

Excavations by the late G D B Jones and C M Daniels along the Moray Firth littoral

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ABSTRACT

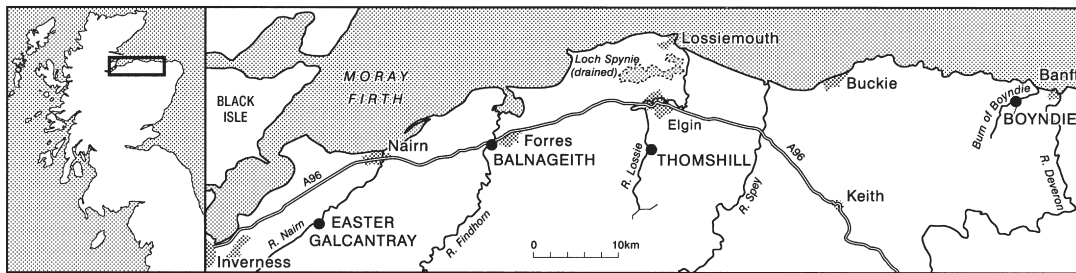
Between 1984 and 1990 the late G D B Jones and C M Daniels from the Universities of Manchester and Newcastle-upon-Tyne respectively undertook excavation at four large rectilinear cropmark sites at Easter Galcantray (Nairnshire), Thomshill and Balnageith (Morayshire), and Boyndie (Banffshire) (now Highland, Moray and Aberdeenshire Council areas respectively). This work successfully identified discrete phases of activity dating from the Neolithic through to historic times. It was the excavators' belief that the rectilinear enclosures had been Roman military fortifications relating to the Agricolan advance into north-eastern Scotland. This paper documents the evidence acquired through this fieldwork, and attempts to present and assess the interpretation which the excavators placed on their discoveries.

PREAMBLE AND CONTEXT

In 1980 Professor G D B Jones, at the invitation of Ian Keillar, visited the Moray Firth for the first time, and initiated a programme of fieldwork which continued for some 20 years (cf Keillar 1999a). The context of this work was intimately connected to Jones' controversial belief that the Roman army probably penetrated the far north-east of Scotland during the Flavian period as part of the Agricolan invasion of Scotland. Initially, fieldwork took the form of an aerial survey, but this was later supplemented by a campaign of excavation over the course of the 1980s. This work concentrated on four large, rectilinear, cropmark sites, which were considered by Jones to be morphologically unique for the area and which, due to their form, might potentially furnish direct evidence for the suspected presence of the Roman army in Moray. Initially, excavation was undertaken at Thomshill, near Elgin, by Mr Charles Daniels, of the University of Newcastle, a close friend of Professor Barri Jones, who also shared the belief that the Roman army may have entered Morayshire. Following this work, excavation directed by Jones commenced at the cropmark sites of Easter Galcantray and Balnageith, Morayshire, and Boyndie, Banffshire. Unfortunately, with the sudden death of Charles Daniels in 1996, followed by the equally sudden death of Barri Jones in 1999, their work remained largely unpublished.

In 1999 the author was invited by Historic Scotland to prepare a catalogue of the excavation archives held at the University of Manchester (Gregory 2000). Following the completion of this catalogue it was then proposed that Jones' excavations, along with the excavations of Daniels, should be brought to publication. The following account therefore attempts to bring this work to

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ILLUS 1 The location of the sites excavated by Jones and Daniels

fruition. The paper is divided into two parts. Part 1 is essentially a narrative constructed and composed very much in the manner that the excavators might have wished. The creation of this narrative was made possible by examining a variety of disparate sources. These include the available excavation archives, unpublished manuscripts and lectures, personal correspondence, and a general familiarity with particular ideas which Jones and Daniels regarded as significant to their overall interpretation of the material. This initial section, therefore, describes and documents the excavations at these four sites, and presents the site-based interpretations favoured by Jones and Daniels. The narrative then ends with a discussion set within the wider academic context which the excavators considered pertinent to their overall argument. Inevitably, many of these interpretations are controversial. Part 2 of this paper presents a brief critique of Jones and Daniels' excavations. In this section an attempt is made to present some of the problems connected with the excavators' interpretations: problems which were initially raised by other Romanists during the 1980s and 1990s (Hanson & Breeze 1991; Breeze, pers comm). In any event the account that follows provides, at the very least, some testimony to the efforts of all those who made the work possible.

Part 1

INTRODUCTION

Historically, the Laigh of Moray extends from the Deveron Valley, Banffshire, to the head of the Beaully Firth, west of Inverness, and is bounded to the south by the Monadhliath and Grampian Mountains. It is a dynamic landscape dominated, in no small measure, by both the north-easterly drainage of several major river systems, and the forces of coastal change.

The major rivers of this area include the two great spate systems of the Spey and the Findhorn, and the less substantial rivers of the Beaully, Nairn and Lossie. These rivers, whilst providing fertile ground along much of their course, in the form of alluvial silts, also share a destructive capacity for flooding, witnessed most dramatically in accounts of the great floods of August 1829 (Lauder 1830). Such episodes, characterized by the heavy deposition of fluvial gravels, appear, therefore, to have been a potential hazard to the long term stability of areas located close to the lower reaches of these rivers, and were presumably a significant influence on settlement during prehistoric and historical times.

Coastal change has also greatly influenced the character of the Moray landscape, particularly between Elgin and Beaully. Here, the evidence of raised beach deposits, such as those around Findhorn Bay and Whiteness Head, the mobile dune systems of the Culbin Sands, and

swathes of alluvial soils and mossland, found notably in the now drained Loch Spynie basin, all attest to significant episodes of coastal modification (*inter alia* Haggart 1987; Firth & Haggart 1990; Grattan 1992; Ross 1992). These changes, which are a product of fluctuating Holocene sea-levels and localized isostatic rebound, are significant, as they indicate that the coastline, and in turn areas suitable for early settlement, would have been radically different during antiquity (cf Jones *et al* 1993).

Although this landscape has been undoubtedly modified throughout the Holocene, it has perhaps always been a region that has benefited from fertile soil and, by virtue of its proximity to the coast, a mild maritime climate. The soils, which are generally light and sandy, developed over fluvioglacial sands and gravels, raised beach deposits, and alluvial silts, offer a suitable medium for both early and modern arable agriculture. These light soils are, however, extremely fragile in structure, and with deforestation and subsequent cultivation, become susceptible to the notorious ‘blows’, as they are known locally, more commonly referred to in the geomorphological literature as aeolian erosion. This landscape therefore has the potential to support a moderately dense agrarian community, and in this respect could, and indeed did in historic times, provide an alternative and independent power base quite separate from the rest of lowland Scotland (cf Keillar 1993; Foster *et al* 1998).

In view of the potential evidence for early settlement that could be recovered from this environment, and with a personal interest in the extent of Roman military penetration in the north-east, Barri Jones undertook preliminary fieldwork in Moray in 1980. In 1982, initial aerial reconnaissance and preliminary ground survey were undertaken, during which time the potential significance of the site of Thomshill was recognized. In 1984 a more rigorous campaign of aerial reconnaissance was initiated with the formation of the Moray Aerial Survey Group. This privately-financed venture allowed the completion of an aerial survey by Jones across the Moray littoral, primarily between Balloch near Inverness, in the west, and Elgin, in the east. Aerial reconnaissance took its most concerted form between 1984 and 1991, although further sporadic flying seasons were carried out between 1994 and 1998. Methodologically, the survey was based from the outset on systematic reconnaissance at annual optima, followed by a more localized level of reconnaissance, based upon a number of criteria which included climatic factors, agricultural land-use, and even light conditions. Undoubtedly, the main success of this survey was the discovery of a high concentration of later prehistoric and early historic cropmark sites across the region. Moreover, it was suggested that this new data allowed the identification of the principal later prehistoric settlement nuclei and their satellite arrangements of lesser settlements, associated field systems and cemeteries (cf Jones *et al* 1993).

Another important element of this research, however, was the recognition of a number of sites that appeared significantly different from the mass of later prehistoric and early historic material, and which exhibited morphological traits more commonly associated with Roman military works. With their own interest in Roman military archaeology it was these sites — the four rectilinear enclosures at Thomshill, Easter Galcantray, Forres and Boyndie (illus 1) — which formed the basis for excavation by Daniels and Jones, with excavation teams assembled from the Universities of Manchester and Newcastle.

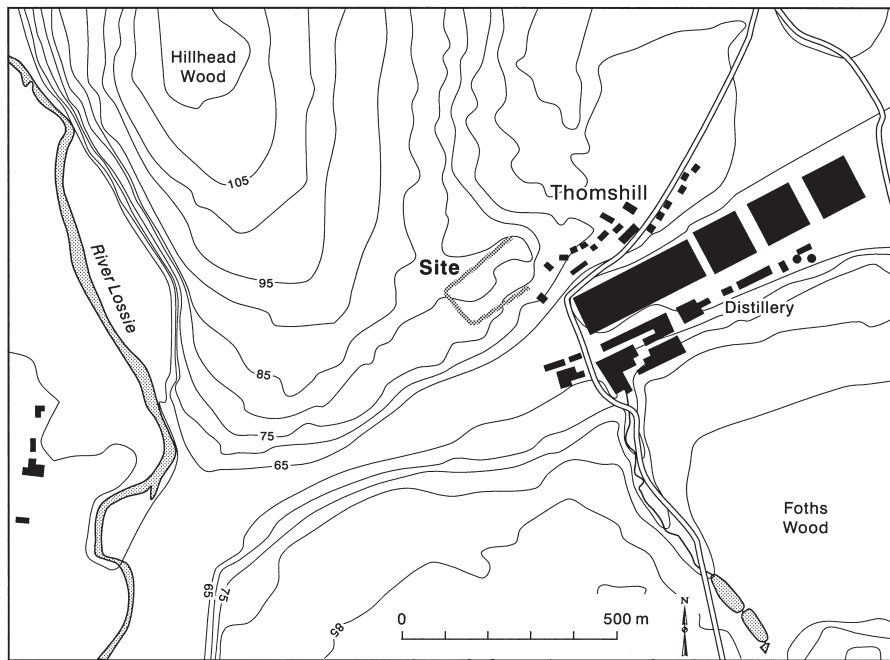
THOMSHILL

DISCOVERY AND DESCRIPTION

In 1980 Jones and Keillar noted through ground observation, the presence of a faint L-shaped cropmark (NGR: NJ 210 573) close to the village of Thomshill, 6 km south of Elgin (Daniels *et*



ILLUS 2 Thomshill. (Photograph courtesy of the G D B Jones Estate)



ILLUS 3 The location of Thomshill. (Based on the Ordnance Survey map © Crown copyright)

al 1985). Jones and Keillar suggested that these apparent remains might represent those documented earlier by the Rev George Gordon in the *New Statistical Account* (NSA, 86), as 'rectangular trenches, or, as some may say, a Roman *castra* at the Foths'. In July 1982 this potential archaeological site was confirmed through aerial photography undertaken by Ian

Shepherd as part of the Aberdeen Archaeological Survey, whilst aerial survey in 1984, by the Moray Aerial Survey Group, further defined the morphology of the site (illus 2) (Daniels *et al* 1985; Daniels 1986). These combined surveys revealed three sides of a rectangular ditched enclosure located on an eroded spur, which now overlooks a dry river valley, dominated in recent times by two large whisky distilleries (illus 3). The spur is composed of unstable fluvio-glacial sands termed the Boyndie Series, which are notoriously susceptible to erosion and accretion by aeolian action. Presumably this pedological instability explains the apparent erosion of the site and the presence, within the eastern sector of the enclosure interior, of a large sandy accumulation that has now stabilized into a substantial dune (cf Grattan 1992).

THOMSHILL — EXCAVATION

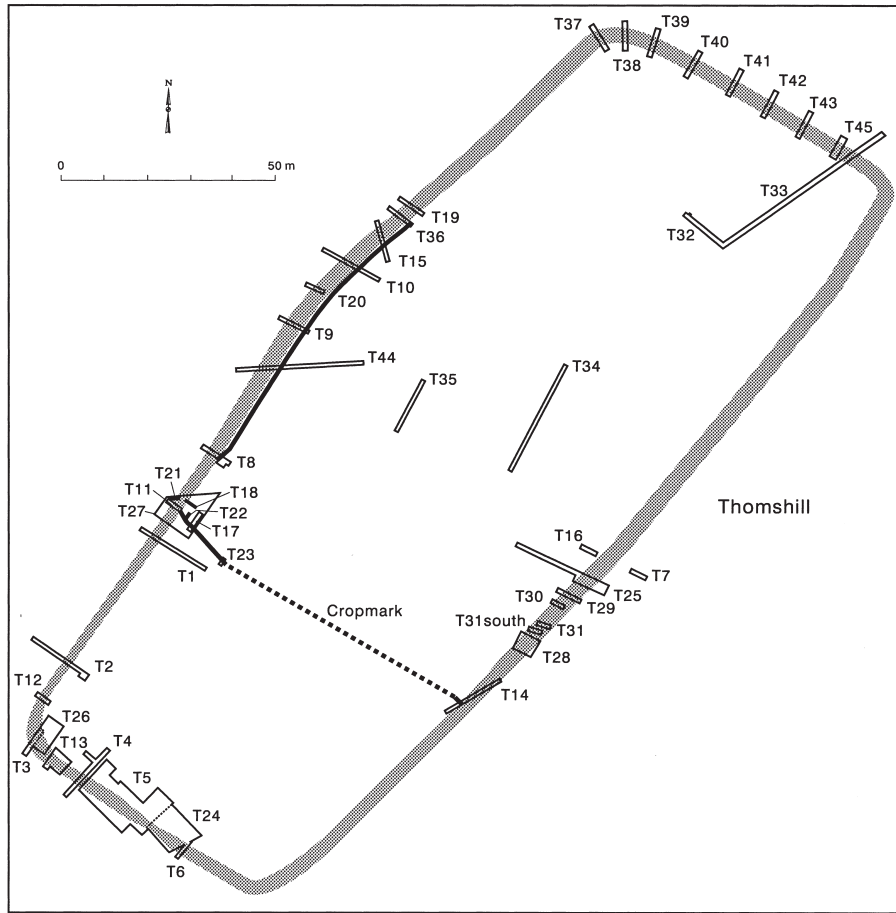
In September 1982 trial excavation close to a modern track was undertaken, with the positioning of a single trench across the north-western ditch of the rectilinear enclosure (Keillar 1983). On the basis of this work Daniels undertook further investigation at the site between 1985 and 1990 in an attempt to clarify the function and the date of the enclosure (illus 4). In 1985, 17 trenches were excavated along the north-western, south-western, and south-eastern sides of the enclosure, whilst six trenches were located within the enclosure interior. In 1986, a further nine trenches were excavated of which trench 27 covered an area partially exposed by trenches 11, 17, 18, 21 and 23 during the 1985 season. In 1988 an L-shaped trench (32 & 33) was excavated in an attempt to locate the north-eastern side of the enclosure. A final season of excavation was undertaken in 1990. Two trenches (34 & 35) were cut into the south face of the sandy hillock found in the interior of the site in order to ascertain its nature, and whether there were any archaeological, as opposed to geological features, still surviving in or under it. A further eight trenches (trenches 37–43, 45) were also positioned over the presumed line of the north-eastern enclosure ditch.

The enclosure ditch

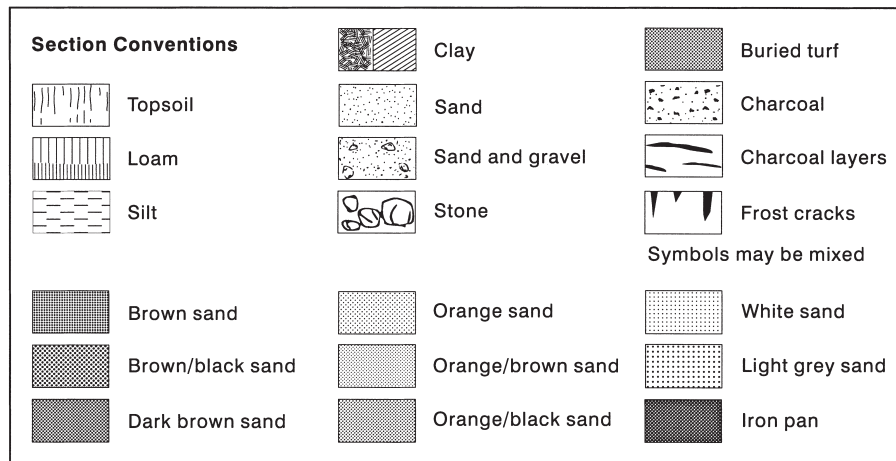
The north-western enclosure ditch was exposed in 12 places, and was fully excavated in five trenches (trenches 1, 2, 8, 9 & 10). In all excavated sections the ditch was found to have a V-shaped profile, with a well-defined sump, or cleaning slot (illus 6 & 7). The character of the deposits found within the ditch was also comparable along this side of the enclosure:

The ditches were cut through sand, though there was some gravel, and the bottom slot and part of the profile was filled with some small stones and silt. Above this were accumulated layers of clean sandy material. At this point the overall plan of the earthwork's ditches would still have been visible at ground level, thus allowing the record in the *New Statistical Account* to be made. Later mixed deposits through agriculture and weathering were overlain by plough-soil with a mixture of charcoal, stone, and rubbish from middens. The ditches finally disappeared after a heavy ploughing had cut into the natural subsoil and in places removed the upper profile of the ditches, as well as the rampart and internal buildings (Daniels *et al* 1985, 8).

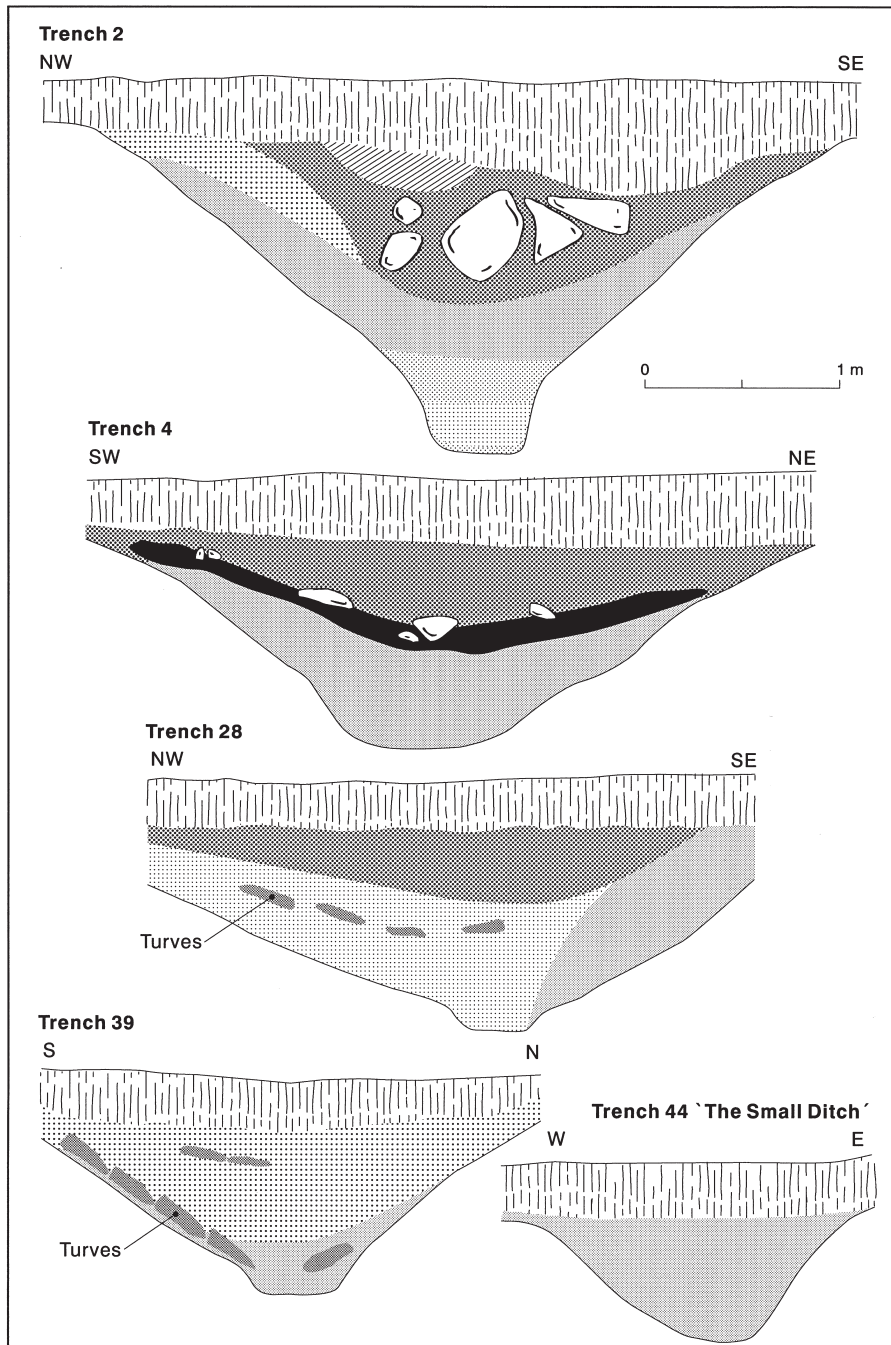
Trenches 3, 4, 5, 6, and 13 confirmed the position of the western corner and south-western side of the enclosure. Trench 26 was positioned on the western corner of the enclosure, and indicated that this corner was rounded rather than angular in plan. Where examined, the enclosure ditch was found to have a slightly differing form and constitution to that recorded on the north-western side of the enclosure (illus 6). The ditch, although V-shaped, was generally flat-bottomed, and was found in trench 5 to contain a considerable quantity of stone in its upper levels, which may possibly represent deliberate back-fill. Within trenches 4 and



ILLUS 4 The Thomshill enclosure and trench location



ILLUS 5 Section conventions



ILLUS 6 Ditch sections



ILLUS 7 Ditch section trench 8.
(Photograph courtesy
of the C M Daniels
Estate)

5 a number of possible post-holes were also recorded located close to the inner edge of the enclosure ditch. These features appear, however, to have been heavily truncated, being only c 0.3 m at their greatest depth.

Along the south-eastern side of the enclosure seven trenches (14, 25, 28, 29, 30, 31, 31S) confirmed the position of the ditch. The enclosure ditch was sectioned in trenches 25 and 28. In trench 25 the ditch was found to be c 3.7 m wide and c 0.9 m deep with a V-shaped profile, and was filled with varying layers of sand. Trench 28 was of similar dimensions and shape, but was found to have a clearly defined cleaning slot at its base (illus 6). The fill of the ditch was largely composed of sand layers, which were interspersed in places by a series of decomposed turfs.

The north-eastern side of the enclosure was established through the positioning of nine trenches (trenches 33, 37–43, 45). The ditch in this sector, although heavily truncated by both wind erosion and ploughing, was found in trenches 37, 38 and 39 to have a clear V-shaped profile with a pronounced cleaning slot (illus 6). The ditch was also found to contain a sand in-fill, with some evidence for a turf revetment on the inner edge of the ditch. Presumably this revetment would have stabilized the ditch profile when the ditch was originally open. In trenches 40 and 41 the V-shaped enclosure ditch had been clearly truncated by a later feature. This feature probably represents a later ditch, but its length must have been relatively short as it was only located within these two trenches. The ditch profiles in the remaining trenches on this side of the enclosure had been severely eroded, and as a consequence the V-shaped form had been reduced to a more ‘bag-shaped’ profile.

The small ditch

Running parallel to, but inside, the enclosure ditch another smaller ditch, or slot, was initially detected on the north-western side of the enclosure, running for a distance of at least 100 m (illus 4 & 6). The relationship of this feature to the main enclosure ditch was established through the excavation of trench 27. Here the main enclosure ditch was found to cut the smaller ditch, indicating that this slot was an earlier feature.

Trench 14 was positioned at an oblique angle over the south-eastern side of the presumed line of the enclosure boundary. This trench exposed the main enclosure ditch, and also exposed another smaller ditch, or slot, running perpendicular to the enclosure ditch. Closer scrutiny of the available aerial photographs indicates that this ditch probably links to the smaller ditch recorded on the north-western side of the site in trench 27. The relationship between this feature and the south-eastern enclosure ditch was not, however, completely established, but it was argued that this smaller ditch was possibly re-cut at some stage.

Interior features

A number of pits were identified in the interior of the enclosure. These features were, however, rare and were confined to trenches 8, 27 and 32. These features also appear to be relatively recent in origin. For example, a pit in trench 8 was found to cut both the main enclosure ditch and the smaller slot feature, and its ashy fill suggested that it was a modern feature, probably associated with refuse disposal. Similarly in trench 27 two pits were filled with ash and charcoal, whilst a pit exposed in trench 32 was found to contain an iron object reminiscent of recent agricultural scrap.

Two trenches (34 & 35) were cut into the south face of the sandy hillock found in the interior of the site (illus 2 & 4). These trenches indicated that the mound was a natural sand dune which had probably evolved over the last 500 years as the result of sand blows lifting and depositing sand off the surrounding landscape (Grattan 1992). At a relatively recent date, very likely contemporary with the construction of the Glenlossie Distillery, considerable amounts of sand had been dug from the mound and the resultant pits left open. Later, household and other rubbish had been dumped into these pits forming deposits 1–2 m in depth. It was assumed that the removal of sand from the rear of the mound, and the addition of refuse, had contributed to the mound's present resistance to wind erosion.

THOMSHILL — INTERPRETATION

The excavations at Thomshill successfully identified three main phases of activity on this eroded spur site. The earliest phase is represented by a slight, sand-filled, ditch. This ditch, which has presumably suffered from both natural and anthropogenic erosion, was found to run in a north-westerly/south-easterly direction until it was cut by the north-western boundary of a larger enclosure, clearly visible as a cropmark. A further section of shallow ditch, very similar in character, was also identified running parallel to, and inside, the north-western boundary of the larger enclosure. Although the precise relationship between these two ephemeral ditches was not established it is possible, based upon the similarities in form, depth and fill, that these two features were contemporary. This may imply an early phase of enclosure on the spur. The precise date of this event is not clear as no finds or suitable carbon samples were retrieved. It seems probable, however, because this ditch shares an alignment with the main enclosure ditch, that the time lag between the two phases of enclosure was not great.

The next phase saw the construction of a large rectangular ditched enclosure, initially recognized by aerial survey. The enclosure ditch was identified through excavation on all four sides of the enclosure, and was found to have a V-shaped profile with a clearly defined ditch sump, or cleaning slot, in a number of the sections examined. Its depth, however, varied considerably. Although truncated, the better preserved sections were located on the north-western, south-western and south-eastern sides of the enclosure, whilst on the north-eastern side the ditch appears to have been severely reduced in size. This apparent truncation was attributed to modern ploughing, combined with soil erosion through aeolian action. Indeed, this erosion was evident while excavation was in progress as 15 cm of wind blown sand was found to have accumulated against the modern field boundaries. This visible erosion prompted a geomorphological investigation of the spur, to assess potential erosion rates. This led Grattan (1992) to calculate, through examination of ground levels north and south of a modern track bisecting the site and the relative depth of the surviving enclosure ditch, that as much as 1 m of soil may have been lost since the construction of the rectangular enclosure on the south-western side, with up to 2 m of soil erosion on the north-eastern side. Much of this eroded sand, particularly on the north-eastern side of the site, may then have accumulated to form the large sandy hillock located within the eastern sector of the enclosure interior. Once formed, however, this mound appears to have escaped the ravages of the plough, allowing a cover of gorse and turf to develop, which effectively

stabilized this natural feature. The extent of this soil erosion is of some significance, and appears to have had a major, destructive, influence on the archaeological deposits of this area.

Inevitably, attempts at assigning a precise function and date to the enclosure also become difficult, particularly as no direct dating evidence was recovered from the enclosure ditch. The majority of small finds were unstratified, being confined to the ploughsoil. On the whole these consisted of late 19th- to early 20th-century material probably derived from the spreading of night-soil and other domestic refuse. Although there were no useful finds, both Keillar (1983) and Daniels (1986) were convinced that the site represented a Roman military work, possibly of Agricolan date. This argument was based on various topographical and morphological traits (see Discussion). In short, these include: the siting of the enclosure; the plan of the enclosure, with its rounded corners; and the apparently characteristic Roman profile of the enclosure ditch. If this argument is accepted, the enclosed area of c 1.75 hectares (4.32 acres) would, as Daniels *et al* (1985) suggest, probably be too small to represent a temporary camp, particularly when its size is compared with the other known camps in north-eastern Scotland (Auchinhove c 14 ha; Muiryfold c 44 ha; Ythan Wells 1 c 45 ha; Ythan Wells 2 c 14 ha; Durno c 58 ha). It is, however, possible that it was a camp comparable in size to the smaller Stracathro-type camps observed in Scotland (Maxwell 1980). Indeed, Daniels *et al* (1985) argued that the site's closest parallels were with certain Flavian forts, such as Fendoch (Richmond & McIntyre 1939), Barochan Hill (Keppie & Newall 1997) and Loudoun Hill (St Joseph 1952). Although controversial, this interpretation does seem possible, due to the size and morphology of the enclosure, and the form of the enclosure ditch. Erosion at the site, however, appears to have destroyed any shallow internal features, such as building foundations, which were originally contemporary with the enclosure. It is, therefore, possible that the site may represent a rare example of a single ditched fort comparable in some way to other single ditched forts known from Scotland, most notably Fendoch (Richmond & McIntyre 1939). If this interpretation is correct this potential fort, at c 1.75 hectares, may have been designed to house a *quingenary* unit (Daniels *et al* 1985).

A final phase of activity detected by excavation is evidenced by the numerous pits located across the spur. Many of these, based upon their actual survival, fills and associated finds, are potentially modern features. Presumably they relate, in some measure, to refuse disposal similar to that examined to the rear of the stabilized dune found within the enclosure interior.

EASTER GALCANTRAY

DISCOVERY AND DESCRIPTION

In 1984 aerial survey by the Moray Aerial Survey Group focused on an area close to the western end of the Moray littoral, between the towns of Forres and Inverness. As part of this survey an examination of the lower reach of the Nairn valley was completed, extending roughly from the Clava Cairns, in the upper Nairn, to the southern suburbs of the town of Nairn, 2 km south of the present coastline. Within this corridor Jones and Keillar (1985) documented a variety of cropmarks, but placed particular emphasis on an apparent concentration of sites found between Cawdor and Easter Galcantray. In this area they documented several probable later prehistoric settlements, which they suggested may have been contemporary with an unexcavated fort (NGR: NH 838 476) found above Dallaschyle Wood, known locally as Dun Edin. This site is located on a dominant outcrop, c 207 m OD, and commands extensive vistas over Cawdor, Kilravock Castle, Holme Rose and Easter Galcantray.

Closer to the River Nairn, 300 m due north of the farmhouse of Easter Galcantray, Jones and Keillar (1985) noted the presence of a peculiar cropmark site (NGR: NH 810 483). At a

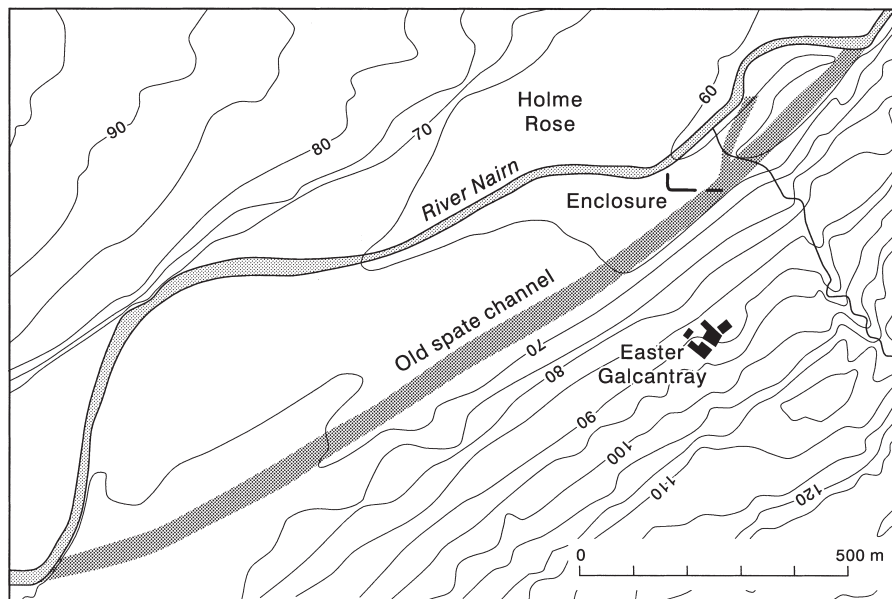


ILLUS 8 Easter Galcantray. (Photograph courtesy of the G D B Jones Estate)

position adjacent to the southern bank of the River Nairn cropmarkings were identified which suggested the presence of a rectangular ditched enclosure, measuring approximately 138 m by 40 m (illus 8). Further scrutiny of the aerial photographs indicates that the enclosure had a rounded south-western corner, and a centrally placed entrance on its southern side (illus 9). It was this site which formed the basis of Jones' subsequent research, between 1985 and 1990.

THE EFFECTS OF RIVERINE EROSION AT EASTER GALCANTRAY

An integral element of Jones' initial work was to place the enclosure in its topographical and geomorphological setting. From this initial examination it soon became clear that the site, and its immediate environs, had suffered from extensive riverine erosion, as the course of the Nairn at Easter Galcantray appears to have changed on numerous occasions. In this context, it is perhaps worth noting that the root of the name Galcantray was probably derived from the Irish Gaelic the 'place of two streams' (Jones & Keillar 1985). This may imply that at certain times the river formed vagrant channel systems during periods of heavy discharge, and in turn these channels may well have contributed to surface erosion in this area. Ross (1986) subsequently examined the extent of this erosion and its effects at the site. He observed that the site stands on the second terrace of the Nairn, 7.5 m above present river level. He assumed that this location would have been highly susceptible to extreme spate flood events, such as those documented in August 1829 (Lauder 1830) and July 1956 and, therefore, noted that:

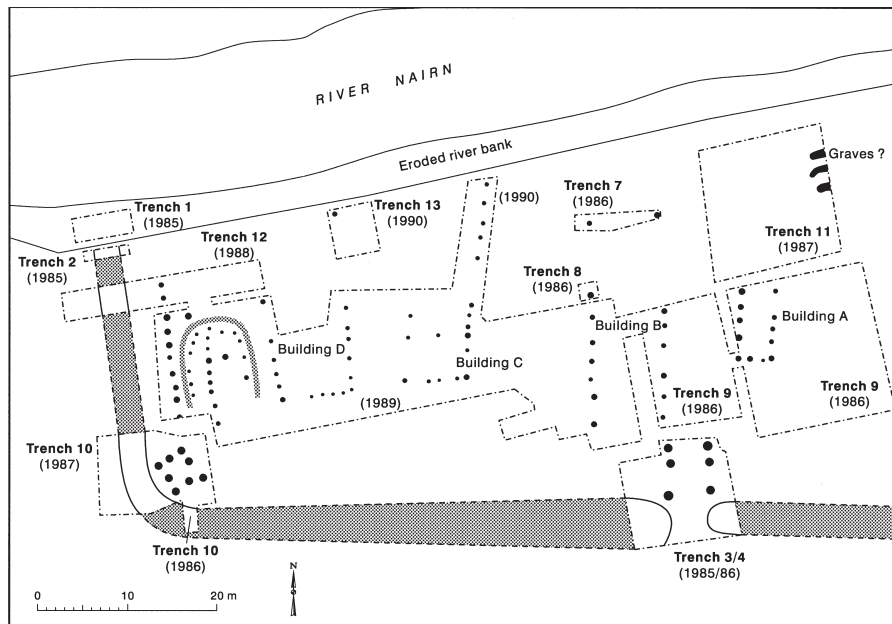


ILLUS 9 The location of the enclosure at Easter Galcantray. (Based on the Ordnance Survey map © Crown copyright)

evidence of past flood damage can still be seen where the river has gradually swung across the lowest terrace, eroding this away completely in the north-west flank of the site until . . . it began to undermine the second terrace causing part of the site to be washed away (Ross 1986, 2).

Ross (1986) then argued that once the meandering stream had cut into the second terrace, a bank of sand and gravel 7.5 m high would have been left across its path, which was no longer protected by the lower river terrace. Ross (1986) assumed that this bank stood at one time close to the critical point of the river meander, and as a direct result a substantial northerly portion of the site was cut away during a high magnitude flood. The date of this main phase of river erosion is not clear, but Ross (1986) suggested, through correspondence with a previous landowner of Easter Galcantray farm, that it must pre-date the 1956 flood, and was perhaps attributable to the great flood of 1829. It is known that the 1829 flood had disastrous consequences for landholders in this area as seen in the writings of Lauder (1830, 60), who comments that:

Fifteen acres of valuable land at Cantray being entirely swept away. The gardens of the Mansion House at Cantray covered by sand: roods of the walls demolished and the house of the miller and gardener inundated and ruined. The greater part of the low ground of Holme [Rose] together with the offices and mills flooded, with three feet of water measured in the stables. The access bridge over the Nairn to Holme [Rose], with a 55 foot span, entirely carried away — here the river was 100 yards wide. The house of a tenant farmer on the Haugh of Culbeg on Kilravock estate flooded to a depth of 5 feet, his entire farm covered by water and all his crops washed away . . . Kilvarock bridge was swept away and here the river shifted into a former channel and cut down so quickly that when the floodwaters receded it kept to this channel and the pre-flood line was deserted.



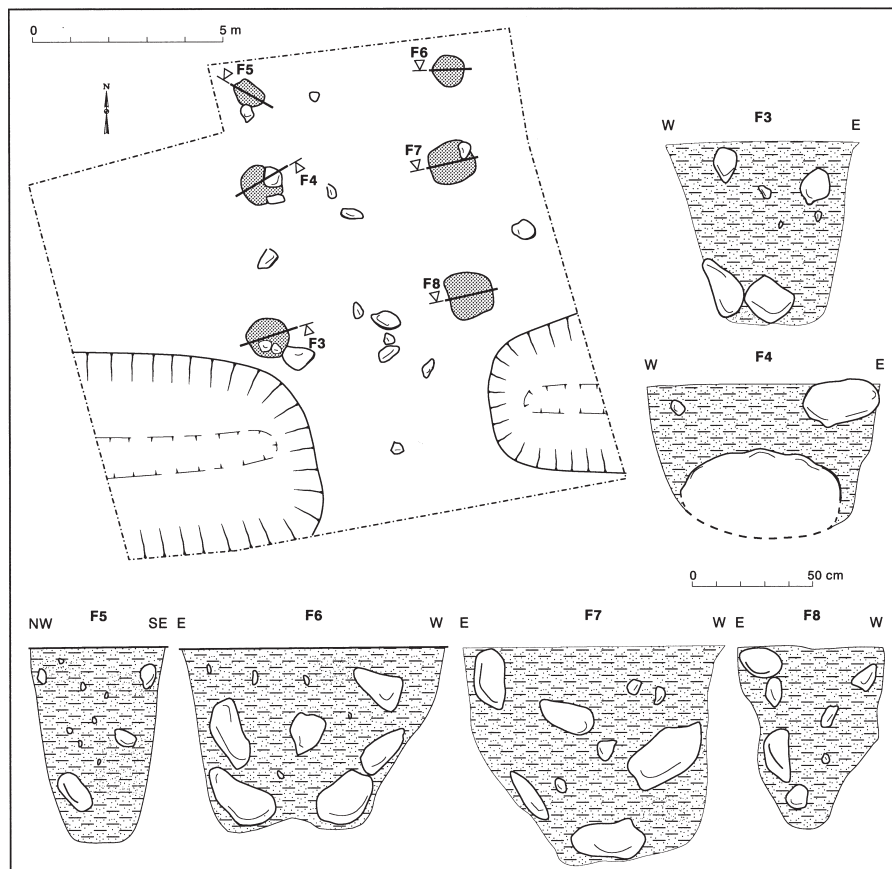
ILLUS 10 The location of excavation trenches at Easter Galcantray

These extreme flood events may also explain other riverine features close to the enclosure. The most notable of these is a former flood channel, which runs in a straight line from a bend 2 km upstream near Balfreish, passing south of Rosevalley farmhouse, and skirting the south of the enclosure before rejoining the normal course of the river just downstream of the site. The channel, which is up to 100 m wide, has been cut into the top of the second terrace almost down to the level of the first (5 m lower), whilst a side channel appears to cut across the south-east corner of the enclosure (Ross 1986). The dates of these channels are not known, but Ross (1986) suggested that the width and smoothed contours of the main channel indicate that it is of considerable antiquity. It is therefore possible that this channel was already a dry hollow when the enclosure was constructed, perhaps enhancing the defensive position of the site. The minor channel, however, must post-date the enclosure and could be attributable to the great flood of 1829. Further erosion in this area would have occurred, however, during the flood of 1956 when the river flooded through these relict channels for 2–3 days.

The present location and size of the enclosure have therefore been considerably modified by a series of extreme flood events. Indeed, it is possible that the site was once located on a prominent spur overlooking the Nairn, whilst its original size was presumably much larger.

EASTER GALCANTRAY — EXCAVATION

After the initial identification of the enclosure at Easter Galcantray a programme of excavation was undertaken with the aim of defining the function and date of the site (illus 10). Excavation of the site began in 1985, with the placement of five evaluation trenches. Trench 1 took advantage of the eroded riverbank in order to examine the western ditch of the enclosure, whilst a further section of the western ditch was exposed in trench 2. Trenches 3, 4 and 5 were positioned over the western ditch terminal at the entrance, and within the immediate interior of the enclosure (Jones 1986b). In 1986 open-area excavation proceeded (Jones

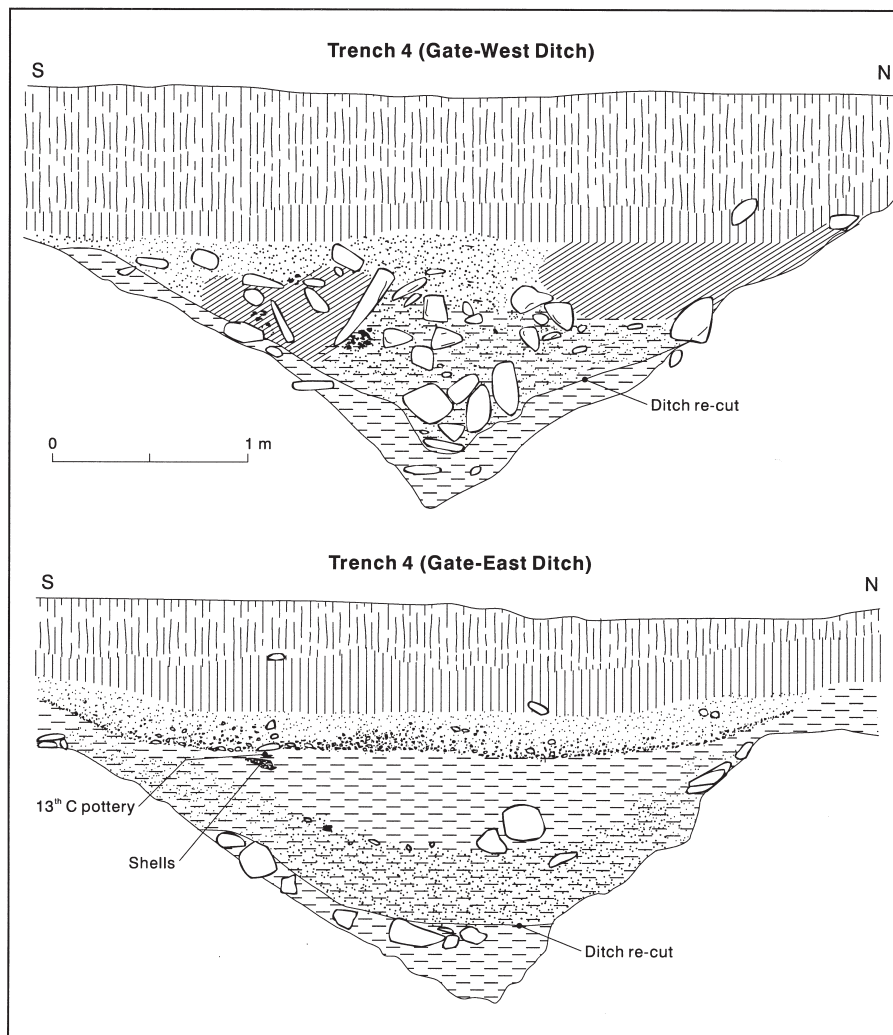


ILLUS 11 The enclosure entrance

1986a; 1987). Excavation of the entrance was completed by extending trenches 3, 4 and 5. This enlarged trench (3/4) exposed both ditch terminals, and a possible gateway. Four further trenches were positioned in the interior of the enclosure directly behind the entrance (trenches 6, 7, 8 & 9). A further section across the enclosure ditch was also examined, close to the south-western corner of the enclosure (trench 10). During the 1987 season trench 10 was extended to expose the complete south-western corner of the enclosure, whilst a further trench (trench 11) was positioned in the eastern portion of the enclosure interior (Jones 1988). In 1988 excavation of the south-west corner was completed and a large trench (trench 12) was positioned to its north. This trench examined a further section of the western enclosure ditch and the western interior of the enclosure (Jones 1989). During 1989, trench 12 was extended to link with trench 6 as a means of examining a further portion of the enclosure interior. 1990 marked the final season of excavation and saw the further extension of trench 12 northwards along a potential building line, and the excavation of trench 13, close to the eroded riverbank.

The enclosure entrance

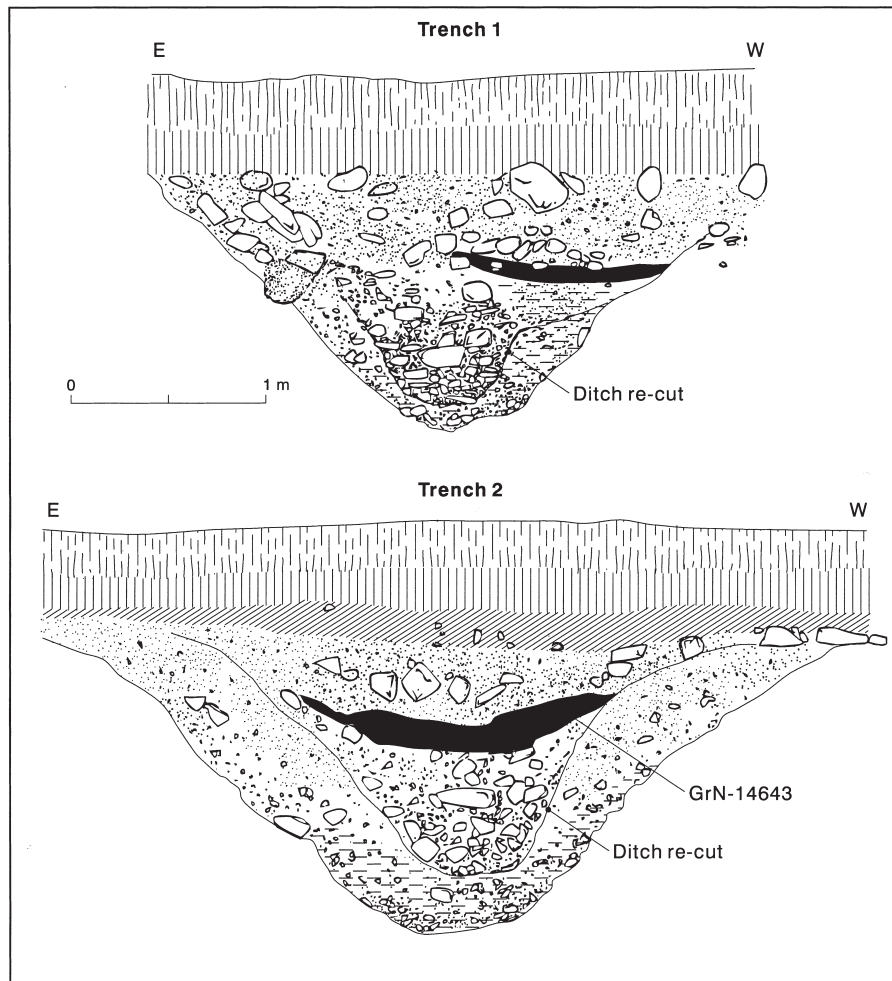
Excavation over the break in the enclosure ditch, visible on the aerial photographs, exposed two ditch terminals, confirming the existence of an entrance into the enclosure, which was c 4.5 m wide (illus 11). The fills of both terminals were comparable, suggesting a similar sequence of events (illus 12).



ILLUS 12 Sections of the ditch terminals at the enclosure entrance

The western ditch terminal was V-shaped in profile, being c 4 m wide and c 2 m deep from present ground level. The sump of the ditch was filled by two silt layers; Jones (1986a; 1986b) suggested that after this initial in-filling the ditch then appeared to have been re-cut, as a secondary sump was identified in the uppermost silt layer. The re-fashioned ditch was then sealed by a layer of brown/black sandy soil, interspersed with clay layers, charcoal and large stones. Jones (1986a) interpreted this layer as evidence of an intentional episode of back-filling with material derived from the rampart of the enclosure. A layer of brown loam, located directly beneath the topsoil, was then found to seal this demolition deposit.

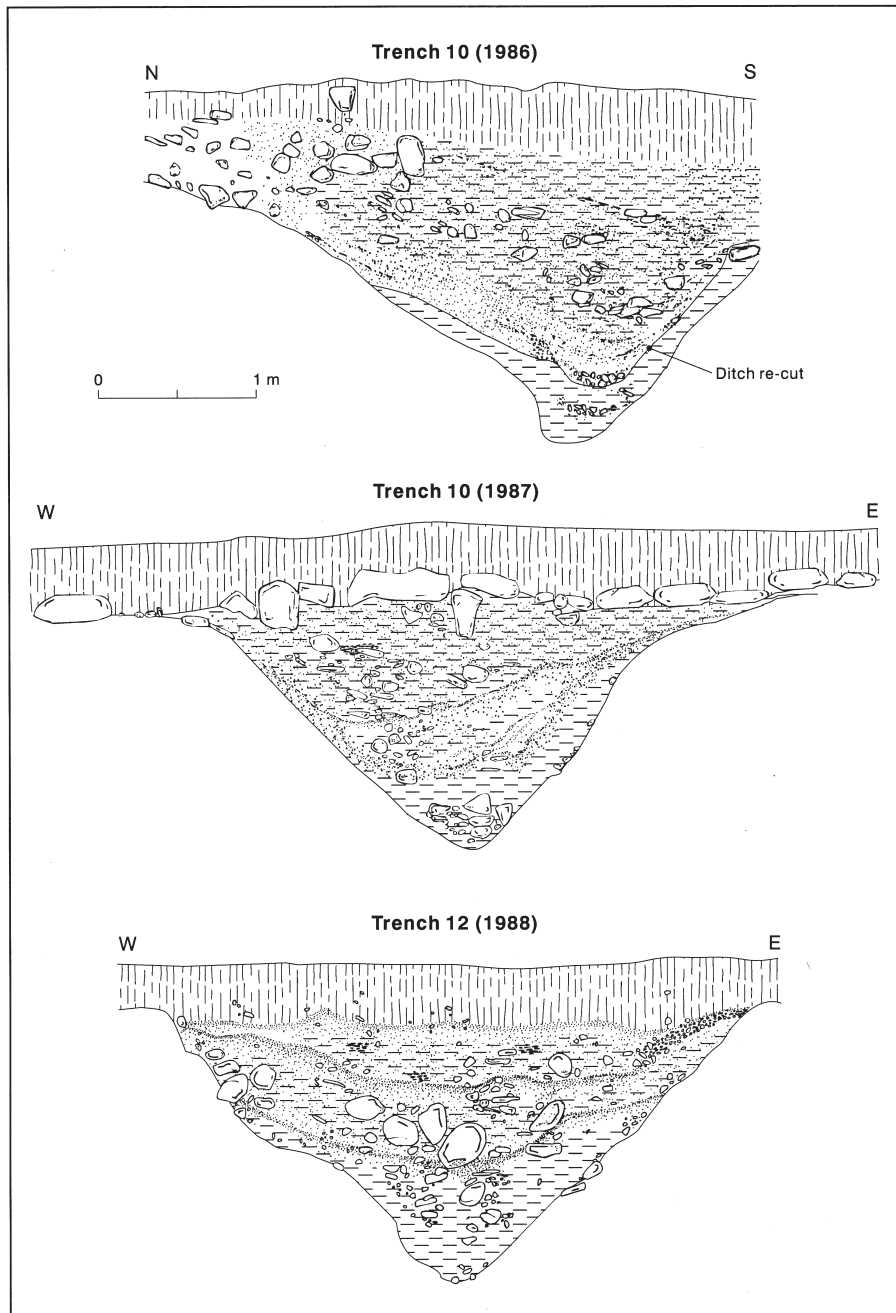
The eastern ditch was also V-shaped in profile, measuring c 3.5 m wide and 1.9 m deep. The lowest fill of the ditch was found again to be silt, which appeared to have choked the ditch sump. Evidence for re-cutting in this ditch was less clear than in the western terminal, as no secondary sump could definitely be identified. Sealing the silt layer, however, was the sandy-brown/black soil, interspersed with some large stones and flecks of charcoal, which Jones (1986a) argued was comparable to the back-filled layer identified in the western terminal. The ditch then appeared to have been naturally in-filled, as a silt layer was identified



ILLUS 13 Ditch sections from trenches 1 and 2

sealing the brown/black sandy layer. With the ditch completely levelled, Jones (1986a) then suggested that it was slightly truncated in its upper levels by a spate event, as water-laid stones were identified covering the deposits. This evidence of flood deposition sealed the remains of two thin stratified layers containing some charcoal and a sherd of gritty orange pottery. This sherd of pottery was subsequently dated to 1300 ± 140 AD (Dur87TL-2AS) by thermoluminescence.

Directly behind the ditch terminals six large, plough-damaged, post-pits were also identified (F3–8). These were arranged in a rectangular formation, which Jones (1986a) argued was indicative of the remains of a timber gateway (illus 11). Of the post-pits found flanking the western line, the largest was located nearest to the western ditch terminal. In section this post-pit (F3) was found to be cut to 0.75 m below the subsoil surface, whilst its diameter was c 0.8 m at the subsoil level, narrowing to c 0.35 m at the base of the feature. A second post-pit (F4) was positioned c 2 m to the north. Its diameter was fractionally under 1 m. Unfortunately, a chock-stone some 0.52 m across jammed in position in the middle of the post-pit proved impossible to move. The overall dimensions of this feature could therefore not be established. Post-pit F5 lay a further 1.9 m into the interior and was 0.55 m in diameter, with a depth below the subsoil surface of 0.8 m. The eastern post-pits were of similar form and spacing. Post-pit F6 had a diameter of c 1.1 m and was



ILLUS 14 Ditch sections from trenches 10 and 12

0.75 m deep; post-pit F7 was c 1.1 m in diameter, with a depth of c 0.9 m; whilst post-pit F8 was c 0.6 m in diameter with a depth of 0.75 m below natural.

The western enclosure ditch

Over three seasons of excavation five further sectors of the western enclosure ditch were excavated. In 1985, following the initial excavation of the entrance, the enclosure ditch was examined in trenches 1 and 2 located close to the eroded riverbank. Both trenches revealed a large ditch with evidence of a single re-cut.

Trench 1 was positioned where the cropmark of the western enclosure ditch met the eroding bank of the River Nairn (illus 10). At this point the steeply-eroded bank was cut back to obtain a section (illus 13) and here the ditch was found to:

reach a depth of approximately 1.9 m below reconstructed ground level. The primary ditch, which may be estimated to have been at least 3.8 m across in its initial form, was cut down through the horizontal beds of sand, pebble and gravel . . . [It] had clearly suffered, as was to be expected in such a difficult sub-soil, from fast silting with small pebbles . . . Refurbishment of the ditch appears to have been designed primarily to create an improved sump, and this development appears to have taken place soon after the initial construction of the ditch (Daniels *et al* 1985, 11).

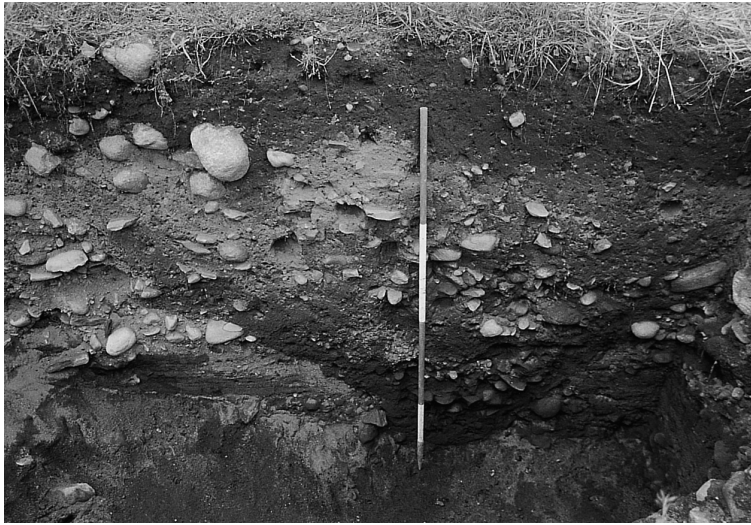
Daniels *et al* (1985, 12) then noted that the refurbished ditch was subject to discrete episodes of infilling:

The ditch sump was allowed to fill with medium and large stone. On top of this a 0.2–0.3 m dump of brown/black soil probably derives from out thrown rampart material. This was then overlain by a level of charcoal, which has parallels in other ditch sections recovered from the site. This may be taken to derive either from scantling of the demolished rampart, or it may represent the remains of demolished internal buildings. Above this a further 0.5 m of earth and stone built up in the ditch.

Trench 2 was positioned 2 m south of trench 1 (illus 13), and here it was argued that a similar stratigraphic sequence to that recorded in trench 1 could be observed (Daniels *et al* 1985). The large primary ditch was c 4 m wide, and was 1.9 m deep below the present topsoil, and it showed evidence of an initial infill attributed by Daniels *et al* (1985) to natural erosion and slippage. The ditch was then re-cut, which effectively reduced its width to c 3.2 m, and its depth to 1.6 m. The re-cut ditch then appears to have been filled by a layer of fallen boulders and silt. A curving layer of charcoal, 0.19 m in depth, then sealed this deposit. This burnt layer was interpreted by Daniels *et al* (1985) as a primary phase in the demolition of the site. A bulk sample was extracted for radiocarbon dating, and produced a determination of 1880 ± 20 BP (GrN-14643, cal AD 80–220 (2 sigma): Table 1). The charcoal layer was then sealed by a sandy-brown/black soil, interspersed with large stones, clay and charcoal flecks. As in trench 1, this was interpreted as rampart material that had been shunted into the ditch during the abandonment of the enclosure (Daniels *et al* 1985). A layer of brown loam, found directly beneath the topsoil, finally sealed the remnants of the in-filled ditch.

TABLE 1
Radiocarbon dates from Easter Galcantray

Lab No	Context	Uncalibrated determination	C^{13}/C^{12} ratio	Calibrated date range (1 σ)	Calibrated date range (2 σ)
GrN-14643	Bulk sample retrieved from charcoal layer in enclosure ditch (trench 2). Charcoal not identified.	1880 ± 20 BP	–25.0‰	AD 80–130	AD 80–220
GrN-15935	Bulk sample from charcoal layer in pit F232 Charcoal not identified.	4545 ± 30 BP	–25.0‰	3360–3120 BC	3370–3100 BC



ILLUS 15 Ditch section from trench 10 (1986).
(Photography courtesy of the G D B Jones Estate)

In 1986 a further ditch section was examined close to the south-western corner of the enclosure (trench 10). Here the ditch was found to be 4.2 m wide and 2.25 m deep below present ground level (illus 14 & 15). The sump of this ditch was filled with two layers of sandy/silt, but these layers were later truncated by a phase of re-cutting producing a re-fashioned ditch with a depth of 1.9 m. This secondary ditch, whilst containing a thin layer of silt on its inner side, was predominantly filled by a sandy-brown/black soil, containing some large stones, which was interpreted as back-filled rampart material (Jones 1986a). The denuded ditch was then finally filled with a sandy/silt layer producing a level profile.

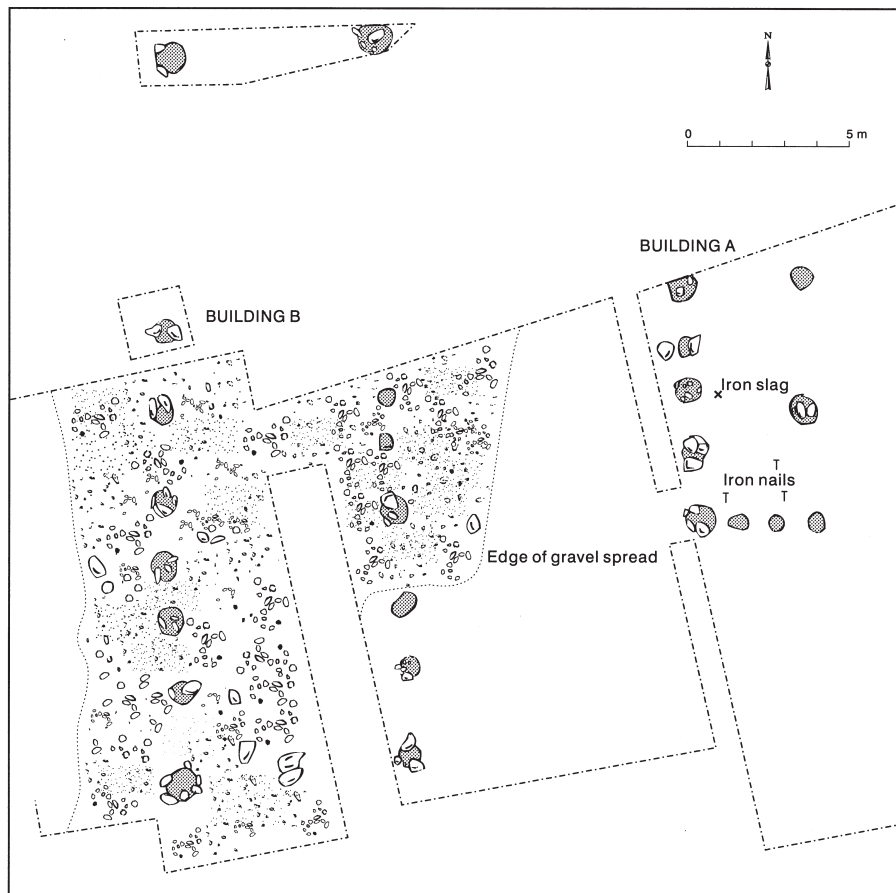
Two further sections were examined in 1987 and 1988 with the extension of trench 10 and the excavation of trench 12 (illus 14). Both ditch sections were of similar form, being V-shaped in profile and measuring c 3.5 m wide by c 1.6 m deep. The evidence for a secondary re-cutting of the ditch appears to be absent, however, in the recorded sections. The ditch sumps were initially filled by a silt layer containing some large stones, and were then sealed by a sandy-brown/black layer, containing large stones and charcoal. Presumably this layer corresponds with the back-filled layer noted by Daniels *et al* (1985) in the other ditch sections from the site. In trench 10, a layer of large river cobbles was found finally to cap the in-filled ditch, and it is possible that this layer was placed intentionally as part of the destruction of the enclosure.

Timber buildings in the interior

Over the course of five seasons' excavation Jones identified a number of heavily truncated pits within the interior of the enclosure. These pits were associated, in most cases, with quantities of sizeable stone located either at the edges, or within, the feature fills. Jones (1986a) viewed this association as clear evidence for the presence of post-pits, or post-pads, within the enclosure interior. He further argued (Jones 1986a; 1988) that, due to the apparent spacing and alignments of these features, four rectilinear timber buildings could be identified (Buildings A–D).

Buildings A and B were located to the north of the enclosure entrance (illus 16). In describing their discovery Jones (1986a, 13) noted that:

Particular attention focussed in 1986 on recovering and identifying any building plans that might survive in the interior. To achieve this three large trenches were laid out to either side of the presumed internal road running from the gate. Partial traces of a gravelled interior survived, but the



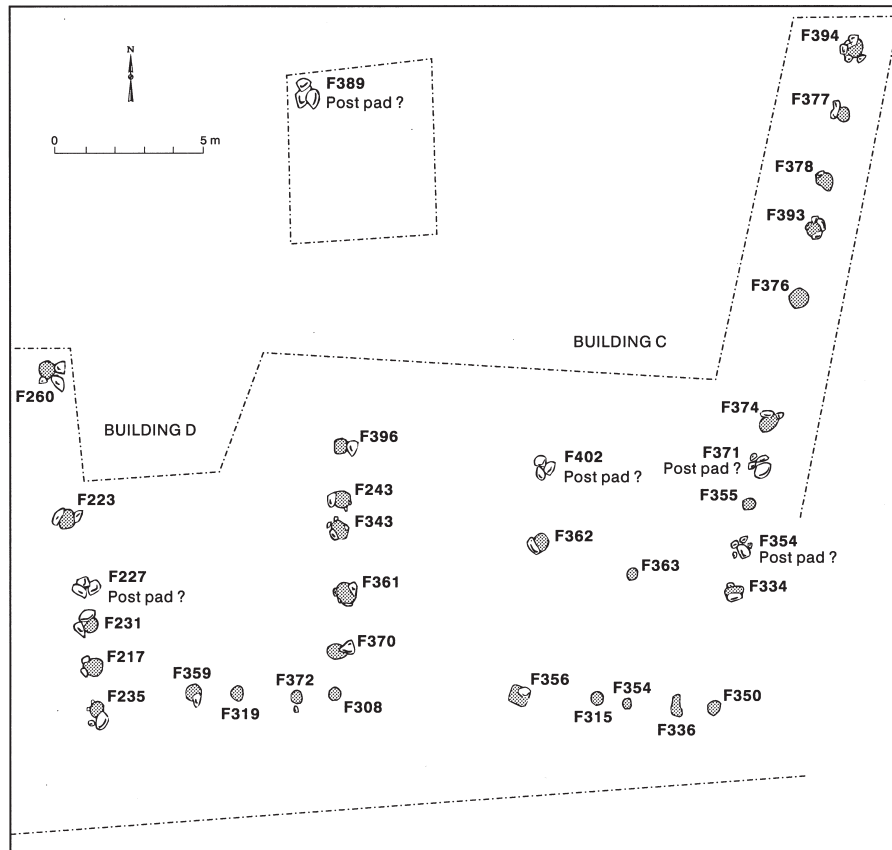
ILLUS 16 Buildings A and B

thinness of the topsoil affected the clarity of recognition. To the east, however, two lines of substantial post-holes were recovered forming the southern end of a rectilinear building whose width was probably 4.1 m [Building A]. The post-holes [had] substantial chock-stones indicating the presence of the post-pit from a higher level. Bent nails indicating demolition were recovered from this structure along with fragments of iron slag. Daub was also recognized in this area.

To the west the remains of a very substantial structure were recovered in the form of two lines of massive chock-stones representing post-holes or post-pads . . . The eastern run of post-holes was found to continue in a trial trench where the profile of a square timber post was recovered. The timber impression was set amidst the chock-stones and it may be assumed that this building extended north/south for a distance of at least 25 m towards the River Nairn.

As an addendum to this description, it should be noted that the retrieved nails and slag were from the ploughsoil, and were thus connected to buildings A and B by proximity rather than stratification. These finds, however, were probably not intrusive, as post-Medieval finds from the site were rare.

Unfortunately the date of these potential buildings could not be ascertained. Jones (1986a, 13) argued, however, that they might be contemporary with the enclosure ditch and entrance as:

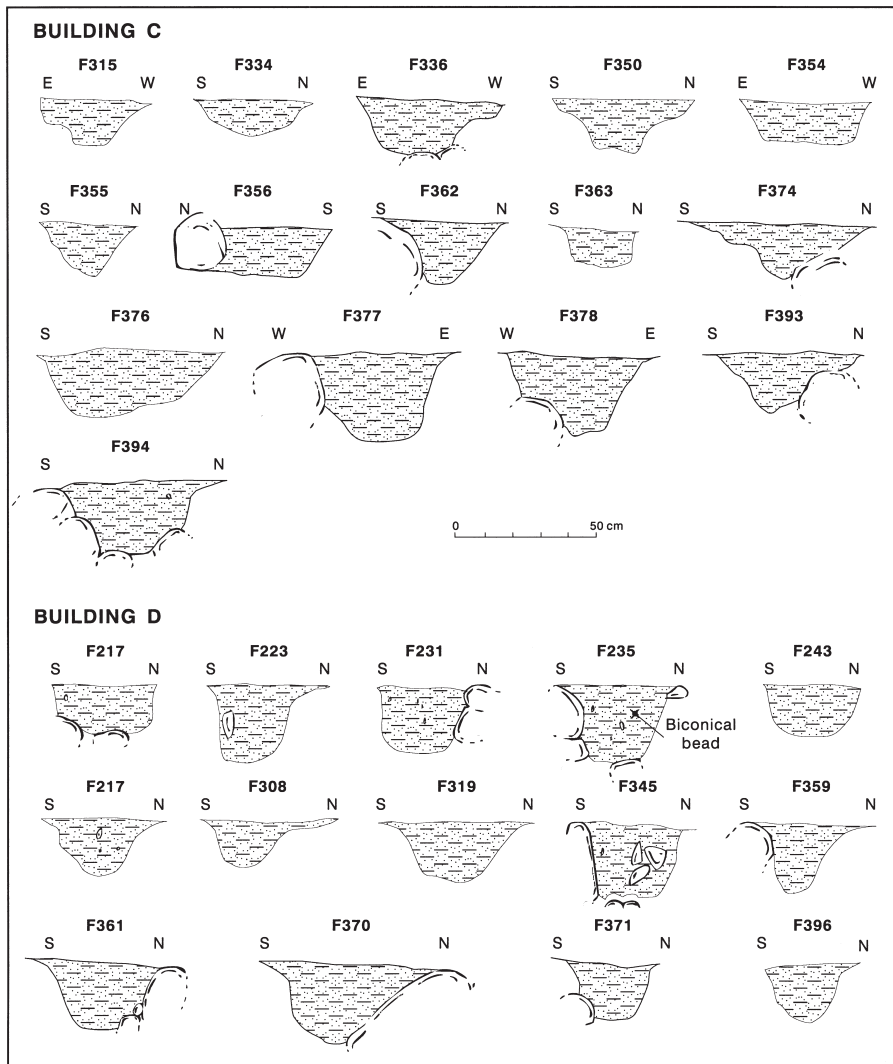


ILLUS 17 Buildings C and D

The alignment of the defences, the gateway and the two timber buildings recovered either side of a central road all follow the same axis to within a degree.

Between 1987 and 1990 two further timber buildings were identified in the eastern sector of the enclosure interior (Buildings C & D). As with the structures to the west these were defined by a series of probable post-pits (illus 17 & 18). Building C was rectilinear in form, measuring c 7 m across at its southern end. The length of this building could not, however, be determined, but a run of post-pits exposed on its eastern side suggests that it was over 24 m in length. Jones (1988) also noted a number of post-pits within the interior of the structure, which he interpreted as evidence of internal divisions. Unfortunately, the date of this structure remains ambiguous as no datable material was directly associated with the building, but its alignment may suggest that it was contemporary with the enclosure.

Building D was of similar form and size. The southern end of this rectilinear structure was c 7 m wide, with a minimum north-south length of 20 m. With the excavation of one of the southern post-pits (F235) a blue glass bead was recovered from the feature fill (Jones 1988). This bead has a diameter of 11–11.5 mm, a height of 4.5 mm and a central boring 4.6–4.8 mm in diameter (illus 19). In describing this artefact Fraser Hunter (letter from Hunter to Gregory, 6/09/01) notes that it is a:

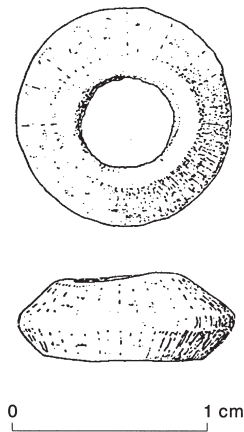


ILLUS 18 Sections from buildings C and D

Thin biconical dark blue translucent glass bead, slightly tapering in section, with abrasion around the perforations from wear against other beads in a necklace.

He further suggests that:

Such beads have a broad date range from the Roman Iron Age to the Norse period. Guido (1978, 97; 1999, 52) quotes parallels from Roman and Early Historic contexts, while cognate types are known from Norse contexts (eg Arbman 1940, Taf 121, 8b). Most of the examples Guido discusses are rather thicker, but this would seem to be a variant of the same, undiagnostic, type.



ILLUS 19 Biconical bead

It is therefore possible, given the long currency of manufacture of this artefact type, that Building D, at least, was contemporary with the enclosure ditch.

The south-western corner

In 1987 trench 10 was extended in order to examine the south-western corner of the enclosure (illus 20 & 21). In this sector the enclosure ditch was found to be capped with large river boulders, whilst directly behind the ditch an extensive spread of smaller cobbles was encountered. Jones (1988) interpreted this spread of stone as the base of the enclosure rampart. Within this layer Jones (1988; 1989) recognized eight post-pits arranged in a rectangular formation, measuring 4.6 m by 4.9 m. The post-pits were generally of similar dimensions being c 0.9–1 m in diameter and c 0.5–0.6 m deep (illus 20). Jones (1988) interpreted these features as the remnants of an angle-tower, positioned directly at the corner of the enclosure.

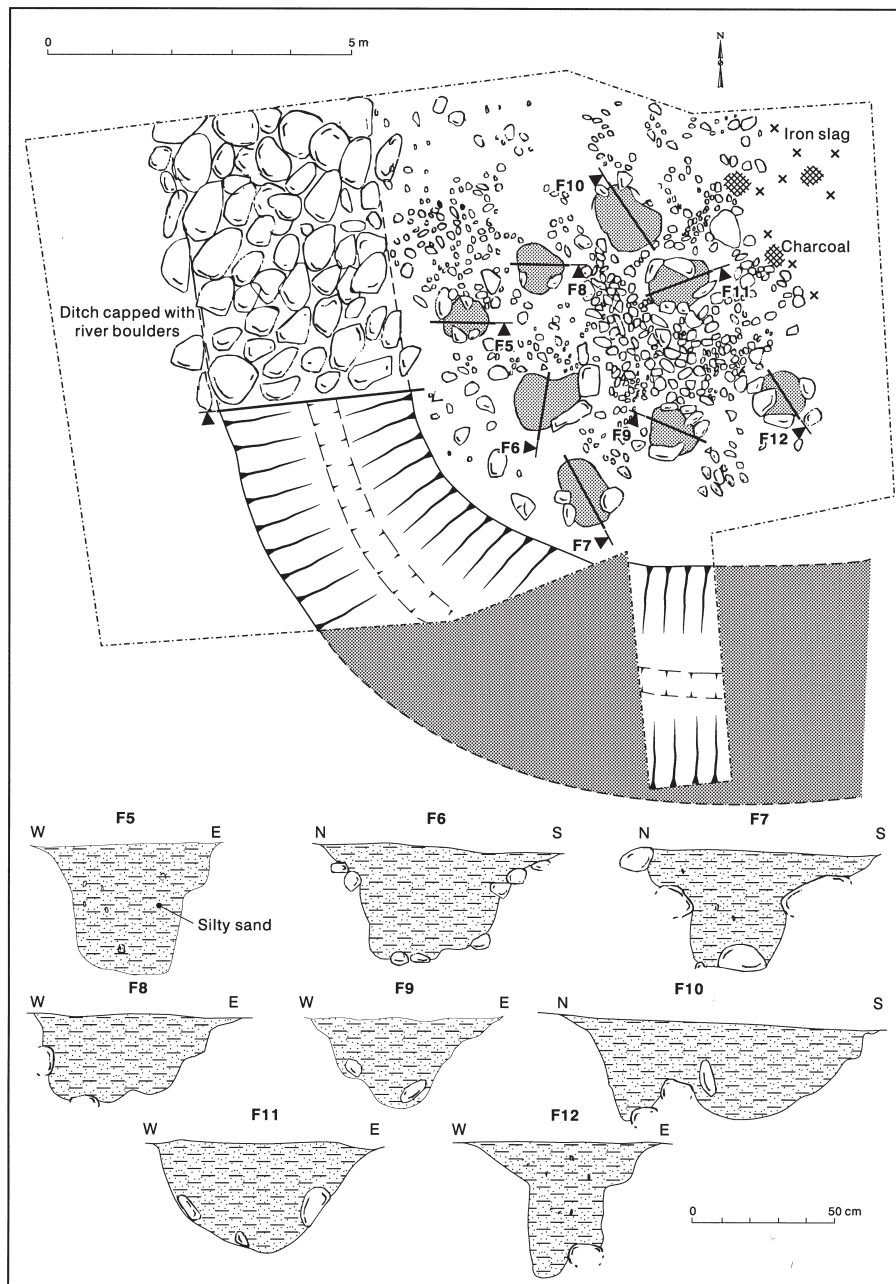
Immediately to rear of the post-pits Jones (1988) also identified three areas of burning. Within this area fragments of iron slag were also located. This slag was recently analysed by Fiona Johnson from the University of Manchester (Johnson 2001, 1) who notes:

The sample consisted of 4430 g of bloomery iron slag of which 916 g was identified as smithing hearth bottoms, or fragments thereof, the remaining 3514 g being so fragmentary as to be undiagnostic in character. In addition, there were 59 g of fragmentary vitrified hearth lining and a single piece of granitic boulder with iron slag adhering to the upper surface.

Johnson (2001, 1) further notes that:

Quantities of undiagnostic slag are frequently encountered on sites producing other evidence of iron smithing and/or smelting. The lack of indisputable evidence of smelting such as ores or tap slags, and the presence of smithing hearth bottoms and vitrified hearth lining, suggests that this assemblage is characteristic of iron smithing residue.

It therefore appears that Jones (1988) was correct in viewing this association as evidence of smelting/smithing at the site, and arguing that the areas of burning represented the truncated remains of three



ILLUS 20 The south-western corner

possible bowl furnaces. Unfortunately the date of these features was not ascertained, but the bloomery residues indicate that this assemblage pre-dates the use of blast furnaces at c AD 1500.



ILLUS 21 The south-western enclosure corner with 'U' shaped structure in the background. (Photograph courtesy of the G D B Jones Estate)

Graves

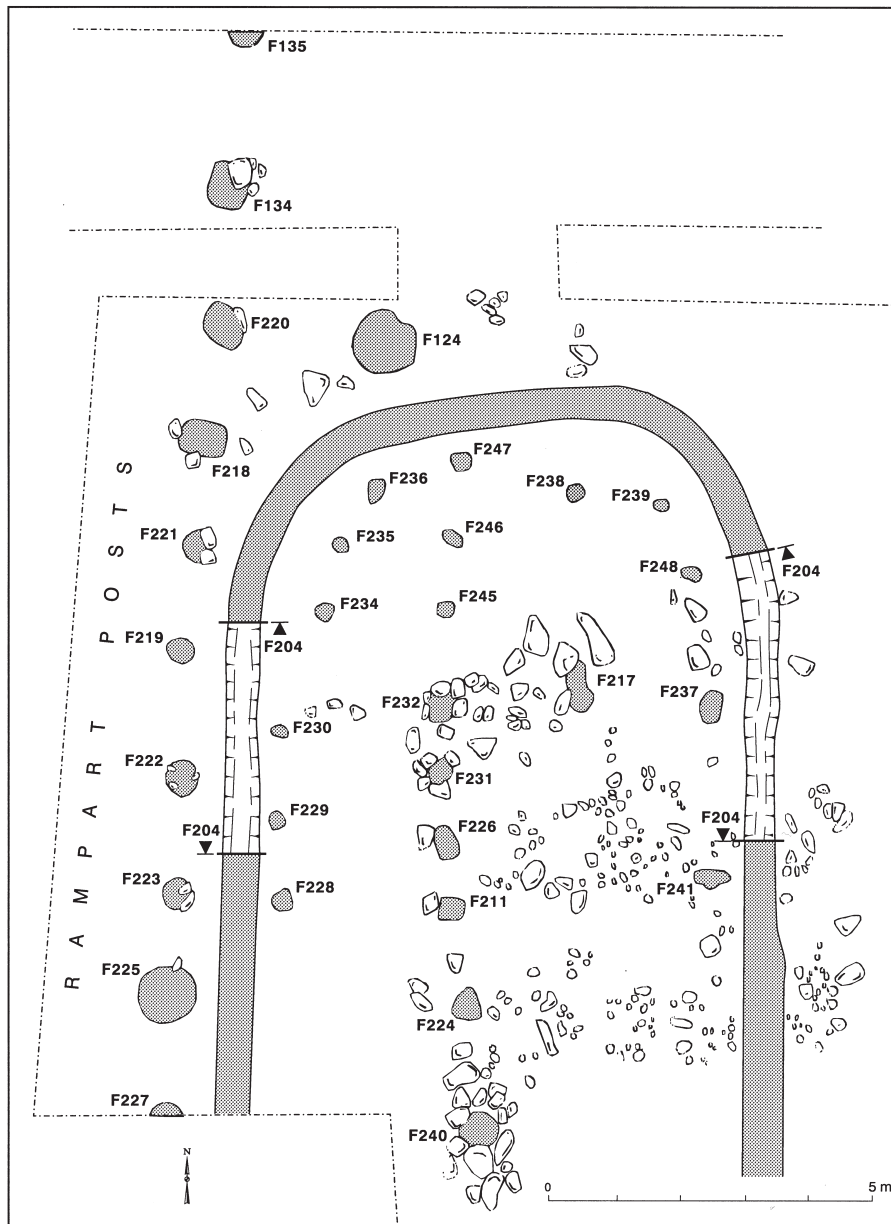
During the course of the 1987 season, three linear features were encountered at the eastern edge of trench 11. The full lateral extent of these features was not defined, but the excavated section indicate that were c 0.5–0.6 m deep, filled with a dark brown, organic, sandy soil. No finds were located within the fills. The form, shallow depth, and east–west orientation of these features led Jones (pers comm) to suggest that they were possibly three Christian graves in which the interred human remains had been destroyed by the acidic soil conditions found in this area.

The western rampart

In 1988 excavation of trench 12 exposed a potential segment of the rampart on the western side of the enclosure (illus 22 & 23). A series of large post-pits was identified which ran parallel to the enclosure ditch (Jones 1989). These ranged in diameter and depth: the largest pit (F225) was c 1 m in diameter and c 0.5 m deep, while the smallest pit (F221) was a mere c 0.3 m in diameter and c 0.2 m deep. The average spacing of these features was c 1.1 m, which led Jones (1989) to interpret the pits as the remains of an interior timber bracing for the enclosure rampart. If this argument is accepted this would give a rampart width of c 3.9 m.

U-shaped structure

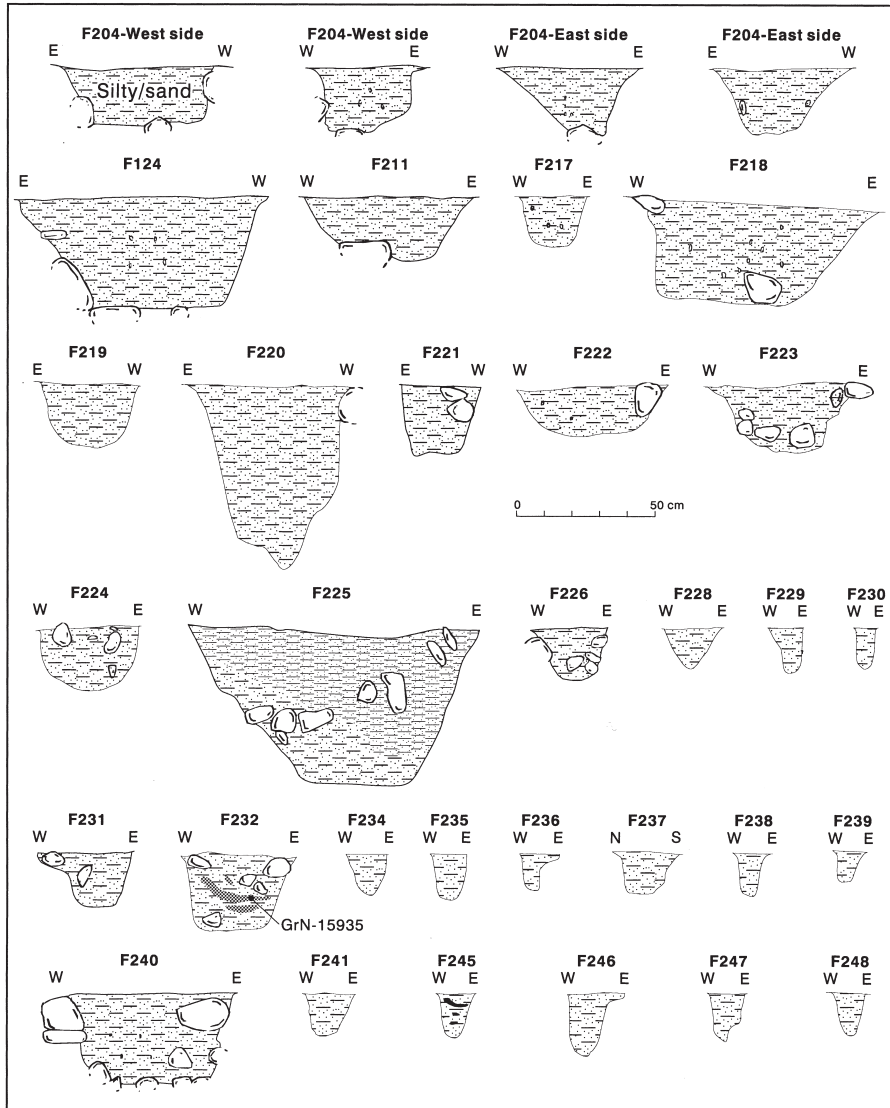
With the excavation of trench 12, in the westerly sector of the enclosure interior, a peculiar series of features was encountered adjacent to the probable rampart-bracing posts (illus 22). Jones identified the northern



ILLUS 22 Trench 12

end of a U-shaped feature (F204) which measured in plan c 8 m by c 10 m. Two sectors of this feature were excavated on its western and eastern sides. These sections indicate that the feature was a shallow trench, c 0.25 m deep, with a flat-bottomed profile (illus 23).

Within the confines of this feature Jones identified a series of small posts, or stake-holes, which appear to run roughly parallel with the internal perimeter of the U-shaped trench. These stake-holes were fairly ephemeral, being on average a mere c 0.2 m in diameter and c 0.15 m in depth.



ILLUS 23 Sections from trench 12

Numerous pits, or post-pits, were also recognized within the interior of the U-shaped structure, and some of these appear to form an apparent alignment located slightly west of the central axis of the structure. On excavation these pits were found to range in size (illus 23), but all displayed a similar U-shaped profile. The pits also contained a similar fill of brown sandy/silty soil, and at least one pit (F224) may have once housed an upright post. Although no artefacts were recovered from these features, two were found to contain evidence of *in situ* burning (F245 & F232). A sufficient quantity of carbon from pit F232 was retrieved and this provided a radiocarbon determination of 4545 ± 30 BP (GrN-15935, 3370–3100 cal BC (2 sigma): Table 1).

EASTER GALCANTRAY — INTERPRETATION

Excavation at Easter Galcantray recovered evidence for discontinuous human activity from the Neolithic through to the Medieval period. The earliest evidence is derived from a pit containing carbon, which produced a calibrated date range of 3370–3100 cal BC, indicating a mid-Neolithic date for this feature. Although not proven by excavation, it is probable, based on the spatial layout and similarities in feature fill, that a number of other features were contemporary with this small pit. These possibly include a line of pits, within which the dated pit is found, and a shallow U-shaped trench with its associated stake-holes. Taken together these features may represent the remains of a substantial Neolithic structure located close to the River Nairn. Jones (pers comm) initially suggested that this degraded structure was possibly the remains of a Neolithic house.

The next phase of identifiable activity corresponded to the construction of the rectilinear enclosure, of which only a proportion remained due to severe riverine erosion. This enclosure was demarcated by a substantial ditch, with a V-shaped profile, which appeared in certain sections to have been re-cut once a layer of silt had formed at its base. Associated with this boundary was a six-post gate, and an eight-post angle tower located on the south-western corner of the enclosure. Four rectilinear timber buildings were also identified within the interior of the enclosure, but their relationship with the enclosure boundary was not clear. Jones (1986a) argued, however, that the alignments of these buildings were related to the enclosure entrance, and that in turn they were possibly contemporary with the enclosure ditch. The discovery of a biconical bead from the post-hole of one of these buildings lends a degree of support to this argument, as the enclosure ditch may also date to the Roman Iron Age.

The site then appears to have been deliberately slighted, as the re-fashioned ditch was deliberately back-filled with rampart material, and possibly scantlings derived from the demolition of the internal buildings. This phase was dated on a single radiocarbon sample to 1880 ± 20 BP (GrN-14643), which calibrates to AD 80–220 at the two sigma level. The sherd of pottery recovered from the upper levels of the ditch indicate that by the Medieval period the enclosure ditch would only have been visible as a slight depression.

Jones (1986a) interpreted the main structural phase within the site's history as potential evidence for the presence of a Roman military work. This assumption was based on a number of salient factors. These include: the rectilinear form of the enclosure ditch, with its V-shaped profile; the associated timber gate and corner tower; the presence of possible contemporary rectilinear timber buildings, which appear reminiscent in both size and form to barrack blocks; and finally, the dating evidence. This, based on the one sigma calibrated range, suggests the slighting of the site during the late first century AD, which would correspond to the governorship of Agricola, or possibly his unknown successor. Jones (1986a, 23), therefore, argued that:

It is evident from the emerging plan of the internal structure that the morphology of the site is consistent with that of a single period timber built fort (such as Fendoch) which was rapidly abandoned.

An estimation of the size of this potential fort was also attempted based on the largely stereotypical morphology of forts of the late first century (cf Johnson 1983). It was suggested that:

In assessing the overall size of the site prior to erosion by the River Nairn any estimate must be governed by the absence of the west gate along the western side, of which only approximately 38 m survives. This suggests that less than half the site is represented by the cropmark phenomena . . . approximately 35 to 40% of the original size. Taking the lower figure, this would imply that in its original form the site measured, over the ramparts, 1.45 hectares (3.75 acres). This would clearly place it in the category of a small infantry fort such as *Caer Gai* (1.6 ha) or *Tomen-y-Mur* (1.34 ha). Indeed, the smaller *quingenary* infantry forts on Hadrian's Wall are very close to this dimension at 1.42 hectares (Jones, 1986a, 25).

A final factor noted by Jones (1986a, 26), which may carry some 'historical implications', concerns the re-cutting of the enclosure ditch. In the post-glacial gravels into which the ditches are set:

re-cutting must have been an essential requirement, at least once a season. Thus the longest period of occupation must be two years. On a shorter scenario the single refurbishment might, however, have been required within a matter of months, hence an occupation of one season only is possible, though perhaps less probable than two.

Following the abandonment of the enclosure later, funerary, activity occurred, evident by the three possible graves located in the north-eastern sector of the enclosure interior. Although no human remains survived, these features presumably relate to the discovery of two uncarved stones found adjacent to the site, which Keillar (1999b) suggests were early modern grave markers.

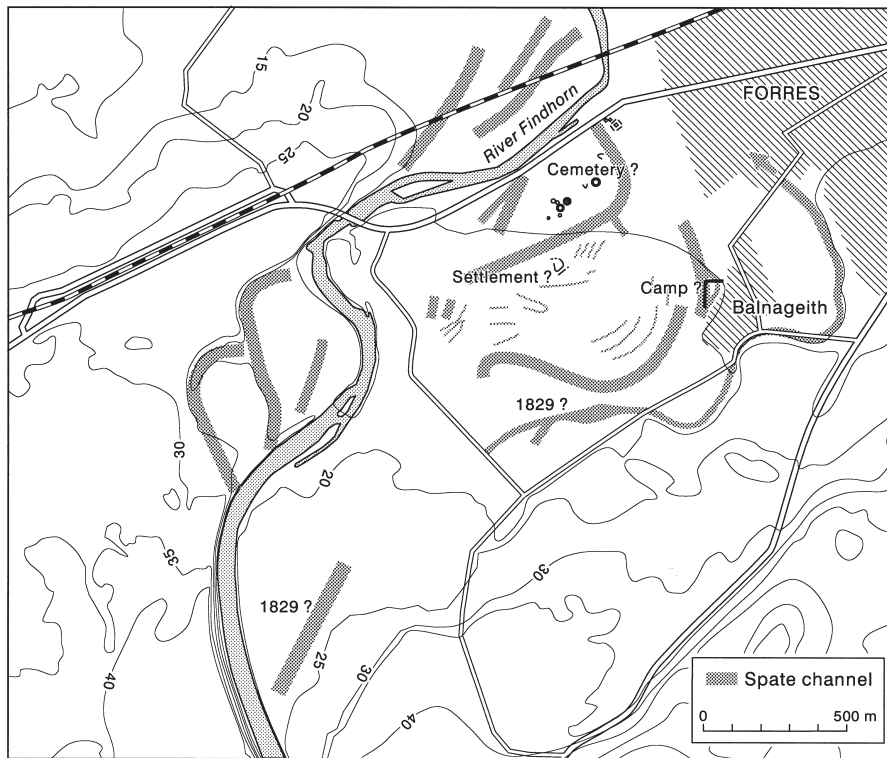
BALNAGEITH

DISCOVERY AND DESCRIPTION

The alluvial floodplain located within the lower reach of the River Findhorn, south-west of Findhorn Bay, has proved to be an area which is extremely susceptible to the development of cropmarks. Aerial survey conducted by CUCAP (St Joseph 1970), the Royal Commission and Ian Shepherd has, for example, detected the extensive remains of numerous geomorphological and archaeological features, concentrated to the south of the modern arterial route, the A96, which runs from Forres to Nairn. The most obvious features are a series of palaeochannels, created by the River Findhorn, which criss-cross the whole alluvial plain (illus 24). Nestled within these channels are also a number of cropmark sites, indicative of early activity on this section of the floodplain. These include a probable later prehistoric settlement and early cemetery, comprising both round and square barrows, which are found partly to overlie palaeochannels of the proto-Findhorn.

In 1989 further aerial reconnaissance was undertaken by the Moray Aerial Survey Group, which resulted in the identification of a hitherto unknown cropmark site (NGR: NJ 0246 5781) adjacent to an abandoned RAF camp, north of Balnageith Farm (illus 25). The site was first described by Jones and Keillar (1990a, 2) who noted:

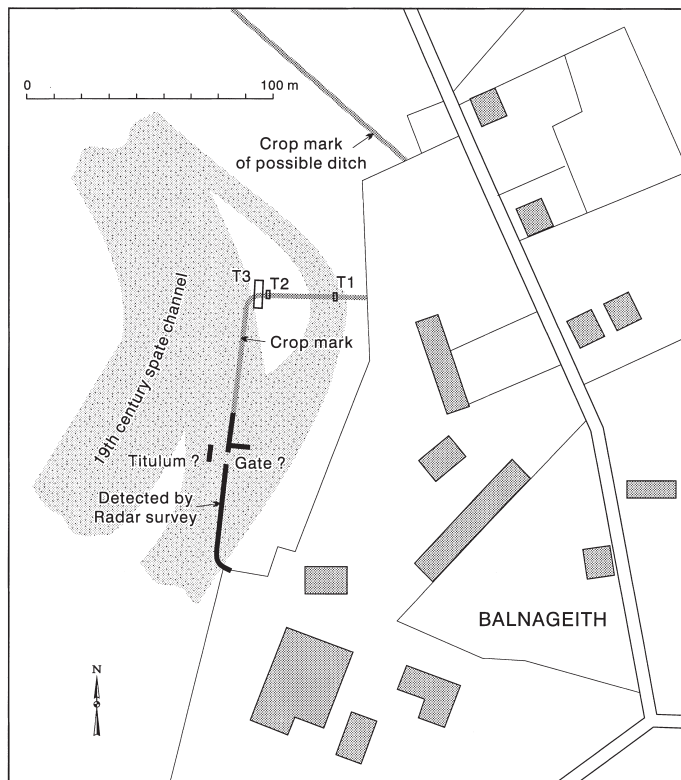
By changing the timing of flying important new evidence was located on the farm of Balnageith on the western side of the present suburbs of Forres. The air photographic work on July 5th/6th 1989 in



ILLUS 24 Palaeochannels and crop-mark sites at Forres. (Based on the Ordnance Survey map © Crown copyright)



ILLUS 25 Balnageith. (Photograph courtesy of the G D B Jones Estate)



ILLUS 26 Rectilinear enclosure at Balnageith. (Based on the Ordnance Survey map © Crown copyright)

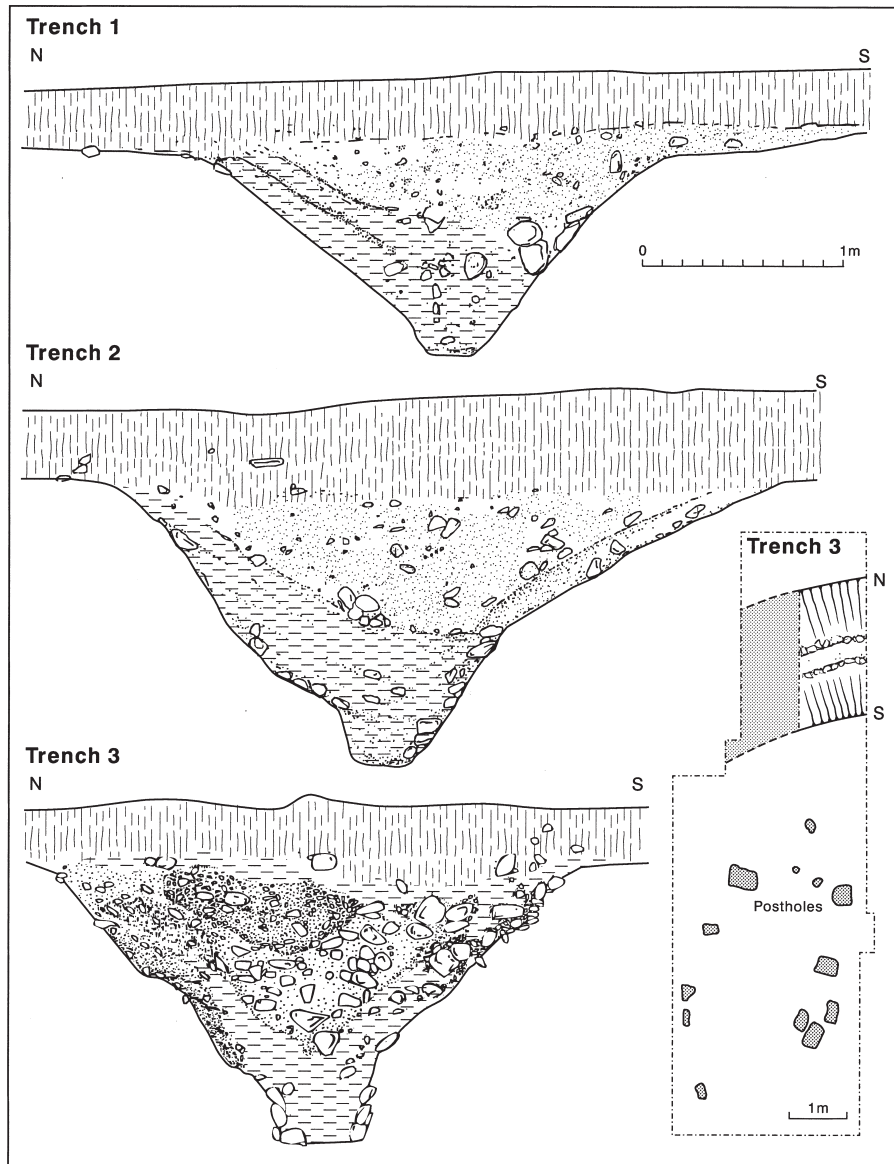
abnormally advanced crop conditions located the north-western corner and two sides of an enclosure. Changes in the weather pattern terminated the cropmark development after less than a week and it is presumed that, unlike the prehistoric evidence to the north, this site is partly overlain by relatively recent spate deposition and only appears in exceptional summers.

The recent spate deposition mentioned by Jones and Keillar may be attributable to the great flood of 1829 which is known to have ‘swept furiously through the estate of Balnageith’ (Lauder 1830, 61).

BALNAGEITH — EXCAVATION

Following this initial discovery two seasons of trial excavation were undertaken in September 1989 and 1990 (illus 26). In 1989 two trial trenches were cut. Trench 1 was positioned 32 m west of the present field boundary, and this exposed a section of the enclosure ditch (illus 27). This had a V-shaped profile, with a flat-bottomed sump. The ditch dimensions were approximately 2.7 m across, with a depth below the present topsoil of 1.2 m. Jones and Keillar (1990a) noted that the in-filled ditch contained two lower layers of sandy silt, the lower of which contained the metacarpal of an ox. Unfortunately, this metacarpal was not radiocarbon dated due to insufficient funds at the time, and could not be located in Manchester during recent cataloguing of the site archive (Gregory 2000). These lower layers were then sealed by a heavy gravel/rubble layer, which was concentrated over the inner edge of the ditch.

Trench 2 was located a further 30 m west of trench 1, positioned near the start of the in-swing of the north-western corner. Here the exposed ditch proved both broader and deeper than in trench 1, being



ILLUS 27 Excavated features at Balnageith

c 3.4 m wide and c 1.9 m deep. It is possible that these apparent differences in the surviving width and relative depth in the two exposed sections are due to the passage of flood waters over this area, presumably as recent as 1829 (Jones & Keillar 1990a). The form and fills of the ditch in trench 2 were, however, similar to the exposed ditch section in trench 1 (illus 27). The ditch was V-shaped in profile with a pronounced flat-bottomed sump, and appears to have been initially filled with fine alluviated silts, which were then sealed by a central filling of coarser, heavier rubble. As Jones and Keillar (1990a) noted, the nature of this in-fill may explain the two separate cropmarks observed from the air, from which the buried feature was originally recognized.

Trench 3 was located on the north-western corner of the enclosure (illus 27). This trench again exposed a V-shaped ditch, with a well-defined sump, which was possibly stone-revetted (cf Keillar 1999b). The ditch dimensions were 2.7 m wide by 1.9 m deep. As with the ditch section in Trench 2, this feature appears initially to have been in-filled with fine alluvial silts, which were then partially sealed by a heavy rubble layer. Within the enclosure interior a number of potential post-holes were also recorded, filled with a brown loamy soil. These were found, however, to be heavily truncated, with a maximum depth of only 0.3 m. Jones (1991a) argued that six of these features may have been the remains of a possible angle tower, but the limited extent of the trench make this interpretation difficult to fully substantiate. A series of stake-holes was also located, and was argued to relate to a former rampart (Jones 1991a).

GROUND PENETRATING RADAR SURVEY

Following the trial excavation a ground penetrating radar survey was conducted by J Trust of Harry Stanger Ltd, as part of an overall assessment of the detection of sites detected through aerial photography and/or excavation (Jones *et al* 1990). The aims of the survey were to determine the extent of the enclosure at Balnakeith.

To achieve this, the radar antenna was first calibrated by placing marker posts along the presumed line of the ditch between trenches 1 and 2. As the antenna passed the marker post, its position was annotated on the graphic print out by means of a marker button. The radar pulse velocity was then calculated by measuring the depth to the base of the ditch and dividing this by the time it took the pulse to reach the target. This gave a one-way velocity of 9 cm/nano second. With this calculated velocity the rest of the field was surveyed; 15 sweeps were completed. These detected the continuation of the ditch from the north-west corner to a possible entrance into the enclosure (illus 26). At this point two other features were detected. The first was a section of ditch located across the entrance into the enclosure. Although this feature was not tested by excavation, Jones and Keillar (1990a) suggested that it might possibly represent the remains of a *titulum*. The second ditched feature was found inside the camp at right angles to the probable entrance. Working south of the entrance the radar survey detected the enclosure ditch, which was eventually found to curve towards a presumed south-western corner.

BALNAGEITH — INTERPRETATION

The investigations at the site of Balnakeith serve to highlight some of the problems facing the fieldworker in an area dominated by riverine erosion and deposition. Whilst the fluvial sands and gravels around Forres often encourage the development of particularly distinct cropmarks in climatically favourable seasons, allowing morphological comparisons to be advanced, the excavated evidence is often exiguous in character. This will, of course, be exacerbated on sites where the length of occupation was perhaps minimal.

It was Jones' belief, however, that the enclosure probably represented a Roman camp, or equivalent, which may have originally been up to 2.4 hectares (6 acres) in size (Jones & Keillar 1990a). This assumption was based on the rectangular shape of the site, with its rounded corner and possible angle-tower, and the presence of a V-shaped ditch, along with a possible *titulum*, detected by the radar survey, to the west of the centrally placed entrance. At present this identification is difficult to prove or disprove, although excavation of the possible *titulum* might provide a suitable way of assessing the Roman character of the site.

If, however, as Jones argued, the Roman military did advance for strategic reasons into the western littoral of the Moray Firth, the positioning of a camp at Balnakeith is logical enough. It is here, for instance, where the most suitable crossing is found across the River Findhorn, as in other sectors, passage across the river is restricted for many miles by a deep channel cut by post-glacial discharge (Grattan 1992). Likewise, immediately north, Findhorn Bay offered a sheltered

harbour to accommodate fleet activity possibly associated with the Agricolan advance. There are also other Roman antiquities recovered from Forres which were documented by Douglas (*NSA*, 125) who notes:

In November 1797, in the streets of Forres, there were dug up several Roman coins and a Roman medallion in soft metal which resembled a mixture of lead and tin . . . A copper coin of the time of the Emperor Titus was found near Sweno's Stone in 1843, on one side was the outline of the head of the Emperor encircled with bay . . . Above the head is the inscription 'VESPASIANUS ROM.IM-P.AUG'. On the reverse side . . . is a female figure under the shade of a palm tree, above there is 'IUDEA CAPTA' . . . On the 25th September 1844, another Roman coin was found among some loose stones on High Street . . . much corroded and defaced . . . thought to belong to the reign of Domitian.

It is therefore possible that these Flavian coins were associated with some form of Roman military activity in this area, particularly as there appears a general scarcity of first-century coins from north-eastern Scotland (cf Robertson 1983; Bateson & Holmes 1997).

BOYNDIE

DISCOVERY AND DESCRIPTION

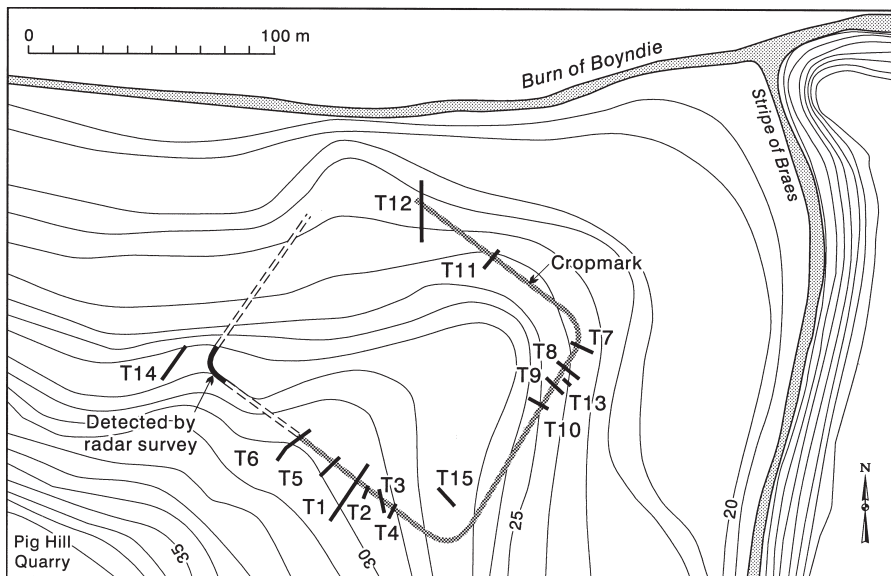
In 1989 the Moray Aerial Survey was extended eastwards towards the Deveron Valley, concentrating on an area west of Banff. One significant result was the identification of a potential archaeological site close to the Burn of Boyndie (NGR: NJ 654 636). In its lower reach this small stream flows along an over-deepened linear valley and is eventually joined by a tributary, the Stripe of Braes. At the confluence of these two streams a projecting spur has been created, which, when viewed from the air in July 1989, briefly produced evidence of cropmarks formed within an oil-seed rape crop (illus 28). Jones and Keillar (1990b) noted that these cropmarks suggest the presence of a buried rectangular enclosure (illus 29). This enclosure is aligned lengthways in an approximately north-west/south-east direction, with the south-eastern and north-eastern corners visible as cropmarks. The south-western corner is less clear from the available aerial coverage, whilst the north-western corner appears to have suffered from erosion by the Burn of Boyndie (Jones & Keillar 1990b). The dimensions of this enclosure were therefore calculated as 120 m north-west/south-east by 110 m south-west/north-east, which would enclose an area of c 1.3 hectares (3.1 acres). Subsequent examination of the site from the ground, during low light conditions, also suggested that a ploughed-out bank on, at least, the south-western and south-eastern sides could be seen when viewed from the northern tip of the hills of Boyndie (Jones & Keillar 1990b).

GROUND PENETRATING RADAR SURVEY

In September 1989 J Trust completed a ground penetrating radar survey over the site, as part of a remote-sensing exercise for Harry Stanger Ltd. The initial survey was conducted using a 120 MHz antenna. Three sweeps were made running diagonally across the site in a north-easterly/south-westerly direction. This confirmed the presence of an enclosure ditch at the north-eastern corner, and established the presence of a ditch at the south-western corner of the enclosure. Six further sweeps over the south-eastern corner of the



ILLUS 28 Boyndie, from the north. (Photograph courtesy of the G D B Jones Estate)



ILLUS 29 Rectilinear enclosure at Boyndie

enclosure were then made using a 500 MHz antenna. These confirmed the presence of the enclosure ditch and also detected a number of internal anomalies of uncertain character.

BOYNDIE — EXCAVATION

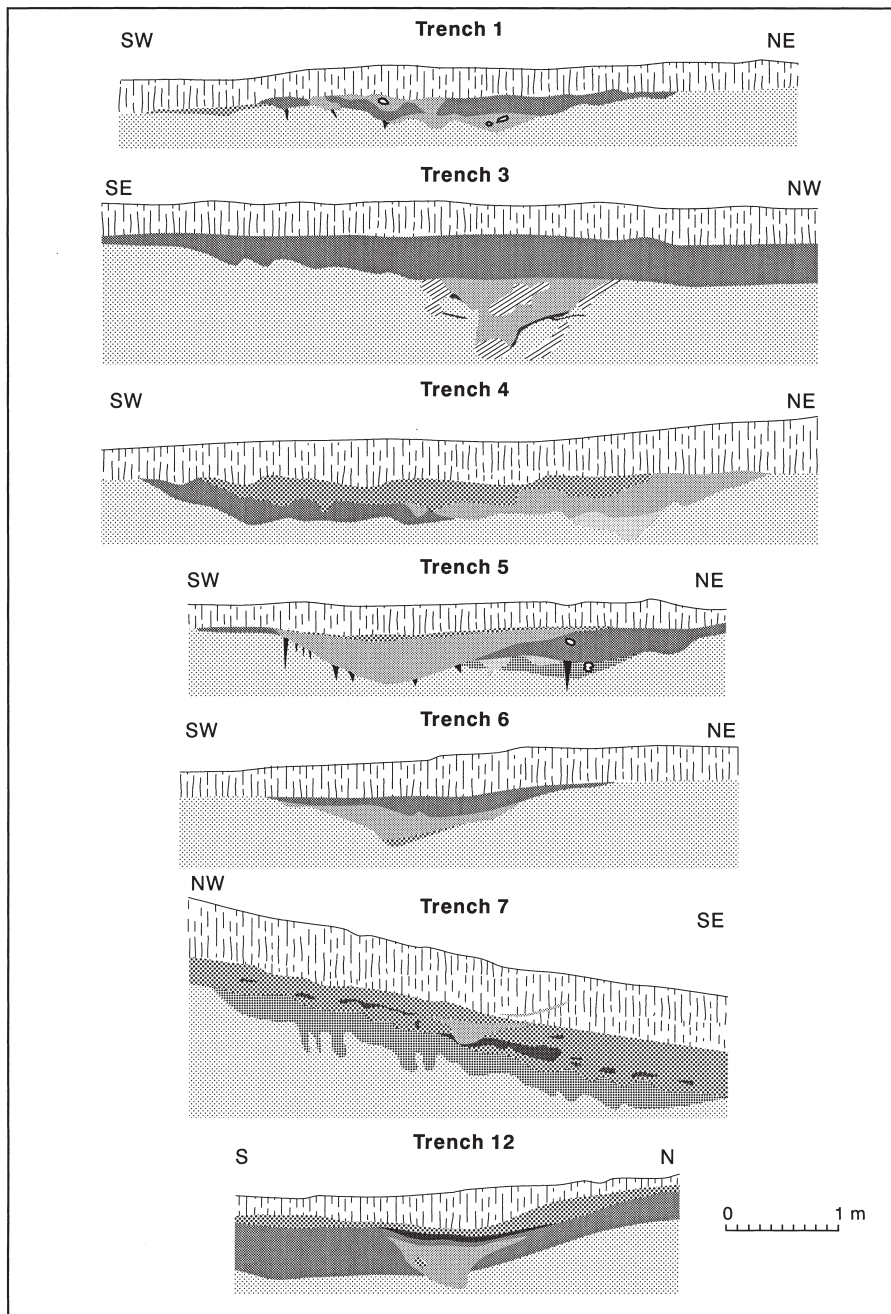
During September 1990 a programme of trial trenching was undertaken, in order to confirm the presence of the enclosure ditch and retrieve any evidence which might date the enclosure; 14 trenches were excavated (illus 29). Two of these were positioned over the northern enclosure ditch (trenches 11 & 12); five were positioned across the eastern enclosure ditch (trenches 7, 8, 9, 10 & 13); six were placed over the presumed line of the southern enclosure ditch (trenches 1, 2, 3, 4, 5 & 6); and one trench was placed in the interior of the site, close to the south-eastern corner (trench 15).

Unfortunately, feature recognition within these trenches proved difficult. This was attributed to the fluvio-glacial sand subsoil of the Boyndie series, which had evolved into well-developed humic-iron podzols. It was argued that the movement of organic acids, in the process of podzolization, had two unhelpful effects (Grattan 1992). The first was a darkening, more often blackening, of the subsoil for as much as a metre in depth, while a second problem was attributed to the consolidation and cementing of the podzol layer, which effectively obscured the outline of any archaeological features. As Grattan (1992, 18) notes:

It was within this layer that the archaeological deposits were located, and their identification was often a problem, requiring careful excavation. Repeated visits to the sections were necessary as the colours changed through soil drying processes, making it easier, or more difficult, to identify archaeological features. Failure to study the potential soil conditions on site could have resulted in a failure to identify any archaeology or to misidentify the processes of soil chemistry as archaeological remains.

The archaeological features recognized were confined, therefore, to only seven of the evaluation trenches (trenches 1, 3, 4, 5, 6, 7 & 12). These features comprised, on the whole, shallow ditch sections, no more than c 0.08 m at their greatest depth (illus 30). These features, which Jones (1991b) described as being either 'V-shaped', or 'bag-shaped' in profile, were invariably filled with an orange/black sand, which was interspersed in some sections with clay. Jones (1991b) suggested that erosion was the main cause of the observed truncation in the recorded ditch profiles. He also viewed this truncation as a prime mechanism in the obliteration of any shallow features found within the enclosure interior. The degree of erosion was calibrated by examining a vertical section from a disused sand quarry found adjoining the field. This revealed a difference of over 1.2 m between the present day field surface and the preserved turf topsoil of the quarry, indicating that down-slope erosion had been extremely severe (Grattan 1992). It was suggested that while some of the erosion had doubtless been exacerbated by modern ploughing, the primary cause was probably the wind (Grattan 1992). This was confirmed, to some degree, by a local record of blown sand from the spur, which had blocked the adjacent road (Keillar, pers comm). In considering the potential for erosion on these unstable soil associations Jones (1991b) was forced to admit that the original size of the recorded ditches must remain largely uncertain.

The date of the enclosure is also largely uncertain, although one sherd of abraded Roman pottery was recovered from the interior of the enclosure (Jones, pers comm). Unfortunately, this find was unstratified, being recovered from the ploughsoil, and could not be located in the Manchester archive to confirm its character and date. Considering the scale of erosion at this site it is feasible, however, that this sherd was once located within a shallow feature, within the enclosure interior, which has now been completely destroyed.



ILLUS 30 Ditch sections from Boyndie

BOYNDIE — INTERPRETATION

Interpreting the remains from Boyndie is difficult in view of the severe aeolian erosion that has occurred in this area due, in no small measure, to the fragile nature of the Boyndie soils.

Morphologically, the size and rectangular form of the enclosure set it apart from the body of prehistoric settlement and funerary evidence available from the nearby Deveron valley, or the Moray littoral (cf Jones *et al* 1993), but the date and function of the enclosure still remain ambiguous. It is possible, however, based on the single sherd of pottery, and the severely degraded ditch profiles, that the site was originally a Roman military work similar in size, and perhaps function, to the putative Roman sites at Thomshill and Easter Galcantray.

Although excavation could not completely solve these intractable problems it was still significant in the information it provided concerning the production of cropmarks on these unstable, sandy, soils. Jones (pers comm) suggested that the nature of the podsolized sand deposits at Boyndie would have a significant bearing on the form of cropmarks in this area, and in other parts of the Moray littoral where similar soil complexes are often found. It was argued, based on the direct evidence from Boyndie, that podsolization, in this case in the interior of the site, would result in a perched water table, a characteristic that would preclude the development of soil moisture deficits leading to cropmark formation (cf Grattan 1992). Moreover, based on the excavated sections, it was suggested that the in-filling of ditches cut into sand, with redeposited sand, would militate against formation of cropmarks, because aeolian or fluvial sorting mechanisms form an in-fill only slightly less dense than the natural subsoil. This contrasts with the formation of more organic silts associated with less acidic soils, which make the detection and identification of archaeological remains easier elsewhere (Grattan 1992). These factors were certainly relevant at Boyndie, where the cropmark was only visible for a few days and despite continued observation over the 1990s has not occurred since, but would also appear to be the case at the excavated sites at Thomshill and Tarradale (Gregory & Jones 2001). In both these examples, the cropmarkings were again found to be somewhat retarded, presumably due to the construction of these enclosures on similar Boyndie Series deposits. It is, therefore, in this context that the general absence of cropmark sites along the Spey–Banff littoral, and the northern shelf of the Black Isle, must be placed, as these are areas where a normal level of ancient activity would be expected.

DISCUSSION OF THE FOUR SITES

Perhaps the most significant outcome of the survey and excavation at the sites of Thomshill, Easter Galcantray, Balnageith, and Boyndie was the discovery and excavation of four rectilinear enclosures which have many morphological similarities with Roman military works. Indeed, both Daniels and Jones, and their co-worker Keillar, were convinced that these sites were potentially forts or camps of Flavian date, associated with Agricolan activity in north-eastern Scotland. This interpretation, if correct, would suggest that the traditional picture of the Agricolan advance terminating east of the Spey (represented by the possible Flavian camps at Auchinhove or Muiryfold, in the Pass of Grange (St Joseph 1969; 1975; Maxwell 1980), and by the likely, but now destroyed camp or fort at Bellie, adjacent to the eastern bank of the Spey, north of Fochabers (Crawford 1949)), requires radical reconsideration.

The basis for this argument can be seen evolving throughout certain published and unpublished works produced over the 1980s and 1990s, and in this respect it is possible to summarize a number of salient points which Jones, Daniels and Keillar presented in support of their controversial interpretation. An initial and significant strand to their argument related to the obvious geographical and economic importance of Moray, which appears to have been recognized by the majority of invading armies who wished to conquer north-eastern Scotland. It was argued that to hold northern Scotland effectively, which was presumably the original

intention of both the Agricolan and Severan forces, Moray with its potentially rich food resources was a logical military objective. Indeed, some of the most fertile agricultural land in northern Scotland is found at the western end of the Moray littoral, which on the evidence of aerial survey supported a densely distributed, agrarian, later prehistoric community. To Jones and Daniels it therefore seemed probable that any Roman force would, by analogy with the later campaigns of Edward I in 1303 and the Hanoverians in 1746, attempt to subdue this important economic and political hub (Daniels *et al* 1985; Jones & Mattingly 1990). They therefore suspected that there was a strong likelihood for some evidence of Roman military penetration beyond the accepted terminus close to Keith.

This suspicion was strengthened when the excavators considered the geographical information contained within Ptolemy's *Geography* (cf Jones & Mattingly 1990; Jones & Keillar 1996). It was argued that much of this locational evidence, which was ultimately derived from the Flavian geographer Marinus of Tyre, revealed a surprising degree of accuracy, in terms of latitude, for sites within the Moray littoral. In consequence, it was argued that *Alta Ripa* could be equated with the line of cliffs on either side of the Sutors, broken by the mouth of the Cromarty Firth (Jones *et al* 1993; Jones & Keillar 1996); *Varar* with the River Beaully; *Loxa* with the River Lossie; *Tuessis Aestuarium* with the mouth of the River Spey; *Tuessis Polis*, possibly with a large, recently identified, native site in the grounds of Gordon Castle (Jones 1997; Keillar 1999a); and *Caelis* with the River Deveron. The identification of a number of these presumed locations was also supported, in some measure, by Strang's (1998) hypothetical reconstruction of a Flavian map of Scotland. He suggests that *Alta Ripa* may be equated with the Hill of Nigg; *Varar* with the Beaully Firth; *Loxa* with the mouth of either the River Findhorn or the Lossie; *Tuessis* with the Spey estuary; and *Caelis* with the mouth of the River Deveron. Jones and Keillar (1996) also attempted to locate the problematic site of *stratopedon pteroton* (cf Rivet & Smith 1979), which should read in its Latinized form *castra cum pinnis* — the camp with merlons (Rebuffat 1984). As they note, this location, on the basis of its relative position to other locations in Ptolemy's *Geography*, must lie on the Moray Firth coast (*contra* Richmond 1921). It was further argued that this location was unlikely to represent a temporary camp or fort but could possibly denote the position of an established native centre, most probably Burghead. Indeed, the occupation of Burghead during the Roman period does seem possible due to the recovery of a melon bead from the site (Robertson 1970). A single radiocarbon determination, providing a calibrated range of AD 240–430, obtained from an organic layer sealed beneath the fort rampart (Edwards & Ralston 1978) may also hint at the presence of pre-Pictish occupation (cf Breeze 1990).

To Jones and Keillar (1996; 1998), the existence of this detailed body of geographical information from Morayshire implied that Roman military surveyors were active in the region. This argument seems plausible, as the information synthesized by Ptolemy was ultimately derived from Marinus of Tyre, who must have obtained geographical information relating to the north of Britain from Flavian military sources (cf Mann & Breeze 1987; Jones & Keillar 1996; Strang 1998). It may also be significant that when moving north of Moray there is an absence of place names mentioned in Ptolemy's *Geography*. This may suggest that, whilst the Roman army reached the Moray Firth, inland penetration beyond was absent, and that the more generalized tribal information available from this area was acquired through the activities of the Roman fleet. It is also possible, based on the location of place names in Ptolemy's *Geography*, that Agricola's army marched back down Strathspey through the Highlands following the battle of Mons Graupius (cf Breeze 1990). If this argument is accepted, this may again imply that Roman military sites are likely to be found in the western section of the Moray Firth littoral.

It was within this largely hypothetical context that the excavated evidence was placed. It was argued that the enclosures, due to their form, and based on the date from Easter Galcantray, might represent direct evidence for the assumed Roman military incursion into the region. It was further suggested that the actual positioning of the rectilinear enclosures fulfilled certain topographical and strategic criteria. It was noted, for instance, that any would-be conqueror must initially, for topographical reasons, follow a coastal line of march. Moreover, based upon the analogous evidence of the Edwardian and Hanoverian campaigns, it was logically argued that it was preferable to reach the coast near Banff, after which the line of march would be conditioned by particular physical barriers such as the rivers Spey and Findhorn, and, presumably, established population centres. Only once the area west of the Spey was secure could the invading army then use the Highland routes to return to lowland Scotland, as was the case with the campaigning of Edward I (cf Breeze 1990; Jones & Mattingly 1990; Southern 1996).

It may therefore be significant that the putative Roman site at Boyndie is found at a location 'where both subsequent Edwardian and Hanoverian invaders sought to gain the coast from the Deveron valley' (Jones *et al* 1993, 67). Following this reasoning, the next logical position for a Roman site would be at a suitable crossing point on the Spey. The now-destroyed site at Bellie, north of Fochabers, if accepted as Roman, would fulfil this criterion, and it may also be no coincidence that it is positioned close to a potentially large native settlement (Jones & Keillar 1998). When moving west towards the River Lossie, the site at Thomshill was also viewed as a suitable locale for a Roman fortification. The site is found on a prominent ridge, which makes particular sense when the existence to the north of Loch Spynie (now drained) is taken into consideration (Ross 1992). It is also probable that the River Lossie flowed during antiquity through a now dry valley found directly to the east of Thomshill, which may add further strategic significance to this locality. As with the potential site at Bellie, it may also be no coincidence that this site was located less than 1 km from the large Iron Age/Roman period settlement at Birnie (Hunter 1999; 2000). A similar strategic logic may also be applied to the site at Balnageith. Here the enclosure is located at the most suitable crossing point of the River Findhorn and is close to the natural harbour provided by Findhorn Bay. Finally, the siting of the enclosure at Easter Galcantray, on the River Nairn, was explained by its close geographical proximity to an apparent concentration of native sites in the Nairn valley, whilst 5 km to the north-west was the harbour at Ardersier, occupied since Hanoverian times by Fort George, which could have provided valuable anchorage for the Roman fleet (Daniels *et al* 1985).

If these sites were Roman fortifications, as the excavators assumed, their function and date becomes of the utmost importance. In addressing this issue Jones *et al* (1987) argued that the site at Easter Galcantray was reminiscent of an auxiliary fort, which could have held a *quingenaria* infantry unit. This was based primarily on the size of the enclosure, the presence of rectilinear buildings, and the refurbishment of the enclosure ditch, which suggested some duration in occupation. It was further argued, on the basis of the single radiocarbon date, that the site was probably Agricolan in date, but was potentially demolished on the orders of Agricola's unknown successor (Jones *et al* 1987). The sites at Thomshill and Boyndie were also interpreted as comparable sites, but ones where the internal structures, usually associated with such fortifications, had been destroyed by severe aeolian erosion. Similarly, the site at Balnageith, while latterly interpreted as the fragmentary remains of a Roman camp, was suggested to reveal some degree of permanency due to the provision of a possible angle tower (Jones 1997).

Interpretations of this kind are inevitably controversial as they carry the historical implication that semi-permanent or permanent Roman fortifications were established in north-eastern Scotland. For Jones, Daniels and Keillar, however, this could be explained, in part,

through a textual reading of *Agricola* 38. It is in this section of Agricola's biography that Tacitus records, following the aftermath of the battle of Mons Graupius and due to the lateness in the campaigning season, that the Agricolan forces continued in *fines Borestorum* — to the land of the Boresti — where hostages were taken, and the fleet ordered to sail around the north of Britain. Significantly, the Agricolan forces were then placed in *hibernia*, or winter quarters, which were presumably close to, or within, the territory of the Boresti. The evidence from Easter Galcantray may also suggest that these encampments were, in fact, maintained for some time, and were only abandoned with the removal of the Roman army from northern Scotland by the Emperor Domitian in AD 86/87 (cf Breeze 1988).

Part 2

CRITIQUE

The interpretations presented by the excavators, as with much archaeological field data obtained from severely truncated cropmark sites, are open to a number of alternative readings. Moreover, in this instance, a critical appraisal of the evidence seems essential, as the interpretations offered present a picture of Roman military activity in northern Scotland radically different from those previously argued on direct archaeological evidence alone.

A major problem which, to some degree, undermines the excavators' interpretations is the lack of secure dating evidence recovered from the sites. This is a particular problem at the enclosures found at Thomshill, Balnakeith and Boyndie. Despite the recovery of one unstratified sherd of Roman pottery from the Boyndie enclosure, no useful, stratified artefacts or carbon samples were retrieved for dating. This problem is compounded by the apparent absence of archaeological features from the enclosure interiors. These were either not examined or were merely trial-trenched following which it was argued that erosion, combined with agricultural activity, had effectively destroyed any potential features such as diagnostic building plans. The presumed date, and in turn the function of these enclosures, is therefore based solely on the form and plan of the enclosure ditches. The excavators' assumption — that these sites were probably constructed by the Roman army — was based largely on their superficial morphological similarity to other known Roman military works. This particular form, they believed, was unusual for the region (cf Jones *et al* 1993) and was also associated with V-shaped ditch profiles and basal U-shaped slots. The interpretation is largely circumstantial and certainly not conclusive. However, it appears from aerial photographs housed in NMRS that the excavators were correct in assuming the scarcity of rectilinear enclosures in the Moray plain, Easter Ross and Aberdeenshire. For example, from evidence held in the NMRS it appears that in this extensive area there seem to be no more than 52 rectilinear enclosures, but it is unlikely that all of these were constructed at the same time and for the same purposes. Unlike other areas of mainland Scotland, such as Dumfries and Galloway (cf RCAHMS 1997; Gregory 2001a) it seems therefore that rectilinear enclosures were probably not a substantial component of early settlement dating to the latter centuries of the first millennium BC and the early centuries of the first millennium AD, as the rectilinear form is an unusual one for the region (Jones *et al* 1993). Indeed, it seems more probable that early settlement in Moray is characterized by unenclosed round-houses and ring-ditches, together with a number of enclosed forts and curvilinear palisaded enclosures (letter from Halliday to Gregory, 21/02/01).

A second criticism relates to the character of the ditch profiles identified at the excavated sites. Although V-shaped defensive ditches were undoubtedly used by the Roman army, it is a form which is also found on a number of Iron Age sites in Scotland. At the Camelon native site, Stirlingshire, for example, enclosure ditches A and C were found to be comparable with those employed by the Roman military (Proudfoot 1978). A similar ditch profile is also found at the Pre-Roman Iron Age settlement excavated at Hayknowes Farm, Dumfries and Galloway (Gregory 2001b). Here the outer boundary of the site was found to have a V-shaped profile with a shallow U-shaped slot at its base. It seems possible, therefore, that the enclosures in Morayshire were associated with a quite different activity than that assumed by the excavators. They may, perhaps, relate to early settlement and/or agriculture in the region. Indeed, it is possible that they are in some way analogous to certain rectilinear sites in Northumberland, such as Hartburn (Jobey 1973), which were initially identified as Roman fortlets but were eventually found to be Pre-Roman/Roman Iron Age settlements. On the other hand, rectilinear enclosures are known to be common in Northumberland and the excavated examples are often associated with early settlement. In Moray, by contrast, they are not numerous, little is known about early settlement there, and the association of rectilinear enclosures with settled agricultural activity is on present evidence not proven.

At Easter Galcantray the archaeological evidence is more abundant in consequence of open area excavation. It was this site which Jones believed presented the firmest evidence for the presence of the Roman army in Moray. Even so, a number of problems still remain. First, the association of V-shaped enclosure ditches with basal slots does not positively identify Roman military activity at this site any more than it does at the other Moray sites. Likewise, the single calibrated radiocarbon date retrieved from the 'demolition deposit' within the ditch, although partially spanning the Flavian period at both one and two sigma standard deviations (cal AD 80–130 (1 sigma): cal AD 80–220 (2 sigma)), remains problematic. It is not, in itself, conclusive evidence that the site was occupied and abandoned during the late first century AD. Still less is it conclusive evidence that it was occupied and abandoned by the Roman military, particularly since no late first-century Roman pottery was recovered from this feature or from elsewhere on the site. The absence of Roman finds from the site might, however, be expected, considering the short duration of occupation postulated by Jones *et al* (1987). At the single-period Roman fort at Fendoch, for example, only nine pottery sherds were recovered, of which only three were diagnostic (Richmond & MacIntyre 1939). This caveat aside, attempting to amalgamate the limited dating evidence from Easter Galcantray with precise historical events, such as the Agricolaan invasion of Scotland, is still largely a matter of faith.

The internal structures located at the gate and the south-western corner, which Jones felt were clear proof for the Roman origin of the enclosure, also pose a number of problems. These structures, whilst in many ways similar to those structures found at known Roman forts and fortlets, need not necessarily be firm proof for Roman military construction. At the nearby site of Tarradale, located at the head of the Beaully Firth, for example, a comparable corner tower arrangement was also found associated with a large ditched enclosure. In this instance, however, artefactual evidence suggests that this putative tower dates to the middle centuries of the first millennium AD and was associated with a large native site (Gregory & Jones 2001). Presumably, in the absence of secure dating evidence, a similar situation may apply to the Easter Galcantray enclosure and its associated features, although it does appear that architectural features of this kind are unusual in a late Iron Age/early historic settlement context.

It should also be noted that some doubt was cast on the integrity of these features by a number of Romanists who visited the site during the late 1980s. It was felt that, in some cases,

ploughing may have disturbed some large sub-surface stones which cover portions of the site. This allowed topsoil to enter the voids formerly occupied by the stones and created a series of false post-holes (letter from Breeze to Gregory, 2/02/01). This may also explain the apparent absence of post-pipes from the 'post-pits' located at the entrance and south-western corner of the enclosure.

The internal structures at Easter Galcantray are also open to alternative interpretation. Jones, for example, suggested that the peculiar U-shaped structure was a Neolithic feature, due to its probable association with one dated pit from its interior, and was possibly the remains of a Neolithic house. Comparison with other Neolithic house plans from Britain and Ireland indicate, however, that this interpretation is unlikely (cf Darvill & Thomas 1996). It seems more likely, based on the plan of the U-shaped structure, that it is associated with the 'long mortuary enclosure' tradition encountered elsewhere in the Scottish Neolithic, as at Inchtuthil (Barclay & Maxwell 1991). As Barclay and Maxwell note (1998, 120), these sites generally consist of a 'rectilinear ditched enclosure, on a scale similar to a long barrow, but with closed-off ends and no trace of a mound'. It is, therefore, conceivable that the structure at Easter Galcantray represents a rare example of these enigmatic Neolithic enclosures from north-eastern Scotland. It is equally possible, of course, that elements of the structure, notably the U-shaped trench and its associated stake-holes, are not related to the Neolithic pit in any way. The spatial relationship between the structure and the enclosure boundary may suggest contemporaneity. If this is the case the site was probably not a Roman fort or fortlet, since internal structures of this type were not constructed by the Roman army.

The other internal buildings (A–D) from the site may also be scrutinized on a number of grounds. It seems possible, as Jones was inclined to argue, that these buildings were indeed contemporary with the enclosure boundary based on their spatial configuration. Even so, their positioning appears in certain places at odds with the known layout of many excavated Roman forts or fortlets. There is, for example, insufficient space for the provision of an *intervallum* between the putative gate and building B.

Even though the buildings may not have been connected to Roman military activity it is likely that they do date to the earlier half of the first millennium AD. This is indicated by the discovery of a biconical bead from building D. Although it is unfortunate that very little is known of domestic architecture during the early/middle centuries of the first millennium AD in this region (cf Foster 1998), similar post-defined rectilinear buildings have been identified at the Tarradale enclosure (Gregory & Jones 2001), whilst at Green Castle (Area 1, Structure U2), Portknockie and Tarbat (Sector 1, Structure 2) the foundation trenches for rectilinear building have also been identified (Ralston 1987; Carver 1995). At all these sites these structures seem likely to date to a similar period as the Easter Galcantray buildings and, in turn, may represent a fairly standard form of architecture constructed by the proto-historic and early historic communities of this region.

CONCLUSION

The intention of this paper has been to document the excavations undertaken by Charles Daniels and Barri Jones, and to attempt to present the interpretative context within which the excavators placed their discoveries. It is clear that, although the excavations produced important results, the possibility that the enclosures represent direct evidence of Roman military activity remains unproven. Arguments may be advanced in favour of this interpretation, as was the inclination of the excavators; equally, arguments may be made against the identification of the enclosures as

Roman military works. At the very least, these findings add a further, if somewhat controversial, element to any future discussion of Roman military penetration in northern Scotland.

ACKNOWLEDGEMENTS

Excavation was made possible through the kindness of various landowners. These include Mr J G Mair, Mortlach Distillery (Thomshill), Mr D Walker of Easter Galcantray Farm, Mr A Proctor, Balnageith Farm and Mr T E Walker of Milton of Mount Blairie (Boyndie). The excavations were funded by grants from the Universities of Manchester and Newcastle, with additional subventions from the Haverfield Trust and the Moray Aerial Survey Group, which contributed both to excavation proper and the related programme of aerial photography. Thanks must also be given to all the students from the Universities of Manchester and Newcastle who participated in the excavations over the course of the 1980s, and numerous local volunteers, without which the excavations would not have been possible. Dr D Breeze and Mr R McCullagh, of Historic Scotland, and Dr M E Robinson, of the University of Manchester, commented on earlier drafts of this paper. L Ferguson, S Halliday and I Fraser of RCAHMS kindly provided information on material held in NMRS. Dr L Allason-Jones allowed access to the archive held at the University of Newcastle. G Bowden kindly prepared the figures. Thanks must also be given to Dr J P Wild, Dr M J Jones, Mr F Hunter and Dr A Sheridan. Finally, a special debt of gratitude must be given to Mr Ian Keillar, who was integral to the survey and excavation from its initiation. The completion of this report was funded through a grant from Historic Scotland.

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This paper is published with the aid of a grant from Historic Scotland