

Investigations of the Antonine Wall and medieval settlement at Kinneil House, Bo'ness, Falkirk

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with contributions by G Haggarty & R Murdoch

ABSTRACT

An archaeological investigation was carried out by the Centre for Field Archaeology (CFA) across the course of the Antonine Wall at Kinneil House, Bo'ness. From topographic and aerial photographic evidence it had been suggested that there might have been two alignments in the field directly west of the house, one running east/west and one diverging from this to the south. The investigation proved that the straight east/west course of the frontier is the only line present, and that the other feature was a more recent cobbled path. Elements of the medieval village that occupied the area prior to its clearance in the late 17th century were also identified. Among other features, these included the remains of a possible timber-built structure and an area of paving. The stratified deposits associated with these features contained artefacts spanning the late 12th to the late 17th or early 18th centuries. The work was funded by Historic Scotland and comprised part of a wider review of the scheduling of the Antonine Wall.

INTRODUCTION

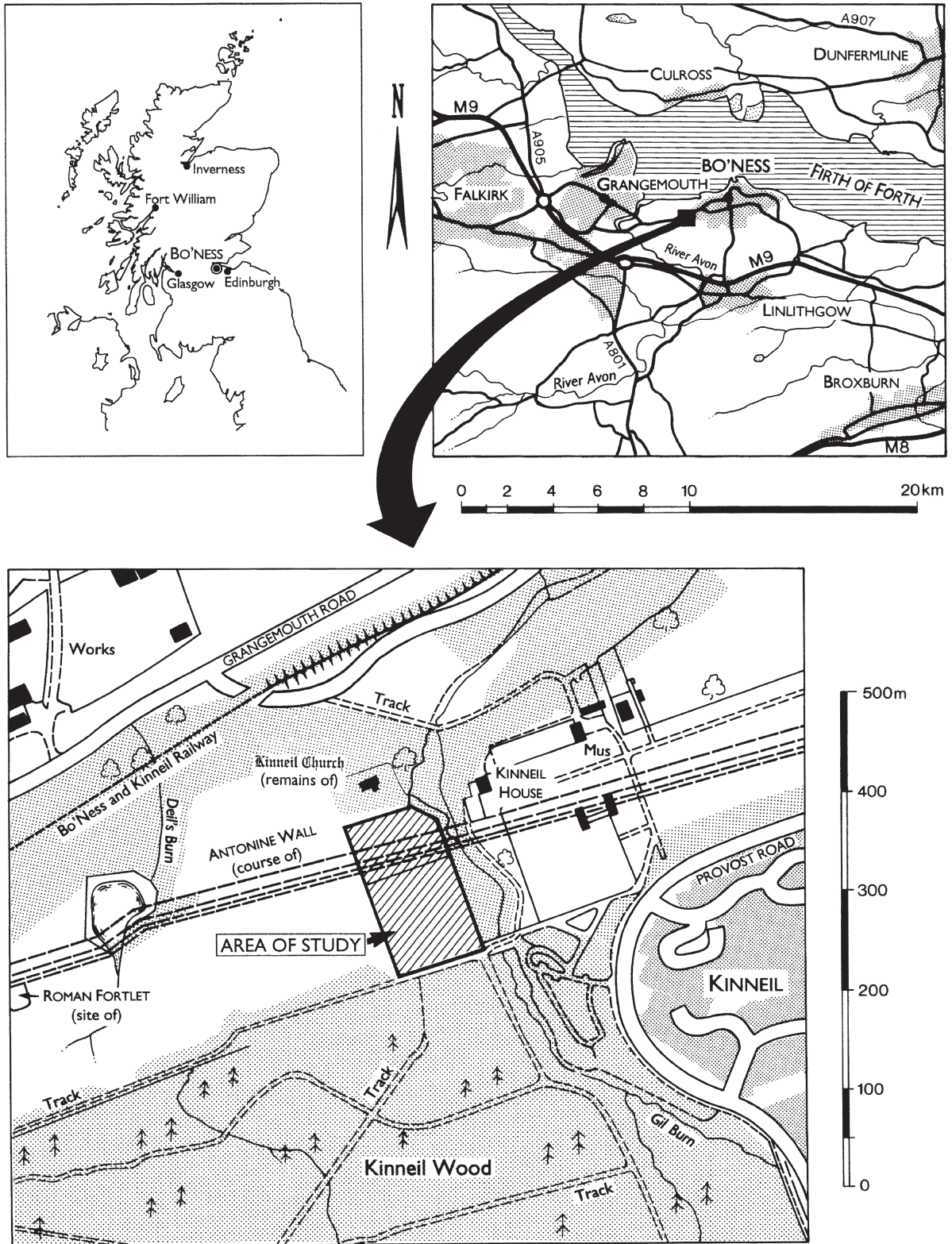
This report presents the results of geophysical survey and trial excavations undertaken by the Centre for Field Archaeology (CFA) during February 1998 in the field, known as the Meadows, located to the west of Kinneil House, Bo'ness, Falkirk (NGR: NS 981 804; illus 1). This work was commissioned by Historic Scotland as part of a wider review of the scheduling of the Antonine Wall Roman frontier works. The objective of the fieldwork was to identify the nature and extent of the Antonine Wall at this point and, particularly, to determine whether two diverging alignments existed here. Kinneil House itself is in State care, and the surrounding parkland is owned and managed by Falkirk Council.

In the following report, descriptive terms used for the various elements of the Antonine Wall (eg 'Antonine Wall', 'Rampart', 'Ditch') follow previous sources (summarized in Robertson 1990, 8, fig 6).

ANTONINE WALL

Previous identifications of two alignments of the Antonine Wall in the Meadows derived from a combination of ground and aerial evidence, supported by antiquarian references (summarized by

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

Bailey 1996, 360–4). Several aerial photographs record two linear traces, apparently of two ditch alignments, to the west of Kinneil House, one running directly east/west and the second diverging south-eastwards from the first, c 100 m west of the Gil Burn (eg *ibid*, 364). On the ground a prominent hollow can be traced running eastwards towards Kinneil House, turning to the south-east along the line of the second proposed ditch line visible from the air.

Macdonald (1925, 276; 1934, 107) tested both alignments in 1915 by opening trenches across the Meadows at frequent (although unspecified) intervals. He demonstrated that the Ditch ran east/west and, additionally, exposed part of the Rampart towards the eastern extremity of the field. His investigations of the hollow diverging to the south-east revealed undisturbed till a little below the turf, but no evidence for a Ditch at this point. He interpreted the surface hollow as the remains of the 'Visto' recorded in the early 18th century by Sibbald (1710, 18) as a path connecting Kinneil House with its former north-west pavilion; Macdonald argued this 'Visto' must have converged with, and reused the line of, the Ditch in the Meadows. Macdonald (1934, 107) concluded that 'Clearly the Limes had never forsaken the straight at all'. In 1961 excavations carried out to the east of Kinneil House appeared to confirm this observation (Hendry 1971).

More recently, aerial photographic evidence revived the belief that the Ditch had turned southwards from a straight course to cross the Gil Burn (eg Robertson 1990, 42–3). Excavations in 1990 carried out by Bailey (1996, 360–4) in the walled gardens of Kinneil House, on the east side of the Gil Burn, uncovered part of a large deep depression. Bailey tentatively interpreted this as the Ditch on the east side of the Gil Burn, and reopened debate as to whether the surface hollow in the Meadows was not after all part of a corresponding Ditch alignment on the west bank. Such re-entrant angles are known on the Antonine Wall at the crossings of the East and West Burns of Falkirk (Bailey 1996, 348), and in this case would have facilitated the crossing of the Gil Burn.

Kinneil has also long been suspected on grounds of spacing as the location of a Roman fort (Hanson & Maxwell 1983, 87), although no traces of such an installation have ever been detected (Breeze 1980, 52). There is certainly no evidence of it on aerial photographic coverage. Just over half a kilometre west of Kinneil House, and outwith the investigation area, the site of a Roman fortlet was identified during fieldwalking (Keppie & Walker 1981), and thereafter fully excavated in 1980 (Bailey & Cannel 1996).

MEDIEVAL AND LATER REMAINS

Kinneil must have been of considerable importance during the medieval period. The present Kinneil House, which was built in 1677, was preceded by the Palace of Kinneil, founded by the Earl of Arran in 1553. The palace was attacked and damaged in 1570 by the Regent Morton, and thereafter an L-shaped house was built a little to the north to replace it (RCAHMS 1929, 190–2; Salter 1994, 64).

The church in the grounds at Kinneil, of which remnants are still standing, is of mid 12th-century date, and was used as the parish church until 1670 (Hunter 1967). The site may have earlier origins as a place of worship as the head of a stone cross, which may date to the late Saxon period, has been found on the site (Clapham 1951, 102). Excavations carried out in 1951 identified the floor level of an earlier structure below the south-east corner of the church (Hunter 1967). Although undated, this horizon may represent the remains of an earlier chapel. Supporting evidence that this was an earlier Christian foundation comes from a semicircular cropmark feature (see Bailey 1996, 364) giving the appearance of a ditch enclosing the chapel. Such circular

ditched enclosures are known to surround Early Christian cemeteries and chapel sites (Thomas 1971, 50–1).

The medieval village of Kinneil was situated within the field in which the current investigations took place. It must have been a sizeable village, for the *New Statistical Account of Scotland* records that in 1661 there were 559 ‘communicable’ people resident in Kinneil. The village probably originated early in the medieval period and was most likely inhabited until it was cleared by the Hamilton family in 1691, when the land it occupied was landscaped to create parkland (Robertson 1990, 43). It has been suggested that the village used the Rampart base of the Antonine Wall as its main street (Salmon 1901, 47–8).

The parkland was presumably set out as a complement to the extensive alterations that the Duke of Hamilton undertook on Kinneil House in the last quarter of the 17th century (RCAHMS 1929, 190–2). It is this emparkment of the estate to which the ‘Visto’ (see above) is probably related.

ARCHAEOLOGICAL INVESTIGATIONS IN 1998

METHODS

Aerial photographs held by the Royal Commission on the Ancient and Historical Monuments of Scotland were consulted to identify cropmarks in the area. A rectification of one of the oblique photographs was carried out to allow the accurate placement of the geophysical survey over cropmark features.

Geophysical survey was then undertaken. Resistivity geophysical survey was conducted because this technique is better suited than gradiometry to the location of linear components of the Antonine Wall, particularly the Ditch. The geophysical survey was carried out in two blocks, A & B (illus 2). An anomaly tentatively attributed to the Ditch of the Antonine Wall was identified. Several other anomalies were also identified.

Four trenches of various sizes were excavated (illus 2). Their positions were chosen using the results of the geophysical survey, combined with the surface and aerial photographic evidence. All trenches were initially topsoiled by earth-moving machine. The excavation of stratified deposits was limited to defining the character and date of the features encountered; full excavation was not attempted.

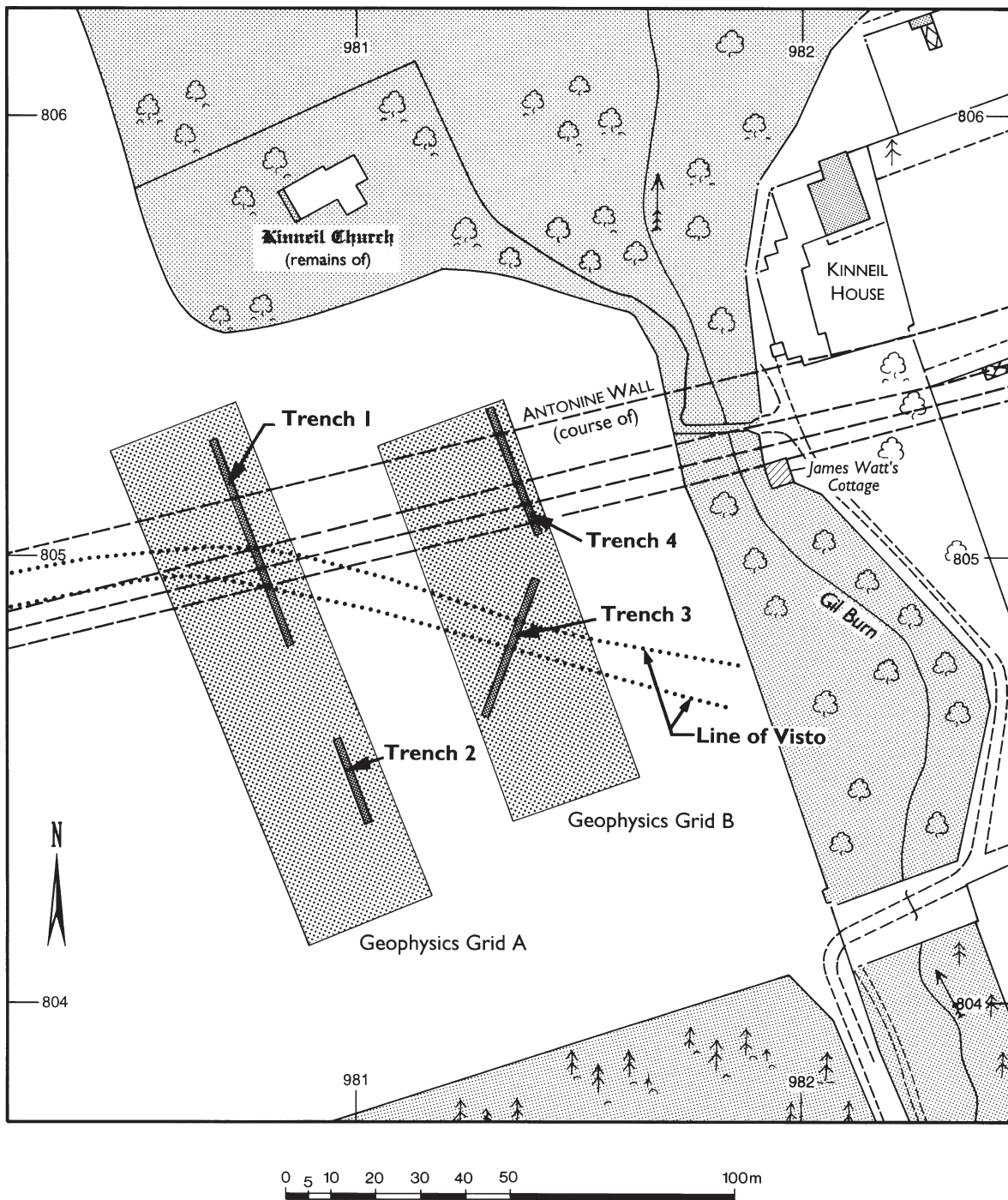
The excavations identified both Roman remains and several features associated with the cleared medieval village. The excavation results and the finds are considered on a trench by trench basis, as each trench effectively represents an independent sample drawn from an apparently large and complex medieval site.

TRENCH 1 (ILLUS 3)

This trench (50 m by 1.5 m) was placed over the junction of the two proposed Ditch lines defined by the aerial photographs and located by the geophysical survey (illus 2). It was excavated in order to establish the character of these two features and to assess the relationship between them. The trench was excavated across the surface hollow identified by Macdonald (1934, 107–8) as the former ‘Visto’; it was present towards the northern end of the trench.

Antonine Wall

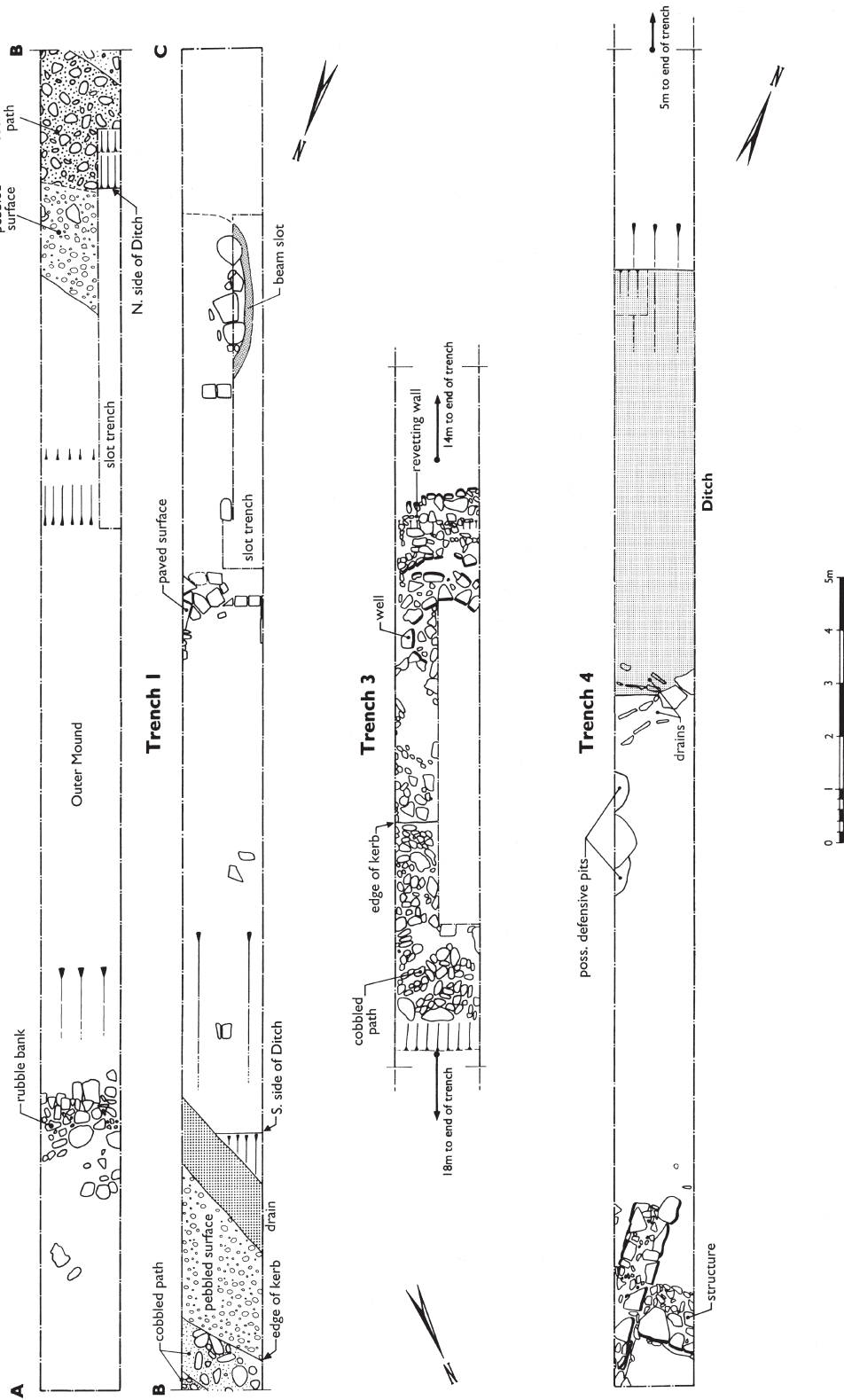
The Ditch was detected running on an east/west alignment. It was located only with some difficulty as it lay below a later cobbled path. The Ditch here had a surface width of c 7.5 m; its profile is not known as it was



ILLUS 2 Map showing locations of geophysical survey and trial trenches

excavated only to a depth of 0.6 m. The exposed upper fills consisted of a series of clayey silts and silty clays, suggesting natural silting rather than deliberate backfilling at this upper level.

About 1.7 m north of the Ditch, a slight bank some 9.8 m wide was present, and is tentatively interpreted as representing the remains of the Outer Mound. Only the southern portion of this feature was examined, and was found to be composed of mixed silty material and sandstone fragments, c 0.3 m thick.



ILLUS 3 Plans showing principal features identified in Trenches 1, 3 & 4

The proposed second line of the Ditch, suggested by previous writers (Robertson 1990, 44; Bailey 1996, 364), was not identified. Although the trench extended c 20 m to the south of the east/west Ditch neither the Rampart nor any other associated Roman features were present within the trench.

Medieval and later remains

The remains of a beam slot were found towards the southern end of the trench. Only its west side was fully defined, c 3.3 m wide. Its southern side was traced for 1.4 m, and continued eastwards beyond the trench; its presumed corresponding north side was obscured beneath more recent archaeological deposits which were not excavated. This slot is potentially part of the foundations of a timber-built structure using sill beam construction techniques. It was sealed by a deposit of fairly clean clayey silt containing artefacts dating solely to the late 12th and early 13th centuries. Above this and to the north of the beam slot remnants of a paved surface of small sandstone flags and a few rounded boulders were identified. It was 0.6 m wide and ran across the trench. This feature may represent the floor of a building, a paved pathway or a yard.

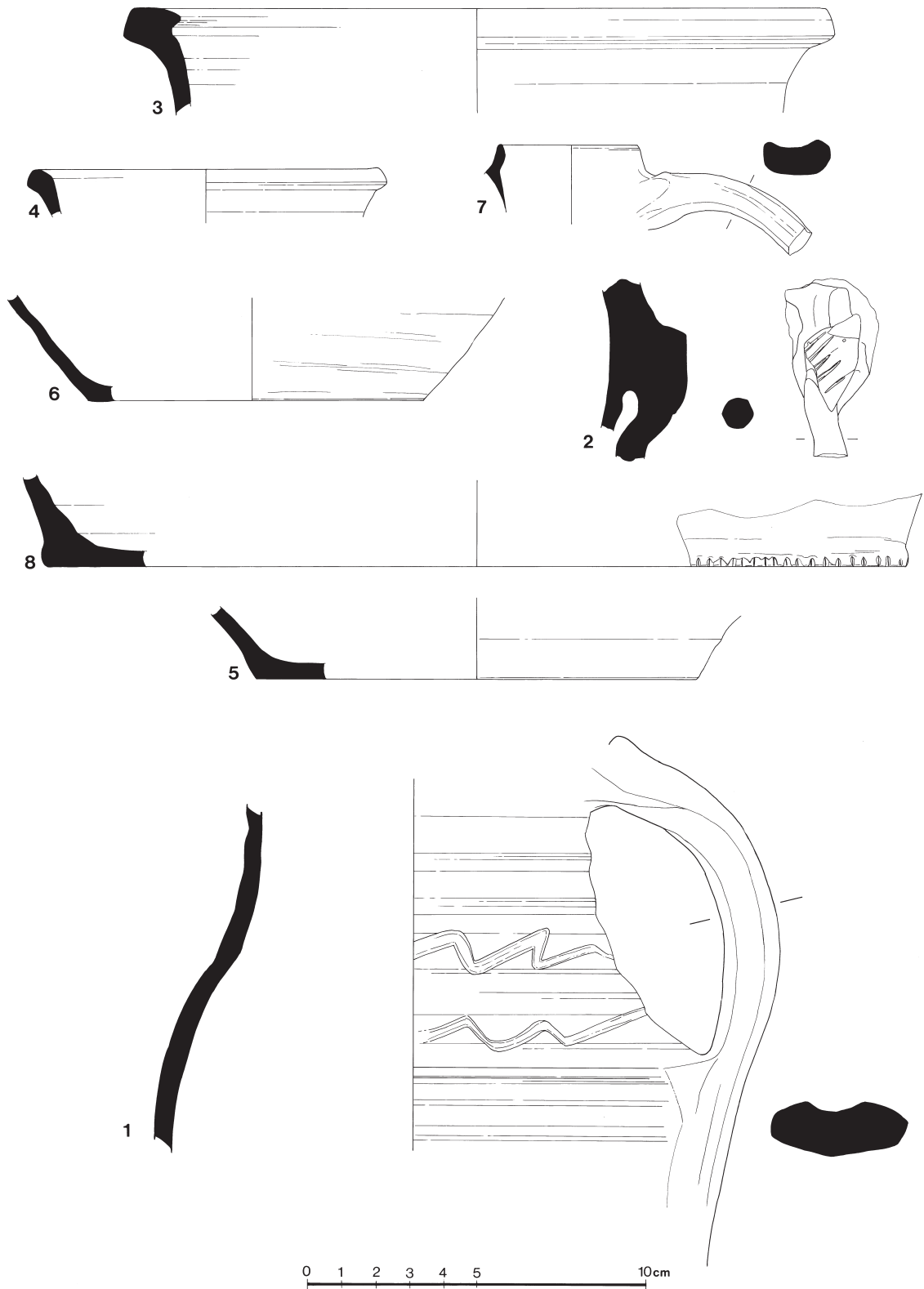
A cobbled path ran diagonally across the surface of the Ditch on a NW/SE alignment. It lay above a tightly packed pebble surface which dipped into the Ditch. It is possible that this layer of pebbles was simply a foundation for the cobbled path, laid in an attempt to prevent the latter subsiding. It may also represent an earlier road surface. The cobbled path itself had a kerb on its south side.

In a hollow to the north of the putative Outer Mound, a bank of rubble was identified, possibly representing a collapsed wall. This was sealed by an unusually large depth of topsoil. A stone-built drain was also identified, cutting across and substantially removing the upper southern edge of the Ditch.

Pottery (illus 4)

George Haggarty

Several interesting ceramic types were identified from this trench. The remains of a large, late 16th- or early 17th-century Scottish post-medieval Reduced Ware jug (illus 4.1), with multiple wavy grooving on the shoulder, was recovered from a dump deposit overlying the paved surface south of the Ditch (context 113). Other examples of this type have been published (Haggarty 1980; Caldwell & Dean 1993). Ceramics of interest also include a range of late 12th- or early 13th-century Scottish White Gritty wares. These came from the dump deposit which sealed the beam slot feature (context 114), and included one sherd (illus 4.2) from a crude local copy of a Scarborough knight jug. Although readily classifiable as a group, knight jugs are impossible to divide on stylistic features into sub-types (Farmer 1979). The body sherd has attached to it part of a small arm and long triangular shield decorated with diagonal rows of incised vertical lines. The pre-1225 date ascribed by Farmer (*ibid*) to highly decorated Scarborough Ware is in general fraught with difficulties, although at least one shield fragment was found in a Southampton pit dated to c 1300 (unpublished fragment in Southampton Museum P758 SM72). The other ceramics of particular interest from the same deposit are two rim sherds from two different cooking pots (illus 4.3 & 4.4), one basal angle sherd from a small globular cooking pot with a flat base (illus 4.5) and another from a globular cooking pot with a sagging base (illus 4.6). Seventeen small body sherds representing approximately 11 cooking pots were also recovered from context 114, along with two small green glazed body sherds from two different jugs. The total assemblage from Trench 1 is summarized in Table 1.



ILLUS 4 Pottery from Trenches 1 & 4

TABLE 1
Pottery from Trench 1

| Context | Vessel type | No of sherds | Date |
|--|---|--------------|------------------------------|
| Cleaning layer (101) | Scottish White Gritty Ware | 5 | 13th century ? |
| | Scottish Redware | 4 | 14th-15th century |
| | Scottish post-medieval Reduced Ware | 11 | 17th century |
| | Scottish post-medieval Oxidized Ware | 3 | 17th century |
| Buried topsoil (102) | Scottish White Gritty Ware | 2 | 15th century |
| | Scottish Reduced Ware | 4 | 15th century |
| | Scottish post-medieval Reduced Ware | 8 | 16th century |
| | Scottish post-medieval Reduced Ware | 5 | Late 17th-18th century |
| Dump deposit over cobbled path (104) | Scottish post-medieval Reduced Ware | 3 | 16th century |
| Fill of drain (106) | Scottish post-medieval Reduced Ware | 2 | 17th-18th century |
| | Scottish post-medieval Oxidized Ware | 2 | 17th-18th century |
| | Scottish post-medieval Reduced Ware | 2 | 17th-18th century |
| Dump deposit overlying paved surface (113) | Red Gritty Ware | 1 | Unknown |
| | Scottish post-medieval Reduced Ware | | Late 16th-early 17th century |
| Dump deposit overlying beam slot (114) | Scottish White Gritty Ware | 24 | Late 12th-early 13th century |

Glass

Robin Murdoch

One fragment of possible window glass was recovered from a dump deposit overlying the paved surface (context 113). It was 2 mm thick, and bluish green in colour. It is not possible to ascribe a date to this although the colour is similar to that of 17th-century window glass.

Coin

A coin recovered from the dump deposit overlying the beam slot (context 114) was identified as a silver long cross penny belonging to the second coinage of Alexander III, c 1280–6 (Stabler, cited in Forkes 1998, 2).

Evaluation

This trench showed that only a single alignment of the Ditch was present, on an east/west orientation. The putative second line proved to be the remains of a medieval or later cobbled path which ran diagonally across the Ditch. It is presumably the combination of the Ditch and cobbled path which created the two linear cropmarks visible on aerial photographs and detected by geophysical survey.

The pottery recovered from this trench ranged from the late 12th to the late 17th or early 18th centuries. Much of it was unstratified or redeposited (contexts 101, 102 & 106): the latest material may have been discarded after Kinneil village was abandoned, if the terminal date of 1691 is accepted. The securely stratified pottery (contexts 113 & 114) points towards a long occupation of the village, with dates ranging from the early 12th to the early 17th centuries.

The beam slot feature may be the foundations of the end wall of a building aligned almost east/west along the contours of a north-facing slope. The use of sill beams was a standard method

of construction from the 13th century onwards (Yeoman 1995, 56). From the excavated evidence this structure would have been about 3.3 m wide, a dimension which fits with other excavated examples of such structures which vary in width between 3 m and 4 m (ibid). It was sealed by a deposit (context 114) which contained a range of early Scottish ceramics, of late 12th- or early 13th-century date, and a silver long cross penny of Alexander III c 1280 x 1286. The dates from the artefacts reinforce other indications that this represents a 12th- or 13th-century horizon.

A paved surface was laid after the beam slot structure had been covered over. The beam slot structure may thus have been deliberately levelled for the construction of another building, although the paved surface could alternatively represent the remains of a pathway or yard, as no evidence of any structural walls was recovered in association with it. This paved surface was sealed by a deposit of clay and sandstone fragments (context 113) which contained pottery dating to the 16th or 17th centuries.

The cobbled path is probably one of the most recent archaeological features identified in this trench. A levelling deposit of clay (context 104) was identified on the path's southern side which contained late 17th- or early 18th-century pottery. The possibility that this path represents part of the 'Visto' associated with the emparkment of the grounds of Kinneil House is discussed further below.

TRENCH 2 (NOT ILLUS)

This trench was placed across a linear vegetation mark visible on oblique aerial photographs taken in 1997 (held by RCAHMS, ref: D 86099/cs–D 86109/cs). The feature lies south of the Antonine Wall, and it was considered to be a possible alignment of the Military Way. No features of archaeological significance were identified in this trench. Topsoil around 1 m in depth was identified over undisturbed subsoil. It is probable that this topsoil was imported to the site during the emparkment of the estate. The cause of the vegetation mark was not discovered.

TRENCH 3 (ILLUS 3)

This trench (45 m by 1.5 m) was positioned to investigate the putative second Ditch line running south-east towards the Gil Burn, as detected by aerial and geophysical surveys (illus 2). The topsoil at the south-west end of the trench was unusually thick, between 0.6 m and 1.3 m, with the deposits in the middle of the trench reaching 1.2 m. At the north-east end of the trench the topsoil was only 0.3 m deep. Ashy dumps could be discerned within this topsoil; some of these must have been of relatively recent origin as they contained glass bottles and other modern debris. It appears from the varying depths of topsoil that the gentle slope of the field at this point is thus the outcome of post-17th-century landscaping.

Medieval and later remains

At the position of the putative Ditch alignment, a well-laid cobbled path was identified running on a NW/SE alignment, and is most probably a continuation of the path located in Trench 1. Below the path a hollow was filled with layers of clay, into which the cobbles had been rammed, presumably in an attempt to provide a firm foundation. As observed in Trench 1, a kerb defined the upslope (south) side of the path, although at some point this had been roughly filled in with stone to extend the cobbled surface south-westwards, towards what appeared to be a well.

Fragments of a revetting wall of drystone construction were identified running east/west along the edge of a steep break in slope to the south-west of the path. Between this and the path the remains of a

possible well were located. Only a small portion of this feature was excavated; it was roughly circular in plan, around 1.2 m in internal diameter and stood 0.6 m above the contemporary surface through which it had been cut. The well was excavated to a depth of 0.9 m; the fill below this was then probed to a depth of more than 0.4 m before impenetrable rubble infill was encountered.

Pottery (illus 4)

George Haggarty

The pottery finds from this trench comprise four sherds from a 17th-century Scottish post-medieval oxidized vessel, possibly a bowl with an internal glaze; two sherds from a late 17th- or early 18th-century Scottish post-medieval Reduced Greyware jug; and three sherds from two Scottish post-medieval oxidized bowls of the same date. All were recovered from a deposit overlying the cobbled path (context 303).

Evaluation

A carefully built cobbled track laid on a prepared clay foundation accounts for the anomaly revealed from the air and detected by geophysical survey. A well and revetting wall lay on the upslope side of the path. No remains of Roman date were identified. The pottery evidence indicates that the path pre-dates the late 17th or early 18th century.

The path is most probably a continuation of the comparable feature located in Trench 1, which was also sealed beneath deposits containing late 17th- or early 18th-century pottery. It may be the 'Visto' created within the landscaped gardens following the clearance of Kinneil village, and has been proposed as following this course by Macdonald (1934, 107–8). However, at least some of the exposed features here may be earlier remains associated with the cleared village of Kinneil, and the hollow beneath the path could have been formed by wear during the lifetime of the village (G B Bailey, pers comm). The recovery of securely stratified artefacts would have been required for confirmation of date.

TRENCH 4 (ILLUS 3)

This trench (30 m by 1.5 m) was excavated across the proposed east/west line of the Ditch. The local topography was level and no surface features were visible.

Antonine Wall

The Ditch was located running on an east/west alignment. It had a surface width of c 8 m. A small section was excavated into its northern side, revealing its edge to be steep-sided. The ground immediately north of the Ditch sloped upwards; this may be due to the (partial) survival of the Outer Mound, but owing to time constraints this possibility was not investigated further.

No trace of the Rampart survived. Two small negative features were located in the area of the Berm. These were not fully exposed within the trench and they were not excavated. They may be 'defensive pits', such as those found at Callendar Park (Bailey 1995, 581) and Inveravon (Dunwell & Ralston 1995, 533); this hypothesis would have required confirmation through more extensive excavation.

Medieval and later remains

In the area where the Rampart had been expected the remains of a structure were identified. This comprised a well-built, mortared, stone wall, 0.85 m wide, running NE/SW for a distance of 3.25 m before exiting the

trench. At a right angle to this, running to the south-east, there was a wall of rougher construction, 0.5 m wide, abutting the first wall and apparently revetted at some time with small fragments of sandstone and clay. Layers of ash were found abutting the west side of the NE/SW wall: the heat had been so great that the wall was scorched red. The remains of the structure had been covered over with a mixture of midden material, rubble and clay. Further excavation found no trace of the Rampart or other Roman remains below the structure.

Two stone-built drains were identified on the southern edge of the Ditch. These probably relate to agricultural practices in these fields after they passed out of use as parkland for Kinneil House.

Pottery (illus 4)

George Haggarty

Ceramics of interest recovered from this trench comprised part of the rim and handle of a small brown salt-glazed jug (illus 4.7) from a dump deposit over the stone-walled building (context 402); and a basal angle sherd (illus 4.8) from a late 12th- or early 13th-century Scottish White Gritty jug with an external pink slip and notched decoration around the basal angle. The latter sherd was recovered from the upper fill of the Ditch (context 406).

TABLE 2

Pottery from Trench 4

| Context | Vessel type | No of sherds | Date |
|--|------------------------------|--------------|------------------------------|
| Dump deposit over stone building (402) | Reduced Scottish Green Glaze | 1 | Late 17th-18th century |
| | Brown Saltglaze | 1 | 18th century |
| Upper fill of possible defensive pit (404) | Reduced Scottish Green Glaze | | Late 17th-18th century |
| Fill of French drain (405) | Reduced Scottish Green Glaze | 1 | 17th century |
| | Scottish post-medieval | 1 | 17th century |
| | Oxidized Ware | | |
| Upper fill of Ditch (406) | Scottish White Gritty Ware | 1 | Late 12th-early 13th century |

Evaluation

The evidence for the Antonine Wall within this trench concurs with that from Trench 1, in that the Ditch is present on the east/west alignment. Possible 'defensive pits' were also identified in the Berm area. These features were not excavated and were only partly exposed in the trench. From the small area opened they did not appear to be as closely spaced as those at Callendar Park (Bailey 1995, 581), and rather resembled the spacing of the pits located on the Berm at Garnhall (Burnham *et al* 1993, 279). Confirmation of their Roman origin would have required further excavation. It must also be noted that a post-medieval potsherd was recovered from the surface of one of these pits, although this may have been intrusive.

The stone building consisted of a well-constructed mortared stone wall, with a wall of ruder construction abutting it. Given its quality of construction, the main wall is probably a fairly late building, although no securely stratified artefacts were recovered to confirm this. After its demolition it appears to have been covered over with clay and rubble to make the area easier to landscape. This deposit contained pottery dated to the late 17th or early 18th centuries, which may reinforce the architectural indications that this was a late structure. As such the building could either have been a part of Kinneil village or part of the parkland landscape which replaced

it. Other late buildings exist in the vicinity: James Watt's cottage, where he is reputed to have built his first steam engine in 1768, lies immediately to the east of the Gil Burn (Salmon 1901, 372–6).

DISCUSSION

ANTONINE WALL

The excavations at Kinneil have confirmed the assertion by Macdonald (1934, 107–8) that only a single line of the Antonine Wall was present to the west of Gil Burn, running on an east/west alignment. The surface widths of the Ditch where located were 7.5 m and 8 m; these dimensions lie within the limits already known from the immediate locality. Widths of between 6 m and 11 m are known from excavations at Kinneil fortlet (Bailey & Cannel 1996, 310), while excavation immediately to the east of Kinneil House revealed the Ditch to be 8.5 m wide (Hendry 1971, 107).

No trace of the Rampart was identified in any of the trenches. In Trenches 1 and 4, where its former presence could be expected, the ground had been disturbed at a later date, which may account for its absence. Indeed, Macdonald (1934, 106) remarked upon the lack of preservation of the superstructure of the Rampart within the fields to the west of Kinneil House and a long way beyond, although he did locate it at certain points (eg Macdonald 1925, 276; 1934, 107).

He also mentioned that the Rampart base was used as a road between Nether Kinneil and Inveravon Cottages until 1848, when it became so worn that the farmer removed it to prevent injury to his horses (Macdonald 1934, 111). The lack of its preservation at Kinneil might be explained if the inhabitants of the medieval village there had used the Rampart base as its main street (as suggested by Salmon 1901, 47–8). Alternatively, the Rampart base would also have provided a useful stone quarry for building material for the village, and thus could have been destroyed by robbing.

The proposed NW/SE alignment of the Ditch proved instead to be the route of a cobbled path. It is likely that this path continues to the west of the study area along the line of the hollow apparent at ground level. If this is the case, its presence may be responsible for much of the linear vegetation mark observed from the air, which had previously been explained as the Ditch. This path may be the 'Visto' referred to by Sibbald (Macdonald 1934, 107–8), built within parkland following the clearance of Kinneil village in 1691, although it may well have had an earlier origin associated with the village.

The results of this excavation suggest that the large hollow excavated by Bailey (1996, 360–4) within the walled garden of Kinneil House is not the re-entrant angle of a proposed divergent line of the Ditch. Given its position to the south of Kinneil House, it may represent a defensive feature related to the Palace of Kinneil and enclosing it on its eastern side, with the western side protected by the vertical cliffs of the Gil Burn. Alternatively, it could perhaps represent the remains of a defensive ditch from the proposed Roman fort at Kinneil (Hanson & Maxwell 1983, 87), although Bailey found no Roman artefacts during his excavation, and the alignment of the proposed ditch would be unusual if it were to belong to a fort behind the Wall. Macdonald (1925, 278–9) suggested that the area around Kinneil House itself occupies the site of the proposed Roman fort. He presumably meant the walled garden area as Kinneil House itself lies to the north of the Wall. The topographic location of the garden is ideal, and it lies on the east side of the burn which, as Macdonald pointed out, is a common place to find forts associated with waterways on the Antonine frontier, such as those at Inveravon and Balmuildy.

The potential remains of the Outer Mound were identified in Trenches 1 and 4. The full extent and character of this feature were not defined as the excavation of stratigraphic deposits was limited.

Medieval and later remains

The identified remains of the medieval village at Kinneil undoubtedly represent only a small sample of a much larger site. The pottery assemblage indicates settlement from the late 12th century to the late 17th or 18th centuries. This complements the known dates for events at Kinneil, from the construction of the church sometime in the 12th century to the clearance of the village in 1691. Finds from earlier fieldwalking also complement the pottery assemblage recovered during excavation. The fieldwalking carried out by Cumbernauld Historical Society (1974, 69) produced a number of sherds from the 15th and 16th centuries and a smaller quantity of 12th-century wares.

From this excavation the earliest date for activity on the site comes from the late 12th century. Intimations of a religious centre pre-dating the mid 12th-century church may, however, indicate an earlier origin for the village, yet to be identified.

Early occupation of the village was indicated by the remains of a structure possibly founded on a sill beam; this building technique was common from the 13th century onwards. Sill beams were usually lain horizontally on a rough stone foundation, to stop the wood from rotting too quickly. No such stone foundation was identified here; it may have been removed if the building was dismantled. The deliberate destruction of this structure is a possibility, as the beam slot was filled by the deposit dumped over the top of it.

The lengthy occupation of the site was also apparent in Trench 1, where limited excavation of some stratified deposits indicated the reuse of the same plots of land over time. The possible deliberate destruction of the structure represented by the beam slot, and its subsequent covering over to level up the ground surface, may have been carried out to allow re-development of the plot. Subsequently the ground surface was further raised.

The stone-walled building in Trench 4 is likely to be late in date. Its walls were substantial, and it is possible that it was constructed only after the clearing of the village. The cobbled path that was identified in both Trenches 1 and 3 also appears to be of relatively late date and may well be the 'Visto' referred to by Macdonald (1934). This feature may have exploited a hollowed-out thoroughfare of the medieval village. However it is interpreted, it is this hollow that has previously been proposed as the Ditch alignment.

Despite the small and incomplete sample of the site revealed by this excavation, the results indicate the survival of an extensive medieval village, occupied for more than 500 years. As an example of a deserted medieval settlement which never achieved burgh status, Kinneil village represents an extremely valuable archaeological resource relating to a little studied area of Scotland's past, and one which has been highlighted as a high priority for future excavation (Barclay 1997, 34).

ARCHIVE

An archive of the project will be deposited with the National Monuments Record of Scotland. The finds have been allocated to Falkirk Museum Service by Historic Scotland's Finds Disposal Panel.

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REFERENCES

- Bailey, G B 1995 'The Antonine frontier in Callander Park, Falkirk, its form and structural sequence', *Proc Soc Antiq Scot*, 125 (1995), 577–601.
- Bailey, G B 1996 'Stream crossings on the Antonine Wall', *Proc Soc Antiq Scot*, 126 (1996), 347–71.
- Bailey, G B & Cannel J 1996 'Excavation at Kinneil fortlet on the Antonine Wall, 1980–1', *Proc Soc Antiq Scot*, 126 (1996), 303–46.
- Barclay, G (ed) 1997 *State-funded 'Rescue' Archaeology in Scotland: past, present and future*. Edinburgh. (= Historic Scotland Ancient Monuments Division, Occas Pap, 2).
- Breeze, D J 1980 'Roman Scotland during the reign of Antoninus Pius', in Hanson, W S & Keppie, L J F (eds), *Roman Frontier Studies 1979*, 45–61. Oxford (= BAR Int Ser, 71 (i)).
- Burnham, B C, Keppie, L J F, Esmonde Cleary, A S, Hassall, M W C & Tomlin, R S O 1993 'Roman Britain in 1992', *Britannia*, 24 (1993), 267–326.
- Caldwell, D & Dean, V 1993 'The pottery industry at Throsk, Stirlingshire, in the 17th and early 18th century', *Post-Medieval Archaeol*, 26 (1993), 1–46.
- Clapham, A 1951 'Some Disputed Examples of Pre-Conquest Sculpture', *Antiquity*, 25 (1951), 191–5.
- Cumbernauld Historical Society 1974 'Kinneil Medieval Village, Pottery', *Discovery Excav Scot* 1974, 69.
- Dunwell, A & Ralston, I 1995 'Excavations at Inveravon on the Antonine Wall, 1991', *Proc Soc Antiq Scot*, 125 (1995), 521–77.
- Farmer, G 1979 *An Introduction to Scarborough Ware and the Re-assessment of Knight Jugs*. Sussex.
- Forkes, D A 1998 *Kinneil House, 1998: Conservation Report on the Silver Coin*. AOC (Scotland) Ltd, unpublished report.
- Haggarty, G 1980 'The Pottery', in Ewart, G 'Excavations at Stirling Castle 1977–78', *Post-Medieval Archaeol*, 14 (1980), 23–51.
- Hanson, W S & Maxwell, G S 1983 *Rome's North-West Frontier: the Antonine Wall*. Edinburgh.
- Hendry, T A 1971 'Antonine Wall excavations: Kinneil sector', *Glasgow Archaeol J*, 2 (1971), 107–10.
- Hunter, D M 1967 'Kinneil Church', *Trans Glasgow Arch Soc* (new ser), 15 (1967), 189–99.
- Keppie, L J F & Walker, J J 1981 'Fortlets on the Antonine Wall at Seabegs, Kinneil and Cleddans', *Britannia*, 12 (1981), 143–62.
- Macdonald, G 1925 'Further discoveries on the line of the Antonine Wall', *Proc Soc Antiq Scot*, 59 (1924–5), 270–95.
- Macdonald, G 1934 *The Roman Wall in Scotland*. Oxford.
- RCAHMS 1929 The Royal Commission on the Ancient Historical Monuments and Constructions of Scotland *Tenth Report with Inventory of Monuments and Constructions in the counties of Midlothian and West Lothian*. Edinburgh.
- Robertson, A S (Keppie, L J F (ed)) 1990 *The Antonine Wall* (4th edn). Glasgow.
- Salmon, T J 1901 *Bo'ness and District*.
- Salter, M 1994 *The Castles of Lothian and the Borders*. Malvern.

- Sibbald, R 1710 *The History of the Sherriffdoms of Linlithgow and Stirling (Ancient and Modern)*.
Edinburgh.
- Thomas A C 1971 *The Early Christian Archaeology of North Britain*. London & Glasgow.
- Yeoman, P 1995 *Medieval Scotland: an archaeological perspective*. London.

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