernmost and easternmost extent of the settlement seems to have been located in Trenches II and IX. In the latter, archaeological deposits were thin at its west end and were absent over most of its length. However, originally they may have been more extensive since the colluvium was less thick here where the ground became more level. The deposits at the north-east end of Trench II were waterlogged, although no organic deposits other than charcoal were found.

LOCHAN

The waterlogged area noted in Trench II formed part of a much larger low-lying boggy area which is illustrated as a lochan in a survey of Inverness drawn in 1725 (illus 5). This wetter area was augered for pollen and preserved palaeoenvironmental material but only a 5 mm thickness of peat was recovered. This indicates that the loch is unlikely to be more than 500 or so years old (R Tipping, pers comm).

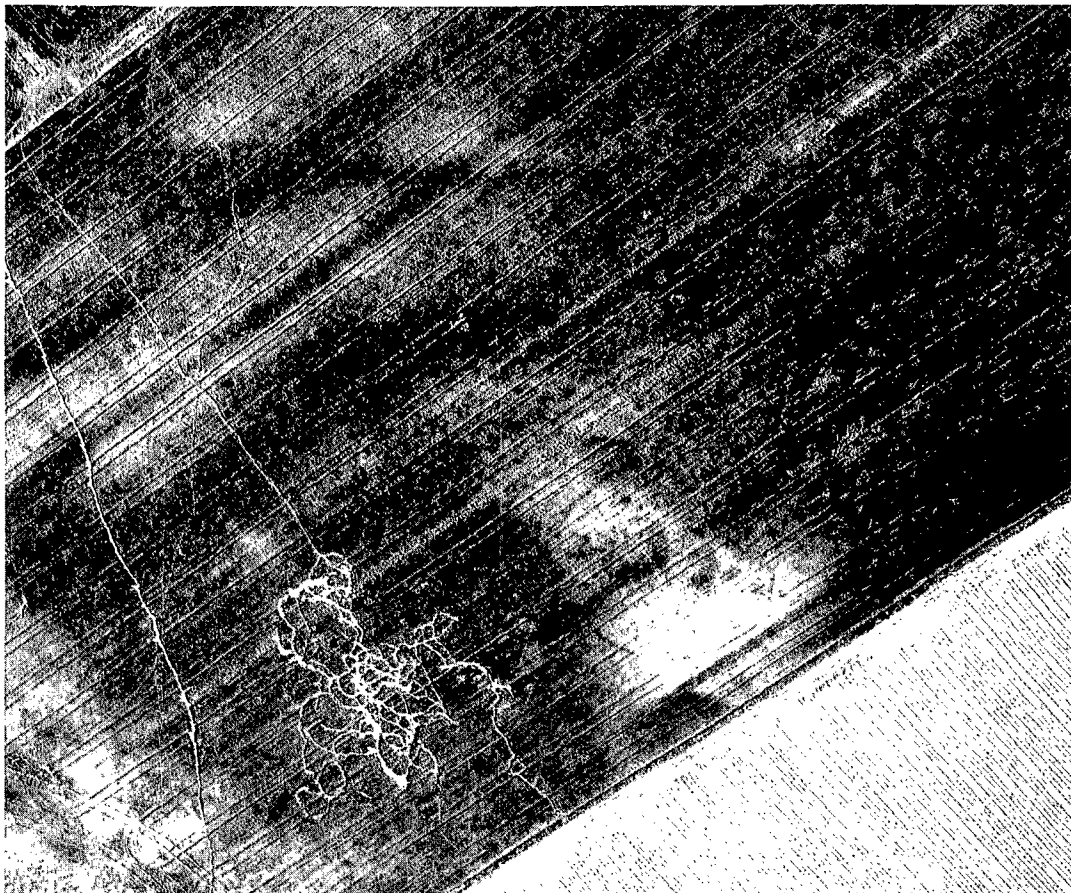


ILLUS 2 Proposed area of development and the site of the excavation

OLD EDINBURGH ROAD

Owing to the low-lying position of most of the other fields and problems of access, further trial work was restricted to the most easterly edge of the planned development, adjacent to Old Edinburgh Road. The position of the five machine-cut trenches, A–E, is shown on illus 2. Two trenches were cut across a linear ridge which proved to be the course of a route to the south. This aligned with Old Town Road and apparently linked up with Old Edinburgh Road at approximately the point where the proposed southern distributor route crosses the field. This earlier route to the south could not be dated and it does not appear on the survey of 1725 (illus 5).

An extensive deposit of gravels and silts averaging 0.7 m in thickness lay under the old road and was also present in the other trenches examined. This gravel was bottomed in Trench B where

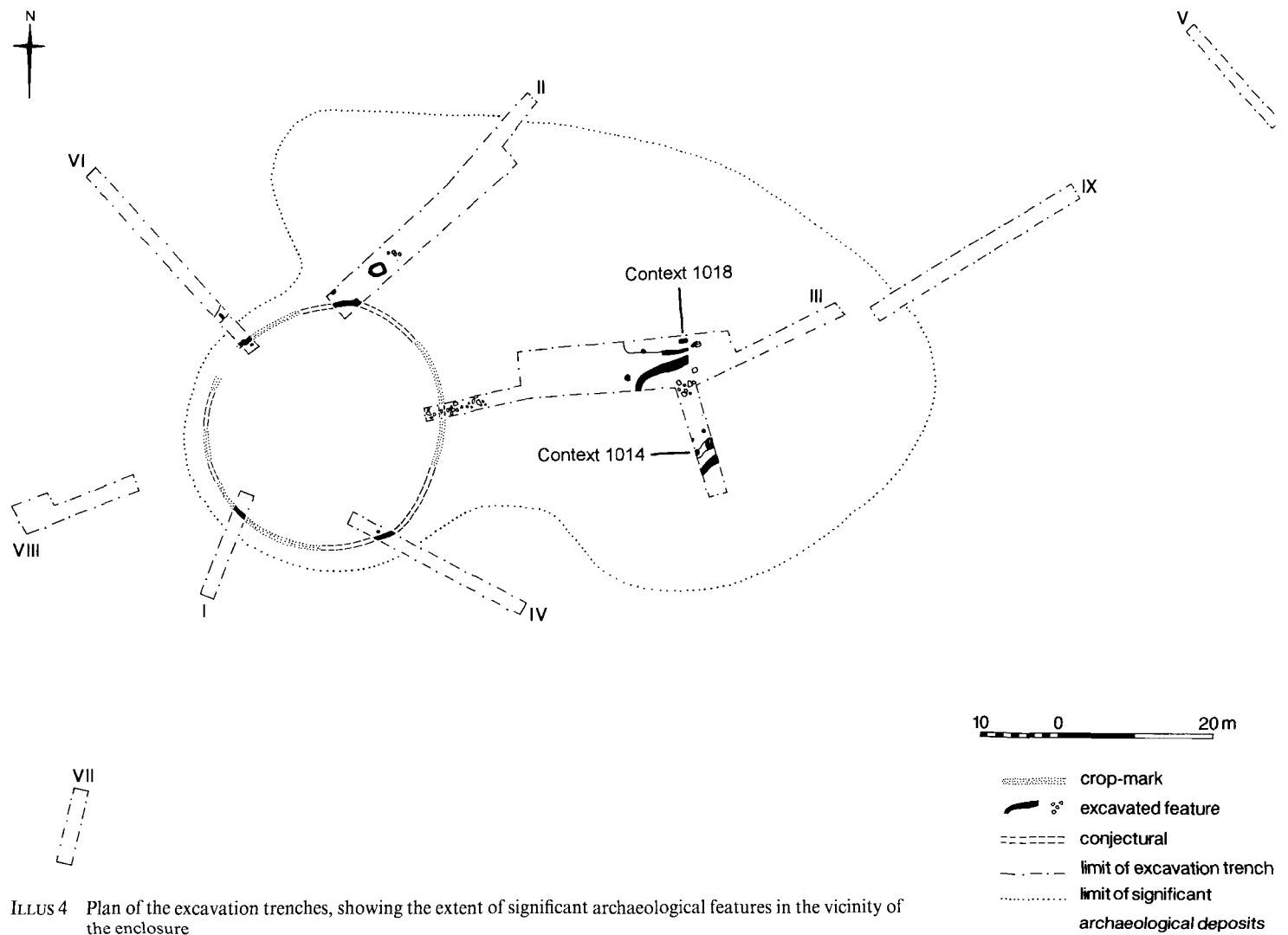


ILLUS 3 Aerial photograph showing the Balloan Park enclosure (*Royal Commission on the Ancient and Historical Monuments of Scotland, IN/3116 © Crown copyright*)

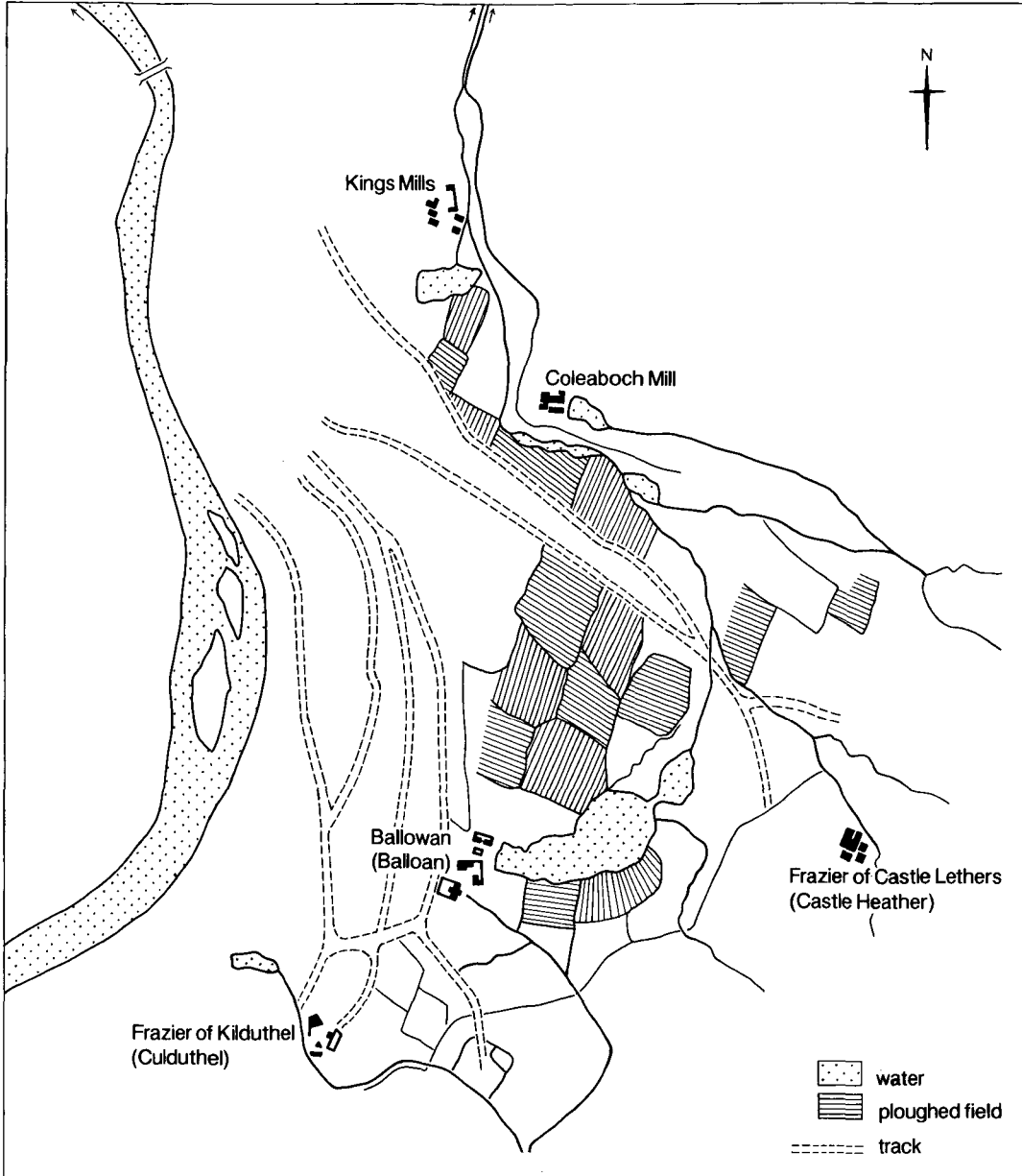
it sealed a loamy silt horizon, heavily scored by cultivation marks. This sequence is interpreted as an ancient field system, abandoned after it had been inundated by a flood (the gravels and silts). This putative flood deposited an estimated 40,000 cu m of alluvial deposit over this field alone, which may have represented a catastrophe for the farming community, whenever this event occurred.

SOUTHERN DISTRIBUTOR ROUTE

Concurrent with the investigation of the area of the proposed housing development, archaeological assessment was also undertaken on the line of the proposed Inverness southern distributor route. The results of this are reported elsewhere (Carter & Russell-White 1993). However, as three trenches along the roadline (see illus 2) were located immediately adjacent to (south and south-east of) the enclosure and associated settlement, and produced archaeological material almost certainly associated with this settlement, it seems apposite to summarize the results here. The two westernmost roadline trenches contained several shallow pits, some with charcoal, and

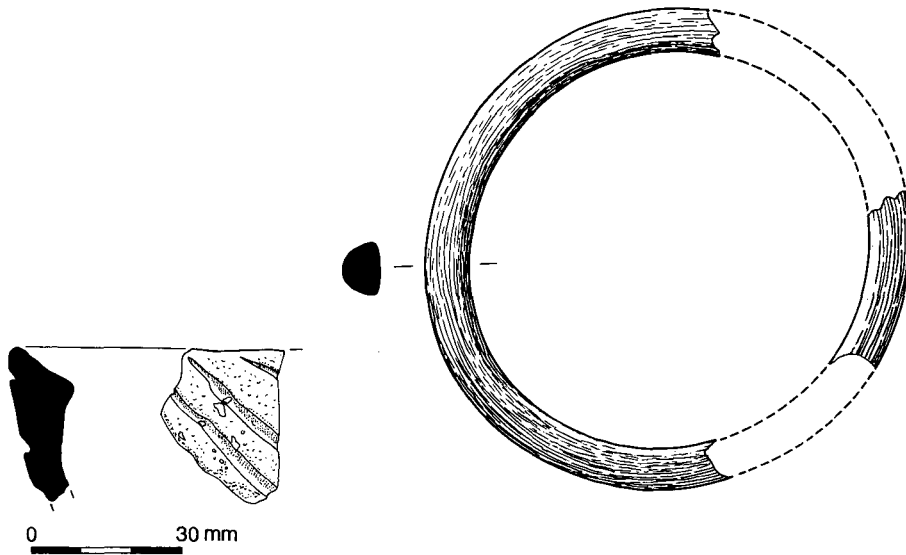


ILLUS 4 Plan of the excavation trenches, showing the extent of significant archaeological features in the vicinity of the enclosure



ILLUS 5 After 'A generall [sic] Military Survey of Inverness and the country adjacent to the foot of Loch Ness', 1725, anon. (MSS.1645 Z.2/76 © Trustees of the National Library of Scotland)

the third a small pit containing loamy silt and a flint flake. The size of the trial trenches precluded interpretation other than confirming that archaeological deposits, presumably contemporary with those to the north, also extend south and south-east of the Balloon Park settlement.



ILLUS 6 Shale bracelet and decorated sherd of pottery from a vessel rim

PALAEOENVIRONMENTAL EVIDENCE

All excavated contexts were sampled for flotation (to extract charcoal and other plant macrofossils) and for soil chemistry analysis. The pH of the archaeological soils was generally fairly neutral (6.6–7.4) which should have allowed for the preservation of bone. However, although small fragments of bone were recovered, no larger identifiable pieces were found. It is likely that the colluvial deposits sealing the external settlement had formed slowly and that the more delicate bone material was destroyed before this colluvium formed. Charred plant material was found in most samples, including both cereal and weed grains. Fragments of ferruginous slag were also found in the samples, particularly from deposits located over the paving at the west end of Trench III. No detailed analyses were undertaken of these materials.

ARTEFACTS

Apart from the ferruginous slag mentioned above, the only artefacts of note were: two flint flakes, one from topsoil and one from Trench III; part of a shale bracelet, found in the fill of the slot of the sub-rectangular building in Trench II; a fragment of decorated copper-alloy sheet, perhaps from a decorative plate, found in a probable occupation deposit in Trench III; a pottery rim sherd and a body sherd, probably from two different vessels, found in Trench IX; and a clay pipe bowl bearing the stamp J. Davidson Inverness. The artefacts have been deposited in Inverness Museum and Art Gallery.

The two rock-tempered pottery sherds include a rim sherd with an internal bevel, decorated on the exterior with oblique, incised parallel lines (illus 6). These sherds are almost certainly Bronze Age in date and their edges appear relatively unabraded (A MacSween, pers comm). The only other diagnostic prehistoric find is the shale bracelet (illus 6) but, unfortunately, this is of little help for dating: this type of artefact has a wide date range and is found in Scottish contexts from the Late Bronze Age to the post-Roman period (Kemp 1992, 42). The Balloan Park

example is D-shaped in cross-section and measures almost 100 mm in diameter which indicates that it may have been worn on the upper arm rather than the wrist.

RADIOCARBON DATES

No artefacts were found to date the main palisade and the taphonomy of the small amounts of charcoal recovered was too poor for radiocarbon dating. However, two radiocarbon samples were submitted from features in Trench III. The first derived from the charcoal-rich silty fill (Context 1014) of a broad gully in the south extension and contained hazel, oak and birch. The second derived from a deposit of fire-cracked stones and charcoal (Context 1018) within a possible rectilinear building and contained oak, birch, hazel and willow. The results of the radiocarbon assays are presented below, along with their calibrated dates (Table 1).

TABLE 1

Calibrated dates after Pearson *et al* (1986)

Sample	Context no	Uncalibrated		Calibrated	
		BP	1-sigma range	2-sigma range	2-sigma range
GU-3174	F1014	2410 ± 70 BP	570 BC–380 BC	800 BC–385 BC	
GU-3175	F1018	1920 ± 70 BP	AD 30–AD 195	60 BC–AD 240	

DISCUSSION

Cropmark aerial photography has expanded the settlement record of the north-east of Scotland, which was previously dominated by visible enclosed sites in the upland zone of survival (Jones *et al* 1993). However, the testing of sites identified by aerial photography by excavation remains rare, though it may be of real importance in interpreting these sites, as shown by the nearby excavations at the Hilton ‘pit alignments’ and the Glendruith ‘timber halls’, where the excavators found nothing to corroborate the suggestions posed by aerial photography (Carter & Russell-White 1993). The excavation at Balloan Park, while revealing little of the actual sequence and nature of occupation, was useful in providing both archaeological evidence to corroborate the interpretation of the aerial photographs, and dating evidence from the external settlement to suggest that the site was occupied sometime between the Late Bronze Age and middle Iron Age. What is clear is that an extensive settlement is located around the enclosure, especially to the north and east. The relationship of the external settlement to the palisaded enclosure remains uncertain in the absence of fuller investigations. However, on the evidence of an area of paving which overlay the presumed line of the palisade in Trench III, it seems likely that at least some elements of the settlement are later in date than the palisaded enclosure.

It is difficult to ascertain the date of the palisaded enclosure by analogy with similar excavated monuments, since only in rare cases have timber posts been burnt *in situ* within the palisades examined and, therefore, only rarely have radiocarbon determinations been possible. A date of 2615 ± 40 BP was obtained for the palisade at Craigmarloch Wood, Renfrewshire; and the palisade at Huckhoe, Northumberland, was dated to 2535 ± 40 BP (Mackie 1969, 21). At Dryburn Bridge, East Lothian, where House 2 seems to have been roughly contemporary with the palisade on the basis of its positioning and architectural details, a suite of radiocarbon dates from the house suggest a date of around the ‘middle of the earlier half of the first millennium BC’ (Triscott 1982, 123).

Single palisades have traditionally been seen as the beginning of an evolutionary sequence from unenclosed settlement to more complex systems of protected/defensive enclosures, a

hypothesis based largely on the results of excavations by Piggott (1948) at Hownam Rings. However, this hypothesis has been shown to be fallible in a number of more recent investigations: the sequence at Dryburn Bridge, for example, included the replacement of a palisaded settlement by unenclosed ring-ditch houses (Triscott 1982, 124). Interim reports of Hill's excavations at Broxmouth have also shown how complex and elaborate both occupation and defensive sequences can be (Hill 1982a). In general, palisaded enclosures do not seem to form a distinct chronological horizon, and can date from between the Late Bronze Age to the Early Historic period (Hill 1982b, 4–7). Later surveys (eg Hill 1982b, 21–2; Macinnes 1982, 66) have suggested that the evidence north of the Forth is even less clear-cut. Moreover, Ritchie (1970) has distinguished between types of palisaded site, preferring to define smaller enclosures such as Balloan Park as homesteads dating to the second half of the first millennium BC, and suggests they are later than the larger, more defensible sites. The physical situation of Balloan Park is not intrinsically defensive or easily defensible. It seems likely, therefore, that the palisade was erected either for political reasons (such as social prestige) or for functional reasons (such as an animal stockade).

Although more evidence was recovered at Balloan Park from the external settlement than from the palisaded enclosure, few firm conclusions can be reached as to the settlement's date range, or the nature of the structures and their function(s), given the limited nature of the investigation. All that can be said from the palaeoenvironmental evidence is that it is indicative of a community with a mixed-farming economy, based on crop-growing and animal husbandry. Few artefacts were recovered and fewer still can be dated diagnostically. The ferruginous slag recovered from above the paved area in Trench III, tentatively interpreted as the relict floor of a building, may indicate that an Iron Age date is likely for this part of the settlement. However, the context of the slag is relatively insecure since it lay directly beneath the topsoil. The pottery sherds found further to the east have been identified as Bronze Age in date. The balance of the scant artefactual and radiocarbon-dating evidence, alongside the probable sequence of structures recorded in Trench III, seems to indicate that the palisaded enclosure and external settlement were roughly contemporaneous, and that this site was occupied, at least periodically, over a prolonged period.

The full extent of the settlement was clearly not established as was demonstrated by the discovery of features (almost certainly related to the Balloan Park site) in three trenches along the proposed Inverness southern distributor roadline and possible cultivation evidence at the north-east of the site. Nevertheless, settlement traces were recorded over a large area, with maximum dimensions of some 6000 sq m. The effects of ploughing over centuries, as well as the encroachment of the medieval lochan, mean that the survival of archaeological deposits is likely to be fortuitous and their preservation variable. Thus the 'limit of significant archaeological deposits' as shown on illus 4 is unlikely to represent the full original extent of settlement adjacent to the palisaded enclosure, and instead indicates only what has survived in this area.

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REFERENCES

- Carter, S & Russell-White, C J 1993 'The investigation of two cropmark sites near Inverness', *Proc Soc Antiq Scot*, 123 (1993), 235–43.
- Harding, D (ed) 1982, *Later Prehistoric Settlement in South-East Scotland*. Edinburgh (= Univ Edinburgh Dept Archaeol Occas Pap, 8).
- Hill, P H 1982a 'Broxmouth Hill-fort excavations, 1977–78: an interim report', in Harding, D W (ed), 141–88.
- Hill, P H 1982b 'Settlement and Chronology', in Harding, D W (ed), 4–43.
- Jones, B, Keillar, I & Maude, K 1993, 'The Moray Aerial Survey', in Sellar, W D H (ed), 47–74.
- Kemp, M M B 1992 'Jet armlets', in Owen, O A 'Eildon Hill North, Roxburgh, Borders', in Rideout, J S, Owen, O A & Halpin, E (eds), 42.
- MacInnes, L 1982 'Pattern and purpose: the settlement evidence', in Harding, D W (ed), 57–74.
- MacKie, E W 1969 'Radiocarbon dates and the Scottish Iron Age', *Antiquity*, 43 (1969), 15–26.
- Pearson, G W, Pilcher, J R, Baillie, M G L B, Corbett, D M & Qua, F 1986 'High-precision 14C measurement of Irish oak to show the natural 14C variation from AD 1840–5210 BC', *Radiocarbon*, 28 (2b) (1986), 911–34.
- Piggott, C M 1948 'Excavations at Hownam Rings, Roxburghshire, 1948', *Proc Soc Antiq Scot*, 82 (1947–8), 193–225.
- Rideout, J S, Owen, O A & Halpin, E (eds) 1992 *Hillforts of Southern Scotland*. Edinburgh.
- Ritchie, A 1970 'Palisaded sites in North Britain: their context and affinities', *Scott Archaeol Forum*, 2 (1970), 48–67.
- Sellar, W H D (ed) 1993 *Moray: province and people*. Aberdeen.
- Triscott J 1982 'Excavations at Dryburn Bridge, East Lothian', in Harding, D W (ed), 117–24.

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