

Excavations at Boonies, Westerkirk, and the nature of Romano-British settlement in eastern Dumfriesshire

by George Jobey

INTRODUCTION: THE PROBLEM

On a distribution map of native settlements of the Roman period in the frontier zone, published in 1966, a major lacuna existed over much of Dumfriesshire and Galloway (Jobey 1966). In particular, the absence of known Romano-British homesteads and settlements in E Dumfriesshire was in marked contrast to the proliferation of sites observable in the uplands and dales of the adjacent Tyne-Forth Province to the east. There was difficulty in attributing this void to adverse natural factors, such as undoubtedly accounted for the absence of settlement in other, less hospitable areas in the frontier region, not least because this countryside appeared to have attracted a reasonable quota of pre-Roman hillforts and related settlements (RCAMS 1920). It was always possible that Roman precept had been responsible for the creation of a partial desert, but both this and drastic depopulation for whatever other reason seemed to offer most unlikely explanations for the apparent scarcity of native farmsteads. Perhaps the problem was no more than that of being able to recognise in field-survey a form of settlement somewhat different from that existing in the east during the Roman period, yet persistent enough to fill the existing geographical and chronological gap.

In the field, the chief diagnostic feature of Romano-British settlement in the eastern uplands has for long been the non-defensive stone-built enclosure containing round stone-built houses which face on to a hollowed yard or yards. More recently it has also become apparent, at least on some of these sites, that timber-built houses preceded the stone ones and that this transition from timber to stone took place only after the Roman occupation was well advanced (Jobey 1966, 4; 1973). Consequently, in their original form, these settlements would have been similar in appearance to a certain type of scooped site, also recorded in numbers in the Border counties, where timber-built houses lie to the rear of a hollowed yard (RCAMS 1967, 24-6, Type E; Jobey 1962a). This being the case, the so-called scooped settlements of this category might also qualify for a Roman or near Roman context. Furthermore, even if only occasionally, these scooped settlements were seen to overlie earlier hillforts in a manner so frequently adopted by the entirely stone-built settlements. Unfortunately, this category of scooped site has not been subject to extensive excavation and, in the past, opinion as to its context has been divided between a later Iron Age and a medieval date (Feachem 1964; Stevenson 1964).

From the evidence of earlier records, the easily recognisable stone-built settlements of the Tyne-Forth Province appeared to be almost absent to the west of Liddesdale in Roxburghshire. Even so, the valleys of E Dumfriesshire, comprising Ewesdale, Eskdale and Annandale, undoubtedly contained a good number of small, embanked enclosures with interior scooping, located on the hill-slopes and river-terraces (fig 1, 2). Many of these were referred to as 'birrens' or 'burians'

in the *Dumfriesshire Inventory*, although the use of the term was not exclusive. Therein, they tended to be attributed to a medieval or later context and were seen as possible corrals for cattle in times of Border strife. Similar ideas had already been advanced in the *Statistical Account* (1794, 528), where the entry under the parish of Westerkirk in Eskdale may serve as an appropriate example:

'There is a great number of burians in the parish. These are all of circular form and are from thirty-six to fifty yards in diameter . . . They are supposed by some to be the remains of Pictish encampments; others think they are places of strength, into which the inhabitants collected their cattle, when alarmed with a visitation from the English Borderers; and many are of the opinion that they were formed for the purpose of protecting the cattle from the ravages of wild beasts . . . The last of these has some countenance . . . in that there is a burian on almost every farm, and that its situation, in general, is on the first piece of dry or rising ground that is to be met with in the neighbourhood of the farmstead, especially when such a situation is rendered the more inaccessible by the bank of the river . . .'

Partly with the problem of Romano-British native settlements in mind and the role which the enigmatic 'burians' might have to play in its solution, the various earthworks of E Dumfriesshire have been almost completely re-surveyed in recent years (Jobey 1971). It was immediately apparent from this investigation that many of the embanked and scooped enclosures in the area contained the sites of round, timber-built houses, and that some at least possessed indications of frontal yards. Although the stature of their enclosure-banks was often quite substantial, in other aspects it seemed that many of these settlements bore some resemblance to the scooped sites of Peeblesshire to the north and the Tyne-Forth Province to the east. A number of selective excavations were clearly necessary in order to refine the survey and to establish contexts in an area where recorded investigation on early settlement sites has been minimal.

It is regrettable that some of the best type-sites have been overplanted by private afforestation since they were surveyed, and were no longer accessible for excavation. The earthwork at Boonies, however, was made available for investigation through the helpful co-operation of the Buccleuch Estates and the tenant-farmer Mr John Clark. Excavations were carried out in 1973 and 1974 with the valuable assistance of internal and extra-mural students of the University of Newcastle upon Tyne, financial assistance being provided by the University Excavation Committee and the Mouswald Trust.

THE SITE (figs 1 and 2, pls 4-6)

The settlement lies about one kilometre to the W of the small village of Bentpath in the parish of Westerkirk (NGR NY 304901). It is situated, like many others in the area, on the edge of a river-terrace some 15 m above the present right bank of the River Esk, and is some 40 m to the W of a small cleugh through which flows the tributary Boonies Syke. A short distance beyond the modern road to the W the hill-slopes rise steeply, eventually to attain a height of almost 300 m on Knock Craigs. The lower slopes and the narrow, flat terrace on which the site lies have all been cultivated in comparatively recent times, but are now given over to pasture. In full view to the NE, across the earlier floor-plain of the Esk, is another site of like form and location, situated above the former smithy at Todholes (NGR NY 308904). This is not so well preserved and, as in the case of a number of less upstanding remains in the valleys of E Dumfriesshire, has not been recorded hitherto.

The enclosure-bank at Boonies still stands to a height of about 2 m, except along the edge of the river-scarp where only a low mound is visible. The entry in the *Dumfriesshire Inventory*

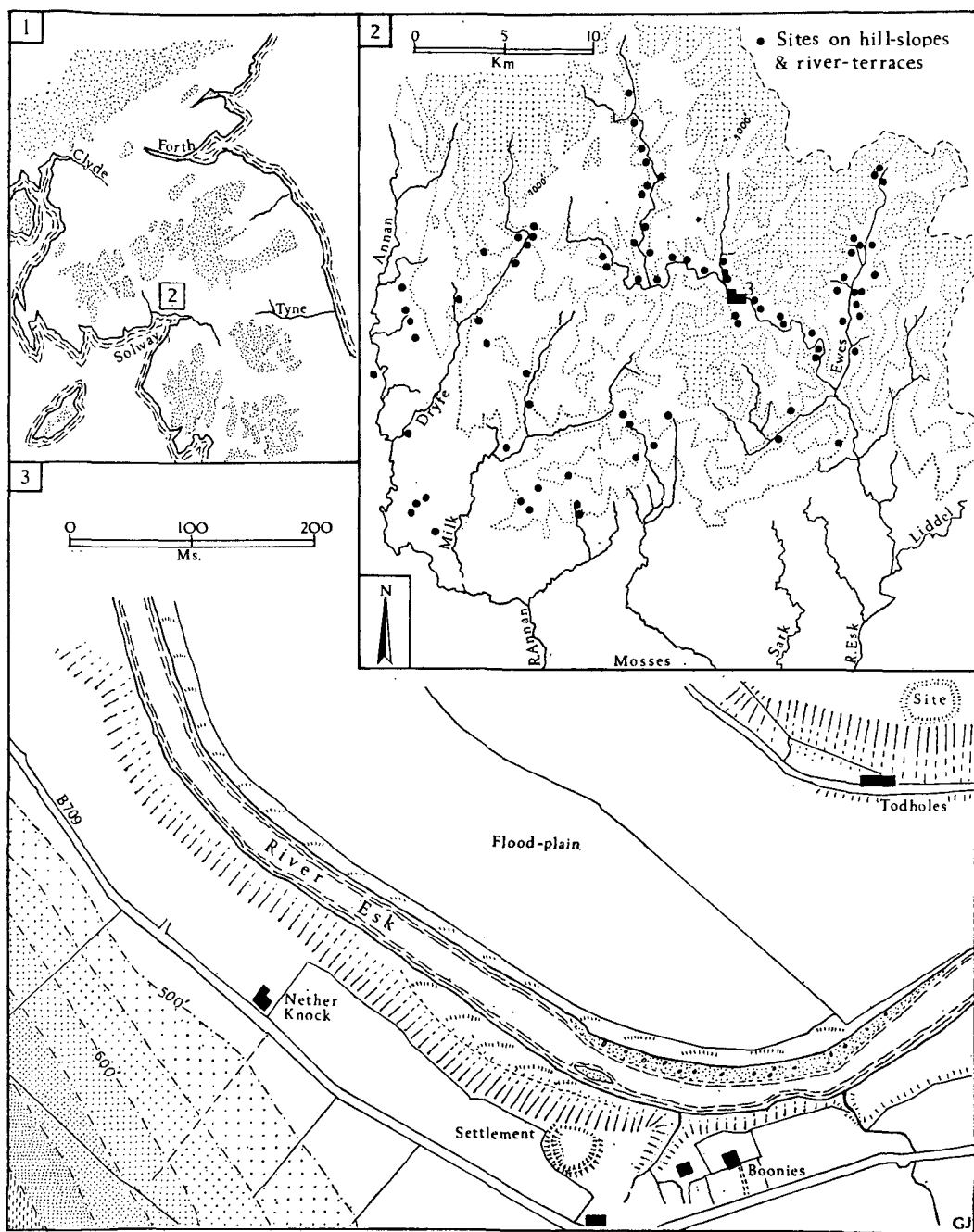


FIG 1 Location map (based on OS map)

states that there is no outer ditch and that the mound has been formed from material scooped from the interior of the site. Even before excavation, however, such an observation was clearly mistaken, in that not only does the line of a ditch betray itself in places by a differential growth in the pasture but also the depth of the interior scooping is patently insufficient to have yielded adequate material for the bank. Moreover, the majority of analogous sites on the river-terraces of these valleys would appear to have a ditch of some form. An entrance is visible in the E, close to the edge of the terrace, where a slight hollow may mark the continuation of the ditch to the scarp itself. Before excavation the SE half of the interior appeared to be devoted to a slightly scooped yard but no house-sites could be seen in the remaining sector. Nevertheless, it seemed reasonable to assume by analogy with better preserved sites that these would be found on the slightly higher area in the north-west. The total enclosed area of the settlement is in the region of 0.07 ha (0.17 acres) which is small, but not exceptionally so, for this class of site.

THE EXCAVATIONS

1. *The Bank and Ditch* (figs 2 and 3, pl 4)

The bank was sectioned in three places; in cutting 1 where it appeared to be most upstanding, in cutting 3 on the edge of the terrace, and again on the south side of the gateway. The ditch was completely emptied in cuttings 1 and 2.

In cutting 1 the core of the bank consisted of mixed earth and local greywacke brash, dumped in various tip-lines and retained front and back by stone rubble and the remains of kerbs of undressed blocks of greywacke. This material rested directly upon an old land-surface which was undisturbed by other features. No structural remains of a timber or stone-built parapet were found on the crest of the bank in a length of *c* 4 m which was examined in excavation. It also seemed unlikely that the stone revetments had risen to any substantial height, as only a little stone tumble was found beyond the remains of the kerbs and, more particularly, in the fill of the ditch cuttings. Even so, the bank at this point was substantial, the core itself being *c* 6 m wide at the base and *c* 2 m high, with nothing to suggest that it had been constructed in other than a single operation. In the section on the S side of the gateway the construction of the bank was similar, but here its overall width at the base appeared not to have exceeded 5 m. Although in cutting 3 the outside of the bank had long since disappeared, due to the gradual erosion of the terrace, its stature had undoubtedly been much less and its original width along the crest of the scarp probably no more than 2.5 m.

Only a minimal berm appeared to have existed between the foot of the bank and the ditch in cutting 1. The ditch was here some 4 m wide at the top but only 1.25 m deep from the top of the undisturbed subsoil. Below the present turf and ploughsoil its fill consisted of layers of material slipped from the bank and only a little stone rubble resting upon the initial silt. In cutting 2, the width of the ditch was only 2.5 m at the top, corresponding to the reduced stature of the bank near to the gateway, and maintained a depth of 1.25 m from the subsoil. Despite a long spell of reasonably dry weather it was at this depth that a water-table was encountered in both cuttings. The stature of the ditch was such that it could not have provided sufficient material for the bank as found in these sections, so that additional material could only have come from the interior scooping or from the surrounding area.

Two fragments from the upper and lower stones of a rotary bun-shaped quern or querns were found in the undisturbed rampart core on the S side of the entrance. A bronze penannular

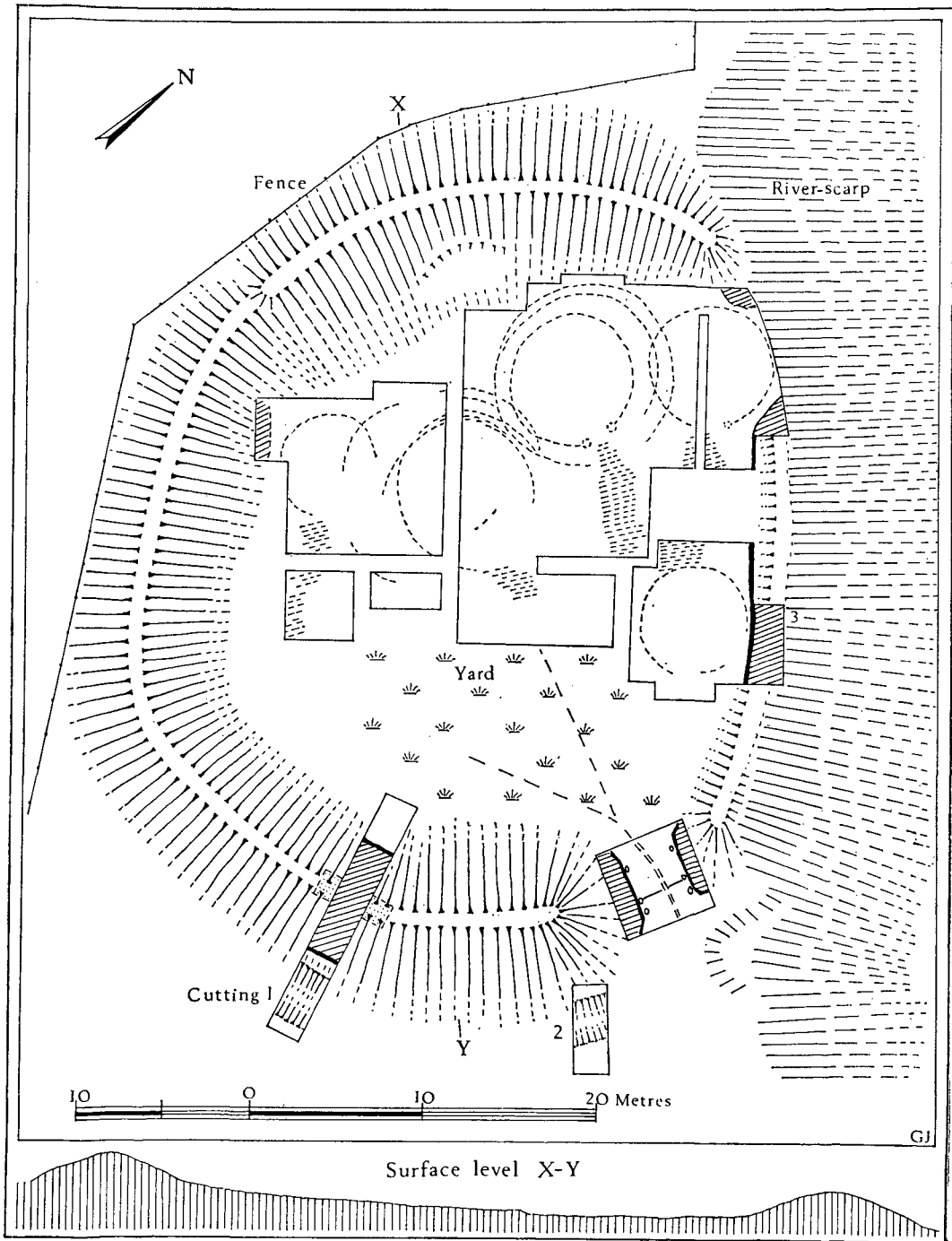


FIG 2 Plan

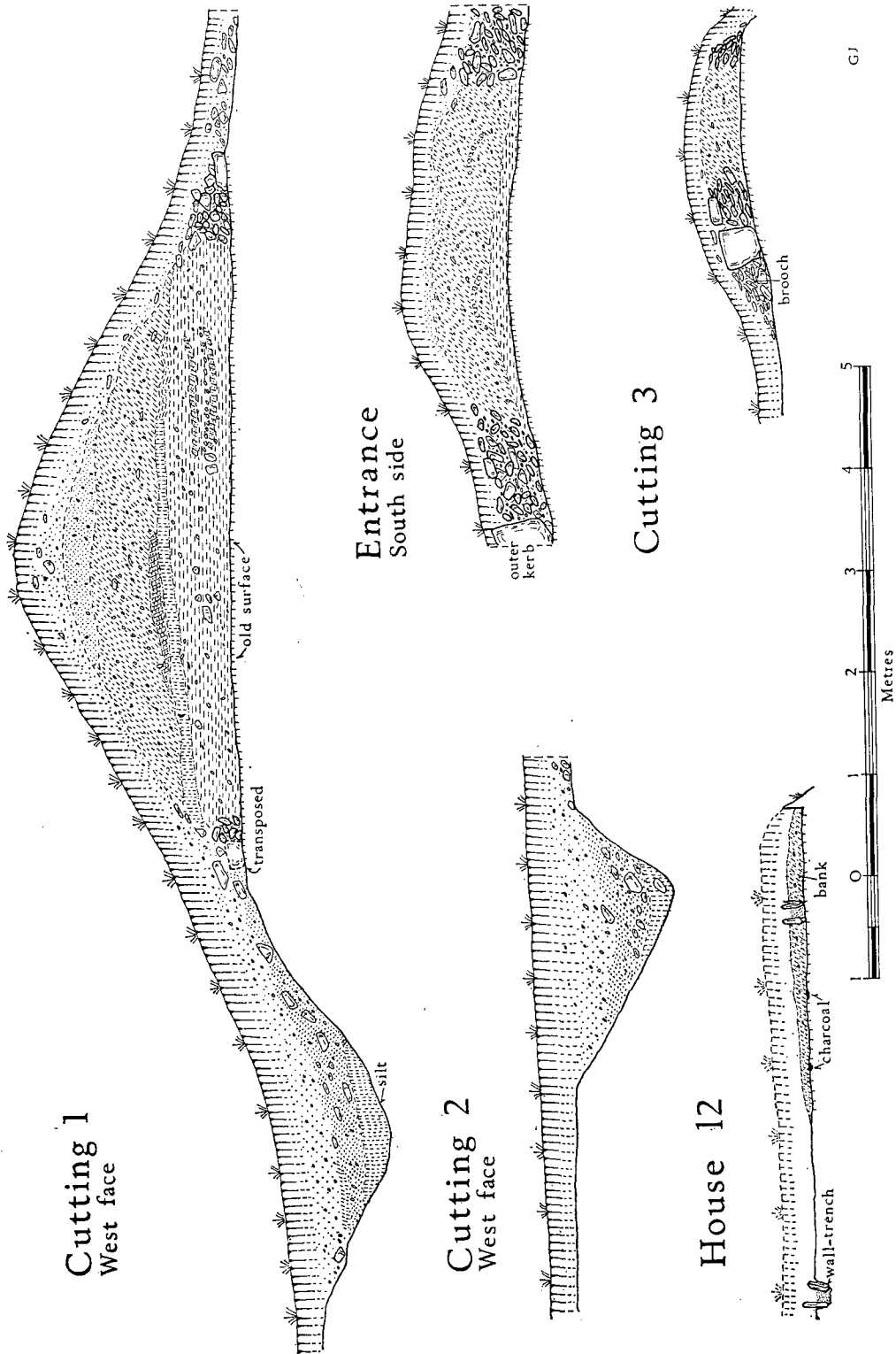


FIG 3

brooch was also recovered from amongst the tumble from the bank in cutting 3, in circumstances which suggested that it had been incorporated in the original structure. Both are types found in association with Roman material on North British settlements although they could also be somewhat earlier in context (see Small Finds). A general *terminus post quem* for the construction of the bank is also indicated by a radiocarbon assay from carbonised wood sealed by the remains of the bank in the area of house 12 (p 130 below). The reading is 108 ± 47 ad (SRR 300; 1842 ± 47 BP) which if the central date is converted to tree-ring calendar dates by 50-year averaging procedure would yield AD 70–110.

2. *The Gateway* (fig 4; pl 4b)

Unfortunately, most of the accumulation in the entrance had been cleaned out in recent times, possibly during the eighteenth or nineteenth century when a substantial stone-built drain had been inserted along the length of the original passageway. The passageway itself was 2.5 m wide and the lower portion of the enclosure bank on either side had been retained by particularly large blocks of local stone and some large water-worn slabs on edge. One of these had fallen forward, perhaps under pressure, but was eased back into its original socket in the subsoil during the course of excavation, as indicated on the plan.

Two different road-surfaces were found. The later one, which consisted of water-worn paving slabs bedded on a penning of rubble and earth, had been mostly removed and the material re-used in the construction of the box-drain. At this level only the two inner post-holes, nos 1 and 2, were visible, the tops of their uppermost packing stones protruding slightly above the level of the remaining paving stones. Both were 0.55 m deep and had probably held timber uprights of c 0.2 m in diameter to give the simplest of gateway structures.

On removal of the vestigial paving and underlying penning, a lower road-surface was encountered in the form of a compacted spread of small stones and river-gravel set into the subsoil. It was only at this level that the post-holes numbered 3, 4, 5 and 6 appeared, together with a drop-trench for a gate, edged with small slabs. The post-holes were all c 0.45 m deep from this road-surface and at least three of them, 4, 5 and 6, had been intentionally blocked with large rounded stones, presumably when the secondary paving had been laid down.

It may be inferred that the original gateway-structure had consisted of at least two pairs of opposed and presumably cross-braced uprights closed by a simple lift-and-drop type of gate located between the two rear posts. On the other hand, the possibility that post-holes 1 and 2 were also part of the original arrangement and only re-used with additional packing stones in the second phase is not discounted by the available evidence. If the stone revetments in the passageway had never risen any higher than as found, then such an arrangement of three timber uprights on either side would have allowed the use of horizontal cladding to retain the upper parts of the enclosure bank. Drop-trenches for securing the bottoms of gates are at the moment a more familiar feature on pre-Roman than on Romano-British native settlements in the Tyne-Forth Province to the east (e.g. Jobay 1962b, 8; Piggott 1949, 55).

A fragment from an opaque white glass bracelet was recovered from the first road-surface in the passageway, sealed by the later paving. This is a recurrent type on Roman military and native sites alike, especially in the northern military zone, although it is not possible to be adamant about its initial date of manufacture. In addition, a fragment of a rotary quern had been incorporated into the rubble penning which supported the later paving. The decision to pave the entrance could well have been made at the same time as the stone pathways, yet to be described, were being laid down in the interior of the settlement in order to aid passage from the later houses across the ill-drained farmyard to the entrance.

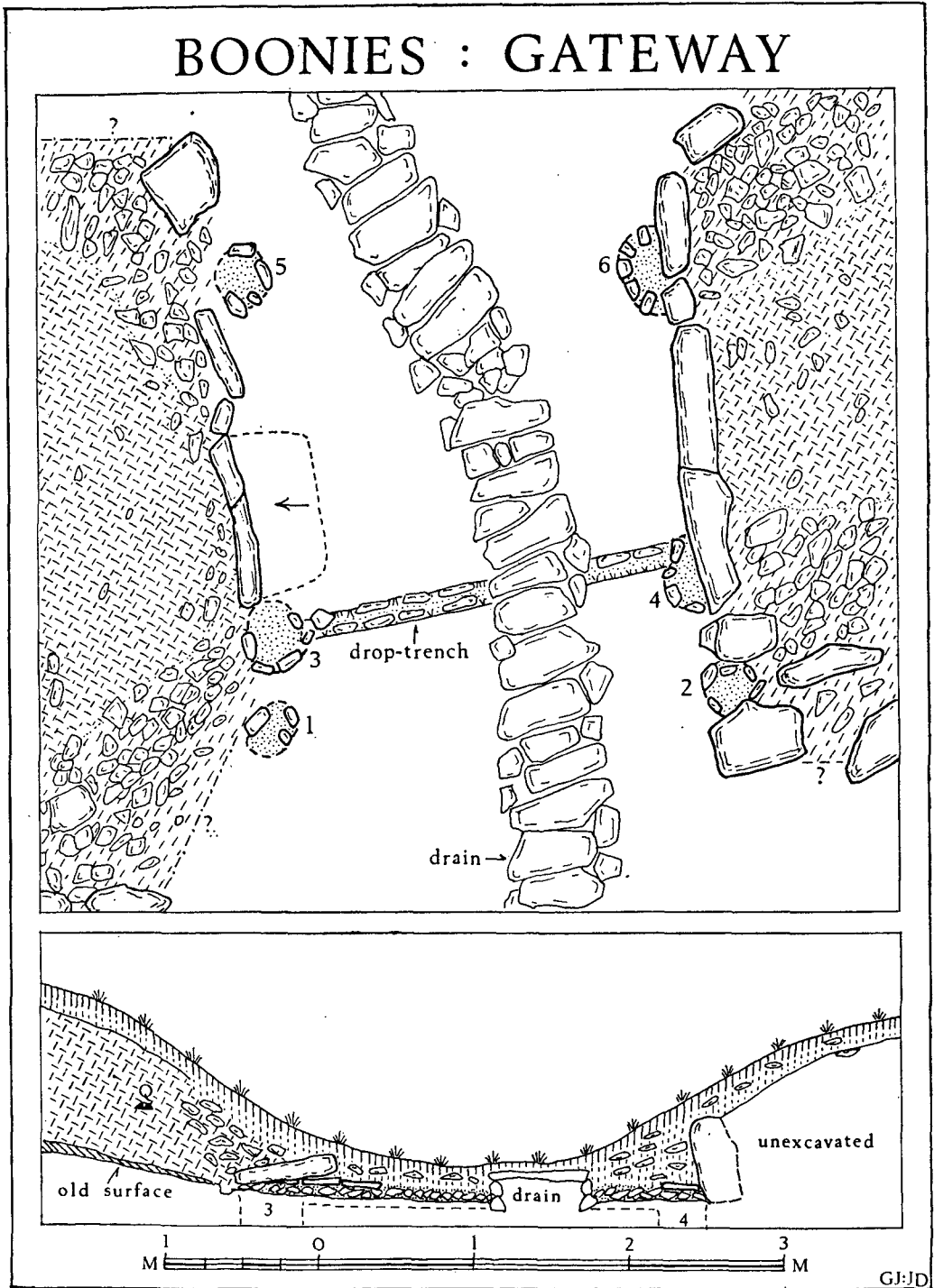


FIG 4

3. *The Interior* (fig 5; pls 5 and 6)

(a) Recent Disturbances

The reason for the absence of any surface indications of internal structures was quickly revealed. The whole of the interior had been hand-cultivated, probably over a period of time, as was evident from the many spade-marks visible in the subsoil and the numerous finds introduced in liberal applications of midden-material to the topsoil. Fragments of clay pipes and pottery would point to this activity having taken place mainly during the nineteenth century (see Small Finds, below). Although the embanked perimeter had clearly limited ploughing to the exterior, the interior would have provided a conveniently sheltered area for a kitchen garden or 'tatie-patch'. Just such an earthwork in upper Dryfesdale was still being put to such use in 1969 when first surveyed. It is perhaps also worthy of note in this connection that the adjacent Boonies Cottage served as a short-term lodging for vagrants, probably during the later nineteenth and early twentieth centuries. A number of other recent delvings had also been made into the interior of the site, including sheep-burials, but some of these have had to be omitted from the plans for the sake of clarity. All told, the later cultivation in particular had succeeded in removing not only the early occupation levels but also some sections of the construction trenches for the internal buildings.

(b) Interior Structures (fig 5; pls 5 and 6)

Traces of thirteen certain or possible round timber-built houses were found, many of them representing successive structural phases, and although the whole of the interior was not uncovered it seemed unlikely that this number would be exceeded by further excavation. The buildings were all of so-called ring-trench construction, whereby the outer walls of whole or split timbers had been set into support-trenches and secured on both sides by small packing-stones. The construction-trenches were from 0.2 to 0.25 m wide and, as found, generally less than 0.25 m in depth from the top of the present subsoil. In the following account the term *house* is used without prejudice as to function and no chronological sequence is implied in the order of description. The number of the house is followed in every case by the measured or estimated diameter and the floor area.

House 1; 5.5 m; 16 m². The trench was best preserved in the W where it lay close to the remains of the revetment of the enclosure bank. A doorway had probably existed in the SE, where the undisturbed subsoil was 0.4 m lower than on the western arc and only the stub-end of one posthole survived. Leading from this area were the remains of a paved footpath. In the interior there were the remnants of a paved floor and an open-ended hearth originally formed from three upright stone slabs, only two of which survived, and a base stone. This house was demonstrably later in sequence than house 2 at the point of intersection and, by the production of the circumferences from the remaining arcs of the trenches, could not have co-existed with houses 3 or 8.

House 2; 9.25 m; 67 m². Only a short arc survived in the W but three elongated slots with packing stones, which lay on its estimated circumference in the E, could have been the last vestiges of the construction-trench hereabouts. This house was assuredly earlier than 1 and could not have co-existed with 3, 4, 5, 6, 7 or 8.

House 3; 9.5 m; c 71 m². The construction-trench had been removed by a later pit on the west and ran out on the slope of an artificial scarp in the E, where the present subsoil level dropped by c 0.4 m. At the points of intersection of their wall-trenches this house was undoubtedly

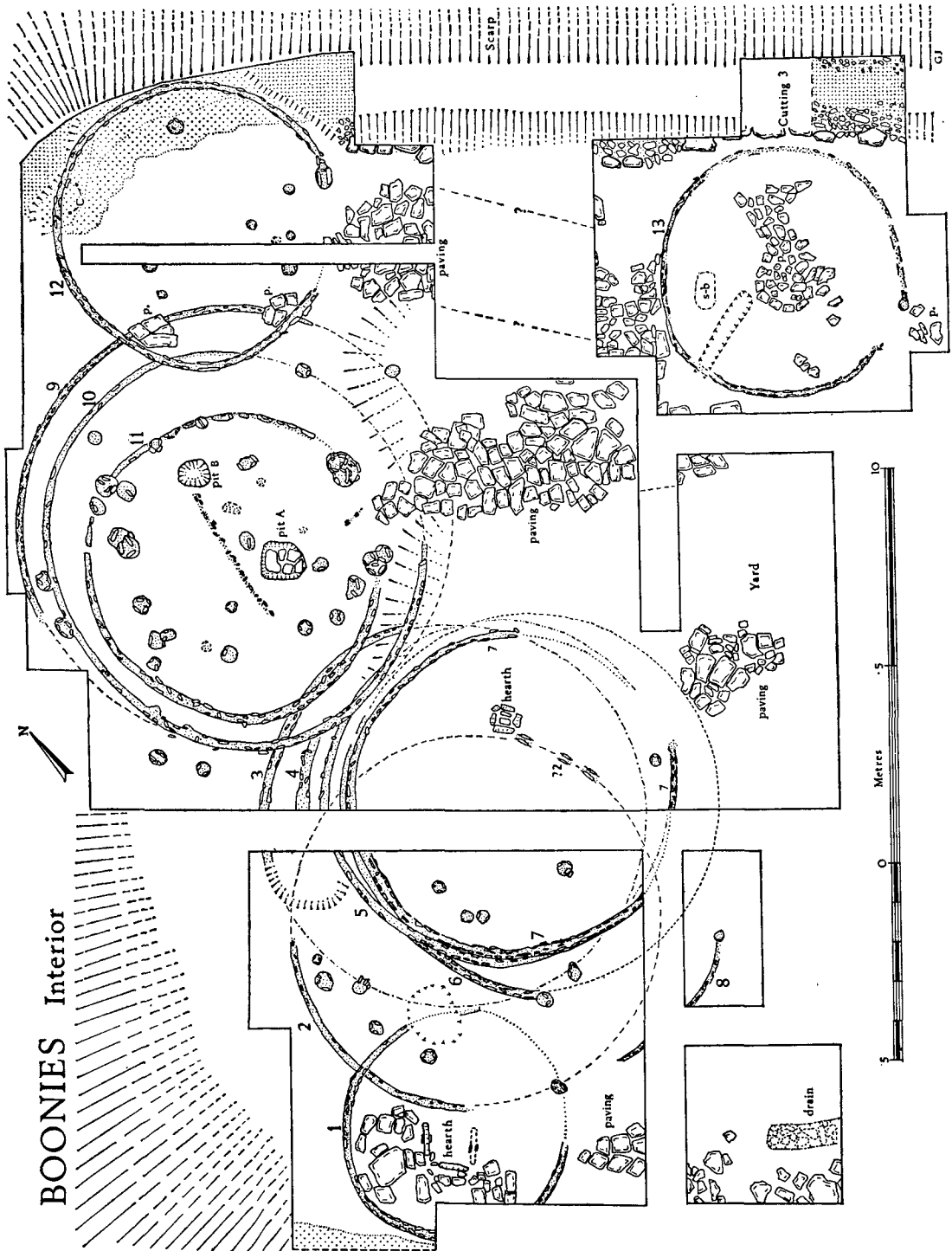


FIG 5 Plan of interior

earlier than *10* and *11* and, therefore, by inference *12* and possibly *13* (see below). It could not have co-existed with *2*, *4*, *5*, *6*, *7*, *8* or *9* and, if the estimated circumference is correct, probably *1*.

House 4; ? 9.5 m; ? 71 m². Although the short arc of the trench was well cut, with some packing stones still *in situ*, it was the least certain as a house-perimeter. Moreover, it is always possible that in association with one of the other trenches in the area it could have formed part of a double ring-trench house, such as is known elsewhere in the north. However, taken as a separate house it would have been earlier than *10* and, by inference, *12* and *13*, and could not have co-existed with *2*, *3*, *5*, *6*, *7*, *8*, *9* or, most probably, *11*.

House 5; 8.5 m; 57 m². Although many of the packing stones appeared to have been removed from the trench, almost half of the circumference of the house could be traced before its obliteration by the construction-trenches of *7* and *10*. As with other houses in this area, the construction-trench faded gradually towards the E with the falling contours of the subsoil. Evidence at the intersections showed it to be later than *6* and earlier than *7*, *10*, and by inference *12* and *13*. Moreover, it could not have co-existed with *2*, *3*, *4*, *8* or *9* and was also uncomfortably close to *11* to allow of contemporaneity.

House 6; 9.5 m; *c* 71 m². Once again the construction-trench faded out with the falling contours towards the E but it was clearly earlier than *5* and *7* and, therefore, *10*, *12* and probably *13*. It could not have been contemporary with *2*, *3*, *4*, *8* or *9*.

House 7; 8 m; *c* 50 m². The trench was well preserved for most of the circumference and only faded out as it approached the probable position of the doorway in the east. Beyond this were the remains of paving which it is tempting to see as an associated path. It is also possible that the slightly sunken hearth with low kerbstones, lying within the interior, was contemporary. This house was without doubt later than *5* and *6* and could not have co-existed with *2*, *3*, *4* or *8*. In addition, co-existence with *9* and *10* may be ruled out because of their very close proximity which leaves no room for overhanging eaves. A rim-sherd from a Roman bowl was recovered from the subsoil within the area of this house but was not necessarily associated.

House 8; ? 9.5 m; ? 71 m². A short but definite arc of a very shallow construction-trench, the produced circumference of which does not coincide with those of any other houses in the area except, very doubtfully, *4*. Seen as the remains of a separate house it could not have co-existed with *1*, *2*, *3*, *4*, *5*, *6* or *7*.

House 9; 10.5 m; *c* 87 m². Without doubt this had been the largest house on the site. Although the construction-trench had been removed by later disturbance in the W, the estimated circumference would suggest that for some distance beyond this it had coincided with *10*, where, in fact, the latter was marginally wider than elsewhere. The stub-ends of two post-holes on the small scarp in the E, one of them overlaid by later paving, perhaps marked the position of the doorway. This house was definitely earlier than *12* and, therefore, as we shall see, most probably *13*. It would also seem reasonable to assume that it was earlier than *10* and the paved way leading up to the doorway of *11*. It could not have co-existed with *3*, *4*, *5*, *10* or *11* and, because less than 0.5 m separated them, probably *6* and *7* as already indicated.

House 10; 9.75 m; 74 m². The circumference was almost complete although the construction-trench was very shallow on the small scarp in the east. A single post-hole underlying the paving leading up to house *11* may have marked the former position of the doorway. This house was earlier than *12* and, therefore, probably *13*, but was later than *3*, *4*, *5* and, by inference, *6*. Co-existence with *9* or *11* was impossible and, because of its proximity, probably *7*. A fragment from the top-stone of a rotary quern had been re-used as a packing stone in the construction-trench.

House 11; 7.5 m; *c* 44 m². The wall-trench could be traced for most of the circumference

but had suffered from later disturbance on the N sector. The doorway was in the SE where two groups of post-holes, consisting of three in each group, were placed *c* 1.5 m apart. These were between 0.3 m and 0.5 m deep and at least one post-hole in each group had been deliberately blocked with additional packing stones, so that some replacement may be envisaged. Although the paved path leading from the doorway had been partly robbed away it would seem reasonable to associate it with this house. Faint traces of a support-trench, containing very small packing stones, ran across the interior of the house, but in the circumstances can be only doubtfully associated. The mere vestiges of a second trench in the centre of the doorway were so limited as to leave its function and context quite uncertain, except that any association with this house appeared unlikely. At least one of the two cooking-pits within the area of the house (pit *A*) was almost certainly of later date (see below) and the context of the other is quite unknown. The house itself was demonstrably later than 3 and could not have been contemporary with 4, 9 or 10, whilst its proximity to 5 might also throw doubt upon the possibility of co-existence. One rim-shoulder of Roman pottery, probably of late first or early second-century date, was recovered from the bottom of the disturbed topsoil within the interior but again could not be unequivocally related to this house rather than any other in the area.

House 12; 7 m; *c* 39 m². The entire circumference of the construction-trench survived, although it must be assumed that its location in relationship to the edge of the terrace had not always been quite so perilous. A paved path led from the doorway in the SE and was almost certainly contemporary. At least part of the floor area had been paved before more recent disturbance had removed all but two small areas of paving, both of them overlying the construction trench for house 9. Two recent post-holes containing the rotted stub-ends of squared posts marked the line of a post-and wire-fence which formerly had run along the top of the scarp.

The unusual location of this house at once explained the reduction in height of the remains of the enclosure bank in this area—a phenomenon already apparent before excavation commenced. In order to accommodate the house most but not all of the bank had been removed or cast over the edge of the scarp. For much of the N perimeter its construction-trench was dug through the last remains of the bank, and in places barely penetrated into the subsoil. Some small pockets of carbonised wood, consisting of twigs no more than 15 mm in diameter, were encountered below this material and on the original surface. A radiocarbon assay yielded a date of 108 ± 47 ad, to which reference has already been made, and may provide a general *terminus post quem* in the first century AD for the construction of the bank and also, thereby, the erection of this house. Two wall-sherds of native pottery and a base and wall-sherd from a Roman flagon, none of them closely datable, were recovered from on top of the vestiges of the enclosure bank within the floor area of the house, but, because of the lack of firm stratification, were not certainly associated with its occupation. At the points of intersection of their construction trenches house 12 was demonstrably later than 9 and 10 and therefore, by inference, 3, 4, 5 and 6. Its probable relationship with house 13 is discussed below.

House 13; 6 m; *c* 28 m². Most of the circumference of this house survived, despite an amount of later disturbance over the whole area. The doorway lay in the SE with the remains of a paved path beyond. In the interior some of the paved floor was still intact and consisted of stone slabs somewhat smaller and thinner than those used in the exterior pathways. No other features were uncovered except a recent sheep-burial and an intrusive trench the function of which could not be determined.

As in the case of house 1, this house had been built close up against the stone kerb of the enclosure bank. A penannular brooch, to which reference has been made, was recovered from the small amount of rubble which had slipped forward from the enclosure bank; but this lay

beyond the perimeter of the house and, in any event, had most probably been incorporated into the bank at the time of its construction.

Because of the absence of a strict physical relationship between this house and any other, it is difficult to establish an unequivocal sequence. On the other hand, the manner in which the paved way leading from house 12 stopped abruptly at the wall-trench of house 13 could well indicate that this paving had been lifted intentionally in order to allow the construction of the latter. Certainly there would have been little point in running a pathway from the doorway of 12 to the rear of 13. It has been assumed, therefore, that house 13 was most probably secondary to 12, although contemporary occupation of both at some stage is not thereby denied. In this event, house 13 could not have co-existed with 3, 4, 5, 9 or 10.

(c) Other Interior Features

Apart from the post-holes already mentioned, most of them probably marking the positions of doorways, the remainder proved difficult to assign to specific structural functions or contexts, chiefly because of the number of superimposed houses and a lack of complete, recognisable interior patterns in relationship to the construction-trenches. Many of these post-holes were no deeper than 0.2 m when found and, because of the disturbed subsoil, it is more than likely that the full complement was not recovered. Undoubtedly the stature of many of the houses demand internal arrangements of roof-supports in greater number than were represented by the post-holes which were revealed when the excavations closed. Although all were emptied, the only small finds consisted of two splinters of opaque white glass from the fill of the hole adjacent to the SW side of the baulk within the area of house 7.

At least one large post-hole on the N perimeter of house 11 was assuredly later than the construction-trench for this house which, as will be argued, was one of the latest round-houses on the site. The possibility of some later occupation on the site was further indicated by a radio-carbon assay of material from pit A, which did not seem to be associated with house 11. This pit, which was 0.7 m deep and lined with burnt stone slabs, contained a basal layer of carbonised twigs and branches amongst which were small calcined fragments of sheep-bones and two thin strips of lead. It had been deliberately back-filled with stone slabs after use, completely sealing the underlying material which yielded a date of 1047 ± 55 ad (SRR - 403; 903 ± 55 BP). In the long run, however, it proved impossible to delineate a convincing structure likely to be associated with this pit, either in the immediate area or elsewhere in the interior, and there were no small finds relevant to such a date.

Those parts of the frontal yard which were excavated proved to be featureless except for the remains of the paved paths and more recent attempts at drainage. Beneath the overburden of soil there was a more liberal scatter of small stones embedded into the original surface than found elsewhere on the site, but no attempt seemed to have been made to lay a solid cobble-surface. A number of wall-sherds of native pottery were found embedded into the surface of the yard but nothing was recovered from beneath the areas of paving which were lifted during the course of excavation.

(d) Discussion of the Horizontal Stratigraphy (figs 5 and 6)

It will be obvious from the foregoing description that many of the interior houses could not have co-existed one with another and that in some cases it was possible to establish a structural sequence, either directly in the excavation of the construction-trenches or by inference. The information has been summarised in diagrammatic form in fig 6.

On the assumption that the short trenches 4 and 8 had been the wall-trenches for two separate houses in their own right then there will have been a maximum of thirteen houses on the site. In theory, if no more than a single house stood at any one time then there will have been a maximum of thirteen structural phases or twelve replacement phases assuming continuous occupation. In reality, however, this is unlikely to have been the case, since it will be apparent that some houses could have co-existed one with another and others almost certainly did so.

As has been demonstrated, house 12 could not have co-existed with and was later than six other houses. The location of this house, which presumably brought about the demolition of the enclosure-bank, also demands that the area behind the yard must have been replete with standing houses or already allocated for their construction. This being the case, house 11 must have been one of these and from the remainder only houses 7 and 1, the latter hard up against

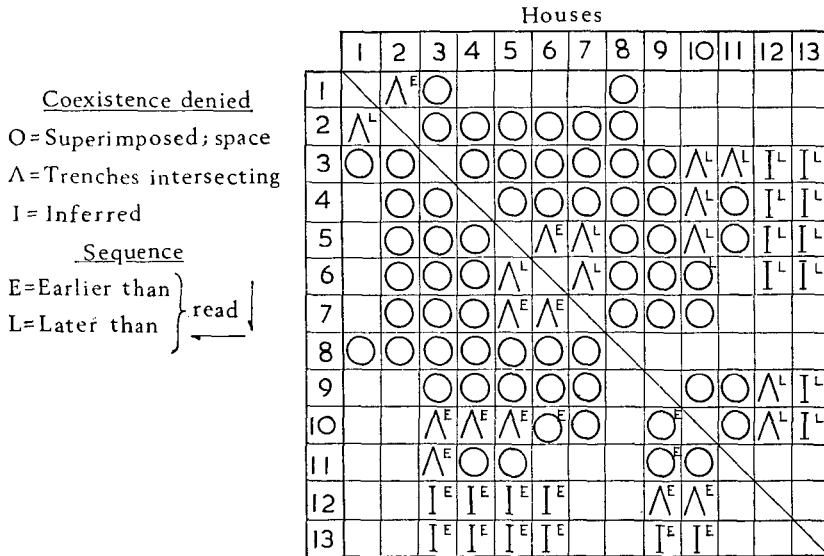


FIG 6

the enclosure bank at the other side of the interior, would qualify in order to complete the full range. It seems most probable, therefore, that in the latest discernible structural phase there were at least four houses. To these might be added house 13 which, as we have seen, was probably secondary in construction to house 12 but could well have seen contemporary use. The transgression of house 13 into an area which, from the major palimpsest of structures, would seem to have been studiously reserved as a yard would also suggest that the rear part of the site was by then fully occupied. Moreover, it may be noted that as a group these five houses were undoubtedly the smallest houses in the overall palimpsest, and that all appear to have had paved ways leading from their doorways towards the entrance which perhaps now also received its secondary paving. Unfortunately, the evidence gives no indication as to whether or not all five houses continued in use until the final demise of the settlement.

As to the earlier structural phases it is evident that houses 3, 4, 5 and 6 must have stood alone, since they could neither have co-existed one with another nor with any one of the four remaining houses. Therefore, for some appreciable period, the site can have been no more than a homestead consisting of only one house. Whereas the four houses not yet accounted for,

namely 2, 8, 9 and 10, could also have stood as isolated houses in a homestead, it will be equally evident that house 2 could have co-existed with either 9 or 10, but not both, and the same applies to house 8. If either house 2 or 8 were to be paired with 10 then this would have been fairly late in the structural sequence because house 10 was undoubtedly later than houses 3, 4, 5 and 6, and probably later than house 9. Beyond this it is not possible to pursue any sequence with profit on the available evidence. All told, assuming that the palimpsest of structures resulted from separate building phases in a continuous occupation, then the *minimum* number which could be represented is seven, namely four of only one house, possibly though not necessarily two of two houses, and one of four and ultimately five houses. The latest phase would have consisted of five houses and one of the pairs at least would have been late in the overall sequence.

4. Additional Cuttings

Two cuttings were made on the small area of haughland, lying between the foot of the scarp and the present river-bank, in an attempt to locate a midden deposit. These were sited over two small mounds liberally covered in nettles, one of them situated immediately below house 13. Unfortunately both proved to be composed of material which had slipped down from the scarp itself, or from the enclosure bank immediately above, and no finds were recovered.

SMALL FINDS

Stone

(a) *Querns*. No saddle querns were found. The rotary querns listed below had all been made from Southern Upland granites such as could have been found as erratics in Eskdale. The local greywacke would not have given such good grinding surfaces and probably would have fractured more easily during the course of manufacture.

Fig 7, 1. Half of a top stone from a rotary quern. The grinding surface had been worn down to the extent that the surviving handle-socket was useless, although a replacement socket could have been present on the missing half. Found within the interior of house 2 but not necessarily associated.

Fig 7, 2. A fragment from a top stone retaining part of the hopper and feed-pipe but no handle-socket. This stone was re-used as a packer in the construction trench of house 10.

Fig 7, 3. Almost half of a top stone with a handle-socket. Found within the apparently undisturbed core of the enclosure bank on the S side of the gateway (Fig 4, Q).

Fig 7, 4. Part of the bottom stone from a rotary quern, also of granite and possibly the lower stone for no. 3. The grinding surface has been worn but no spindle-hole survives. Provenance as no. 3 above.

Fig 7, 5. A very small fragment from a top stone, dressed over the outer surface with small peck-marks. Found amongst the rubble penning supporting the later paving in the entrance.

(b) *Pounders*. A number of possible stone hand-pounders was found in the interior of the site but as these are all river-cobbles it is doubtful in many cases if the wear on the ends of the stones is due to human activity. Such is not the case in the example illustrated.

Fig 7, 6. An oval shaped river-cobble which fits comfortably into the hand and has percussion marks on the broader end and two pecked cavities, one on either face, to serve as finger and thumb-grips. A similar tool was found on the palisaded and embarked homestead at West Brandon, Co. Durham (Jobey 1962, 26).

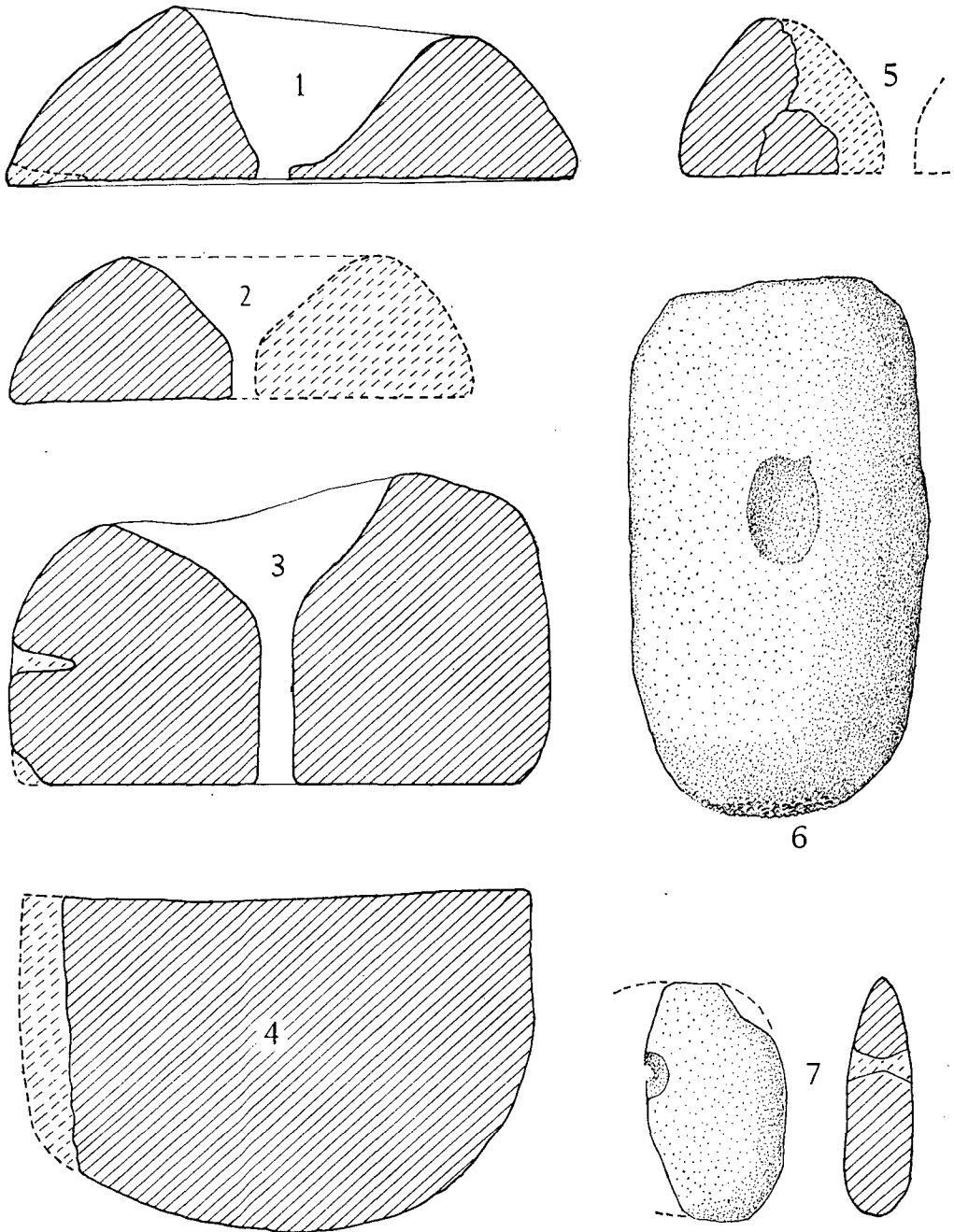


FIG 7 Querns, 1-5 (1 : 4); pounder, 6 and weight, 7 (1 : 2)

Not illustrated. An anvil or base-slabstone of local greywacke bearing numerous percussion marks grouped near to the centre of one face. Re-used as a packing stone in one of the post-holes at the doorway of house 11.

(c) *Perforated Stones*

Fig 7, 7. A small, broken stone bearing the remains of an artificially made hour-glass perforation. It is too heavy and ill-balanced for a spindle-whorl but could have been suspended as a weight. Found within the floor area of house 11 but the association is uncertain.

Fig 8, 8. One of four similar stones from various parts of the interior of the site, none of which can be assigned to any particular structure. The stones themselves are all water-worn as are the perforations themselves which could have been made from one or, in one instance, both sides by natural processes. Although careful search will occasionally reveal similar stones in the river-bed this does not preclude their use as weights of some sort. In the case of the example illustrated there is a groove in the top of the hole such as might have arisen from prolonged suspension from a cord. Most of the stones have been broken but all would seem to have weighed between 0.75 kg and 1 kg when complete.

Similar stones exhibited in the Burgh Museum, Dumfries, are referred to as 'Witch' or 'Wutch Stanes' as still found in old farmsteads, hanging from rafters or built into walls as a protection against charms or the 'illsicht', although it is not suggested that they necessarily performed such a function in this instance. They could have served as net-sinkers as they have little to commend them as loom or thatch-weights.

Fig 8, 9. A broken stone bearing on one face a circular hollow with vertical sides which have been deliberately cut. Its purpose is unknown and, though it might have served as an open mould, there is no corroborative evidence for this. Found within the area of house 7 but with no firm association.

Pottery

(a) *Native.* Only seven small sherds of native hand-built pottery were found, a low yield even for this type of site in the Border counties. The five wall-sherds and the one rim (fig 8, 10) all have a dark red outer surface and a dark grey or black core containing numerous grits up to 2 mm in size. Whilst the fabric and the rim-form are similar to that of some native pottery from Romano-British settlements in the Tyne-Forth Province neither is a safe guide to context (see Jobey 1973, 71). Two wall-sherds came from the floor area of house 12, four wall-sherds up to 15 mm thick from the surface of the yard, and the rim-sherd from the disturbed topsoil.

(b) *Roman.* Only three sherds of Roman pottery were found. The rim-sherd is in a red/buff fabric and comes from a small bowl which is probably Flavian/Trajanic in context rather than later. It was found in the surface of the subsoil within house 11 although not necessarily associated with this house rather than any other in the area.

A base-sherd from a flagon in orange-coloured fabric, possibly of first/early second-century date, and a wall-sherd probably from the same vessel was found within house 12 on top of the vestiges of the enclosure bank.

(I am indebted to Mr J P Gillam for his comments on these sherds.)

Glass bracelet

Fig 8, 11. A fragment from a bracelet or pendant of opaque white glass which has a slight green slick in the matrix, possibly because this opaque white form results from the mechanical aeration

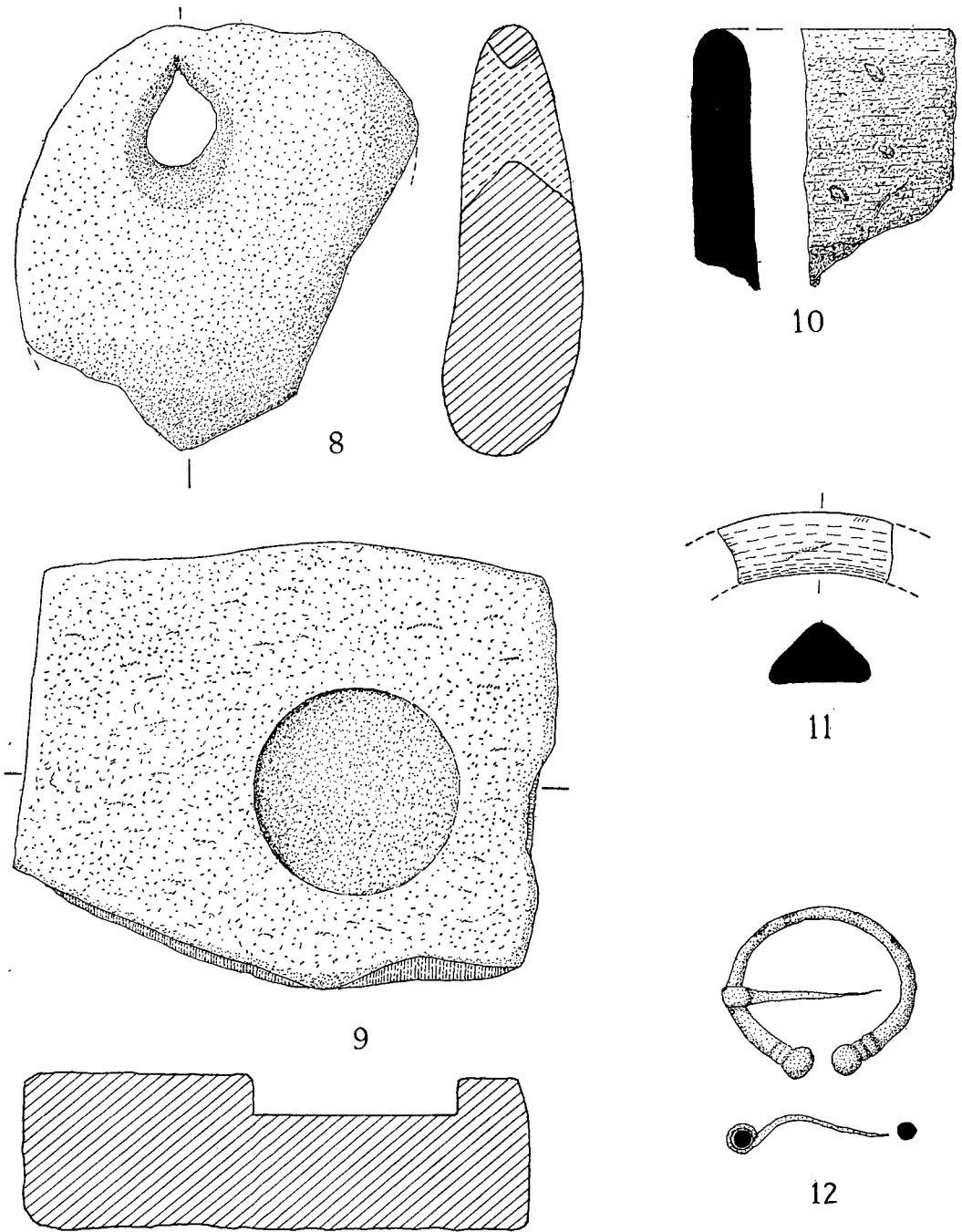


FIG 8 ?Weight, 8 and ?mould, 9 (1 : 2); native sherd, 10, bracelet, 11 and brooch, 12 (1 : 1)

of common ice-green glass (Stevenson 1956, 217). It is Kilbride-Jones type 3A and found generally in Roman contexts though it is difficult to be more specific (Kilbride-Jones 1938, 377). Recovered from the surface of the first road-surface in the entrance, sealed by the later penning and overlying paving.

Two splinters of similar glass came from the fill of an interior posthole adjacent to the S side of the baulk within the area of house 7.

The difference in the intensity of distribution of glass bracelets as between SE and SW Scotland, to which Stevenson drew attention (1966, 28-30), may be no more than a reflection of archaeological activity. There are now at least three further unpublished finds from the SW, Boonies and Burnswark, Dumfriesshire, and Moss Raploch, Kirkcudbrightshire (info. J Condry).

Bronze penannular brooch

Fig 8, 12. A very corroded example of Fowler's type A.3, datable only generally to the I to III centuries AD (Fowler 1960, 175). The double moulding accompanying the knobbed terminal is now only visible on one side. Found amongst the rubble spill from the enclosure-bank in the area of but not within house 13 and most probably incorporated into the bank at the time of its construction. Similar brooches have been found in Flavian contexts in North Britain so that the construction of the enclosure-bank need not be delayed beyond the first century.

Miscellaneous finds (not illustrated)

Sherds of nineteenth- or early twentieth-century pottery, fifty-three fragments of clay pipes, slate pencils, brass buttons, and fragments of fairly recent ironmongery, including nails, were recovered from the disturbed topsoil in the interior of the site. Amongst the tobacco-pipe bowls there is only one early example of a small, bulbous bowl with a flat heel and rouletting around the rim, probably of seventeenth-century date. The remainder are almost certainly eighteenth and nineteenth century in date and include: (1) A bowl on one side of which is a four-masted sailing-ship and on the other an anchor and rope. On the short length of attached stem are remains of a pair of unframed stamps reading MCDOU. . and (GLAS)GOW. (2) A bowl decorated with flowers and leaves. (3) A bowl with a wheatsheaf on one side and a crown on the other. (4) A bowl with a short basal spur and a stamp TW in an oval frame. (5) Part of a bowl bearing a cross-hatched shield such as is sometimes found with the TW stamp. (6) Fragments of a stem with unframed stamps W. WHI. . and (GL)ASGOW. (7) Two fragments of stem with unframed stamps T. W. & Co. and EDIN^B. (8) Fragment of a stem heavily decorated with spiral of alternate continuous and dotted lines.

DISCUSSION AND CONCLUSIONS

Albeit on the basis of a single radiocarbon assay and one small find, it would seem that the enclosure-bank of this settlement had not been constructed until after the early first century AD. A pre-Agricolan foundation is possible but is by no means certain, and it may well have been delayed until some time after the first Roman incursion into North Britain. The equally sparse artefacts of datable value from the interior of the site, if taken at face value, need not be indicative of an occupation lasting beyond the early second century AD. On the other hand, as is often the case on early settlement sites in North Britain, the structural evidence may be more informative as to the length of occupation than the artefacts themselves. In this instance, although only two phases were discernible in the gateway, the interior palimpsest of round, timber-built houses

represented a *minimum* of seven structural phases and there could well have been more. Therefore, whether intermittent or continuous occupation is portrayed, and the latter seems the more likely, a fairly long period of settlement is possible, perhaps extending further into the Roman period than the few scraps of pottery suggest.

Whatever the absolute length of occupation may have been, for much of the time the site was no more than a homestead consisting of only one house. Certainly this was the case in four of the interior structural phases and these could well be extended to eight were it not for the fact that in two additional phases pairs of houses could have co-existed. In what was undoubtedly the final structural phase, four and ultimately five houses occupied the interior. Throughout there would appear to have been a persistent intention to reserve the front half of the site as a yard – or at least until the final phase, when the increased number of buildings led to some slight intrusion into the forward area. But by then the rear part of the site was replete with buildings and part of the enclosure-bank had already been sacrificed in order to accommodate them.

Little direct evidence was recovered for the type of economy practised by the inhabitants. Perhaps mixed farming may be assumed from the presence of broken rotary querns and the frontal yard, which, after the manner of Romano-British farmsteads to the E, may well have served as a stock-yard. The harvest from the nearby River Esk can hardly have been neglected but of this there is no surviving evidence unless some perforated stones from the settlement had been used as sinkers.

On the assumption that all the round houses were used as dwellings, there being no evidence to the contrary in excavation, the overall increase from one to five houses could be indicative of an increase in the number of inhabitants by the final phase. If such an implication is to be inferred, in preference, say, to some basic change in the structure of the community, then it is as well to bear in mind that the degree of expansion in the number of inhabitants need not be in direct proportion to the increase in the number of houses, particularly if formulae are employed which relate the possible number of heads to the total floor area available (Jobey 1973, 77-8). During those phases when only a single house existed, the floor area would have varied little between replacement phases, being of the order of 67 to 71 sq m. On either of those occasions when two houses could have been occupied the minimum total floor area would have been 140 sq m and the maximum 160 sq m, dependent upon the choice of pairing. Despite the greatly increased number of houses in the last discernible phase, the total floor area was no more than 177 sq m, which is only a two and a half fold increase rather than a five fold increase on those phases when only a single house existed.

This increase in the number of houses at Boonies is a phenomenon already encountered in excavation or postulated from field-survey in the case of a number of Romano-British settlements in the Tyne-Forth Province. At Tower Knowe settlement in North Tynedale, 35 km to the E as the crow flies, there was an increase from one to two houses in the timber-built phases, followed by three stone-built houses in a final phase which did not occur until after the mid-second century AD (Jobey 1973). Here again, the houses decreased in size as they grew in number, possibly but not necessarily in order to accommodate them in a prescribed area, since in this instance the change in building material may also have been a limiting factor. A tentative suggestion has also been made, albeit mainly on the basis of field-survey rather than excavation, that some thirty-one per cent of the extant stone-built settlements of Romano-British type, found in the counties of Northumberland, Berwickshire, Roxburghshire and Peeblesshire, provide evidence of an increase in the number of round-houses over time (Jobey 1974). The limitations of such an exercise are readily admitted and at present it cannot be used to argue for an overall growth in population. Even so, it provides a hypothesis to be tested in future excavation and the situation

at Boonies must now pose a similar problem for further enquiry in the valleys of E Dumfriesshire.

All told, however, the immediate importance of the site at Boonies must be that for the first time in excavation we have a settlement occupied at least for some time during the Roman period, in an area which hitherto has been a void. The only possible exception, amongst the very few minor earthworks in the area on which there has been recorded excavation, would be the so-called west fort on the W slope of Burnswark Hill in Annandale. In 1898 this small, ditched and embanked enclosure with a slightly hollowed interior produced a broken rotary quern and an opaque glass bracelet, although no internal structures were recorded. The small enclosure at the foot of the E scarp of the same hill, now marked as a settlement on the latest edition of the O S map, appears to have had a hollowed yard and some paved flooring to the rear, but there were no finds attributed to it in the same early excavations (Barbour 1889).

At least in its interior plan the settlement at Boonies resembles both the stone-built settlements of the Tyne-Forth Province and their possible predecessors with timber-built houses, including perhaps the scooped settlements to which reference has already been made. On the other hand, differences will be found in the greater stature of the perimeter at Boonies and the fact that here, as elsewhere in this area, there is no evidence for a change from timber to stone buildings in the Roman period. A reason for the general scarcity of the stone-built house has been sought in the possible continuance of a plentiful supply of timber and the comparative unsuitability of the locally available greywacke as material for dry-stone building (Jobey 1970, 79–81). But it must be admitted that such an argument would have more to commend it if the stone-built settlements of the E were entirely absent from the greywackes of Peebleshire, which is not the case. Nor do cultural reasons, based upon different tribal areas, seem to have more to support them by way of explanation, so that this problem must be left in abeyance for the present. Unless an immediate pre-Roman context is envisaged for the initial establishment of the settlement at Boonies, a similar difficulty is encountered in finding a reason for the somewhat more defensive nature of the perimeter than prevails on the non-defensive eastern settlements in the Roman period.

Clearly, one swallow does not make a summer, and although there are many similar settlements on the riverine terraces and hill-slopes of E Dumfriesshire (fig 1, 2), any further refinement of the distribution map already presented elsewhere (Jobey 1971) must await further selective excavation. The task will be all the more difficult in an area which lacks some of the more distinctive diagnostic features of Romano-British context as revealed by field-survey in the eastern Border counties.

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The Society is indebted to the University of Newcastle upon Tyne Excavation Committee for a generous grant towards the cost of publishing this paper.



b Boonies (foreground) and Todholes



d Gateway from outside



a Boonies (site right foreground) from Knock Craigs



c Enclosure bank, cutting 1



Interior during excavation, houses 1-12 (composite photograph)



a House 12 during excavation



b House 13 during excavation