

## THE RATH AT BALLYMACASH, COUNTY ANTRIM

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## ABSTRACT

Excavation of the rath at Ballymacash, Co. Antrim, gave a comprehensive view of the internal arrangements of a two-phase rath of the earlier second millennium AD. The phase II rath had a small, square, two-period house near the centre, which was succeeded by a poorly built round house. Surrounding the houses was a cobbled yard leading to a causeway entrance. Around the inside of the phase II rath bank was a continuous structure with an oven, a drying kiln, a hearth and a substantial post-and-wattle structure at its south-eastern end. To the north and east were the remains of a stave tub and a granite quern. Such systematically developed peripheral buildings are a novel feature in rath archaeology. The phase I layout also had peripheral occupation, but little internal evidence survived. Phase I seems to have been without pottery, although souterrain ware was fairly common in phase II.

## Introduction

The rath at Ballymacash (National Grid reference NW360224) has a single bank and external ditch, lies on boulder clay on a rise overlooking the Lagan Valley to the south and is only a little distance to the north-west of Lisburn (Fig. 1). Behind it to the north the land rises to the Basalt Plateau. The rath is set on sloping ground just below the highest point of the rise, presumably to ensure reasonable drainage, as the glacial till is impermeable.

There are several other raths in this area: that of Lissue, for example, excavated by Dr Gerhard Bersu (Bersu 1947), being only 2km to the south-west. Gerhard Bersu was a figure of the highest international repute and standing, respected particularly for his interpretation of excavation evidence. He wrote his own fairly lengthy account of Lissue (including a report on the pottery). Had this been published in its original form it would have formed the basis for further discussion.

In 1953 Mr W. Korbel sought permission to build a house within the rath at Ballymacash. The rath had been altered a little in the last century, and this proposal was sanctioned by the Ministry of Finance (N.I.) provided there was a preliminary excavation. This was a fortunate decision, as the site proved to be of some archaeological importance, especially in view of its proximity to Lissue. The

<sup>1</sup>Professor Edward Martyn Jope, M.R.I.A., died on 14 November 1996 at the age of 80, shortly after approving the final corrections to his account of the excavations at Ballymacash. The pottery and other finds reports were prepared by R. J. Ivens in collaboration with E.M. Jope.

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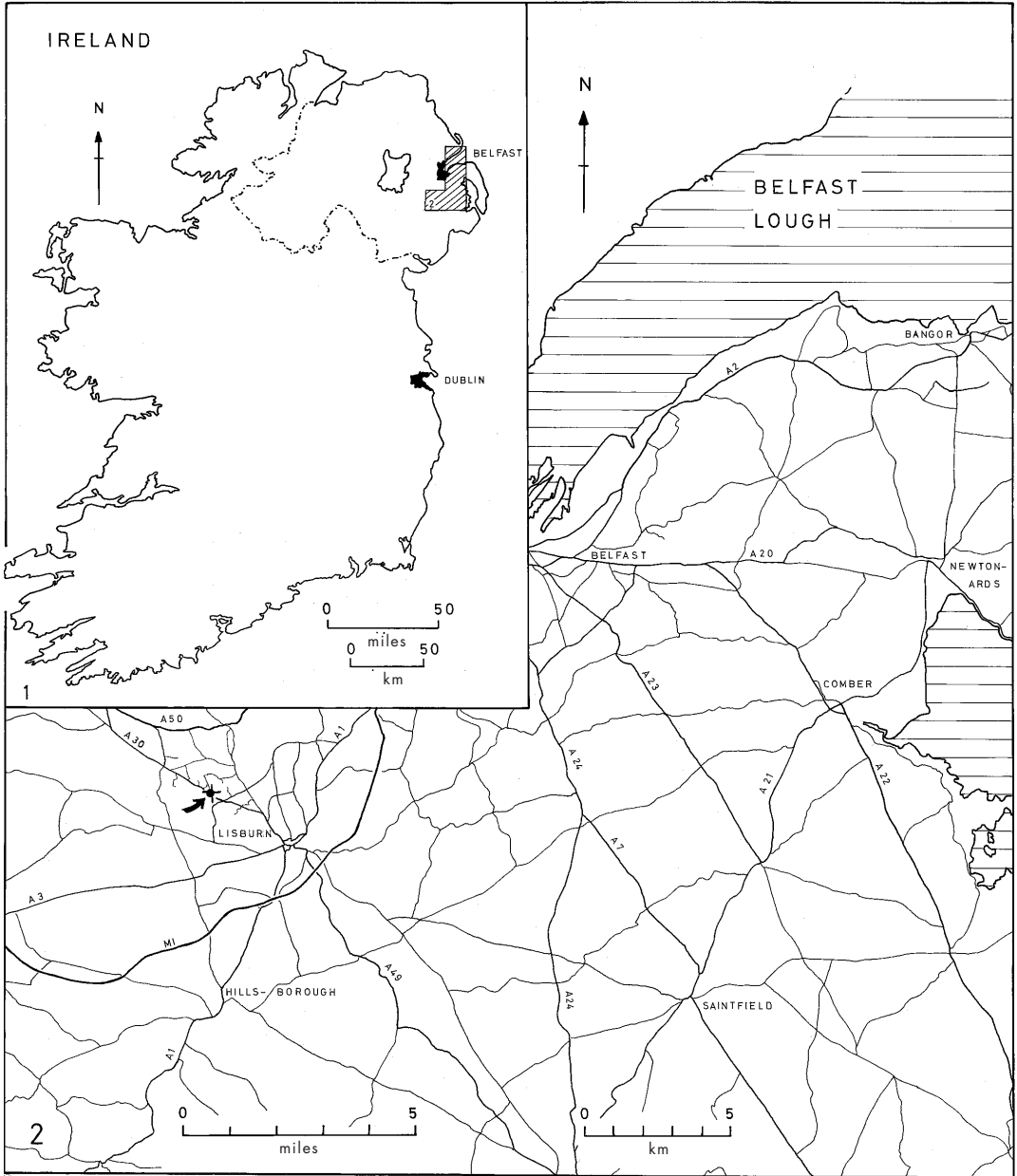


FIG. 1—Ballymacash: map showing the location of the site.

work was carried out by Mr and Mrs E.M. Jope for eleven weeks from May to July 1953, when two-thirds of the interior was examined and the sections of the bank and ditch dug. A further four weeks' excavation in 1954 (when the building of the house was already well advanced) concentrated mainly on the important peripheral areas.

Labour was provided equally by the Ministry of Finance and Messrs Orlit (through the kindness of Mr Korbel).

### The earthwork

This rath seemed a fairly well-preserved standard example; it was circular and 33.5m in internal diameter with a bank *c.* 1.52m high and a ditch outside (Figs 2–3). This ditch had been recut in recent times, and material from it (orange clay) had been thrown up on to the bank. Trees had until shortly before the start of excavation been growing along the top of the bank, and the maximum number of tree-rings counted in 1953 was 104, which suggests that the ditch clearance occurred in around the 1840s.

The recent sharpening of the ditch profile does not extend quite round to the original entrance on the southern side. Where the ditch has not been recut the bank is rather lower (Fig. 3). This shows the extent of extra material piled on the bank in the nineteenth century; in the sections cut through the bank it was actually difficult to trace the junction of the newer material with the original bank as the new clay had firmly consolidated with the old, leaving a barely detectable turfline.

The original entrance of the rath had been altered, perhaps when the ditch was recut, by the making of a field boundary. Even inside the rath, however, the entrance proved most elusive on excavation, as a modern field drain (large stones thrown into a dug trench) obscured the area (Fig. 2).

The interior of the rath had been disturbed to *c.* 0.23m below the surface by nineteenth-century agricultural activities, but this had left most of the archaeological structures intact. At this time also a number of large pits had been dug (perhaps by people digging for gold), but these again had left reasonably untouched the essential ancient features of the rath, such as the central hearth and post-packings.

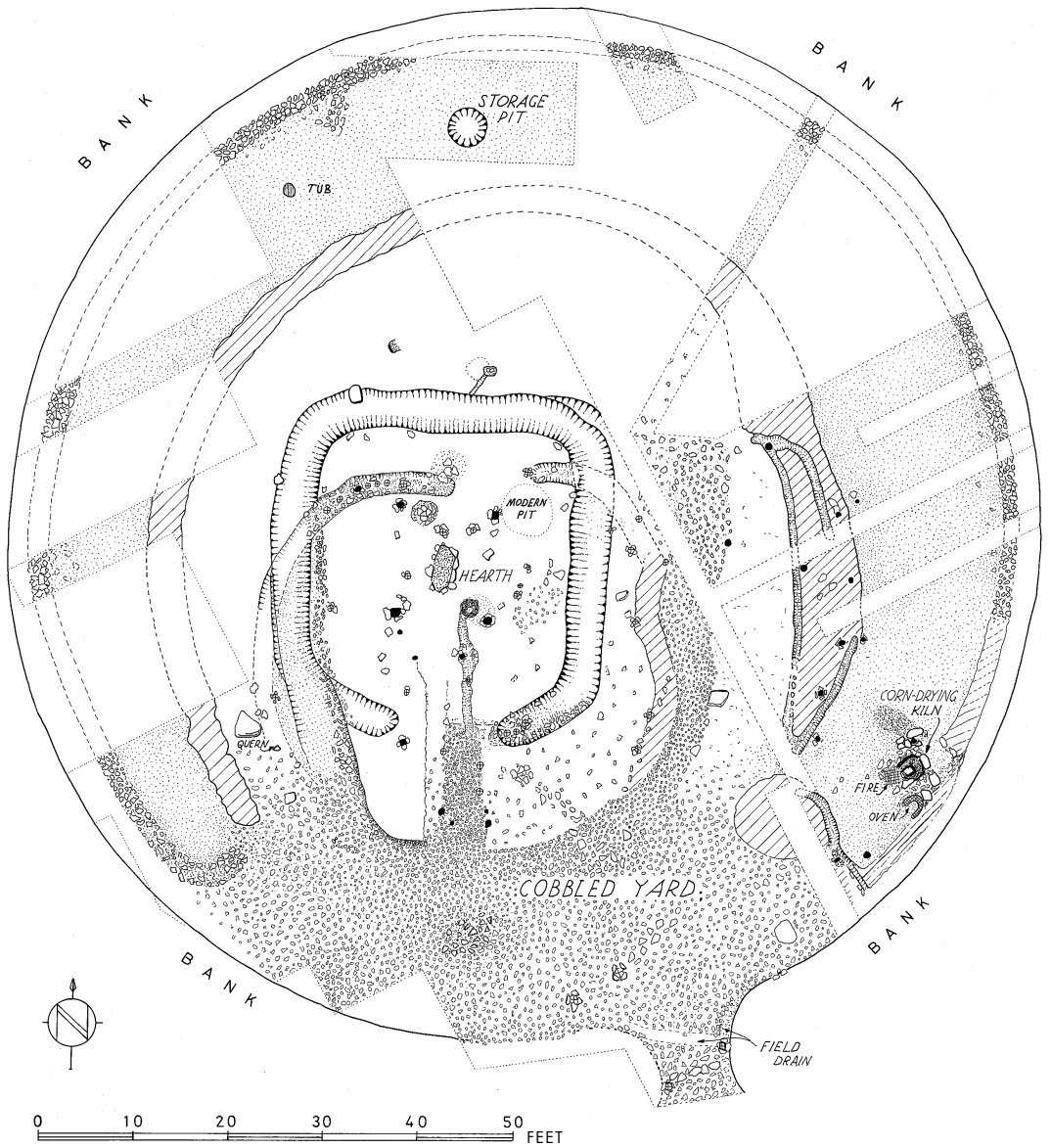
### Structural development of the site

Excavation revealed two main phases:

Rath I: small bank, presumably with ditch	House 1: trench for squared timber; one post-hole
Rath II: larger bank (rath I extended on inside) with ditch	House 2A: square; four central posts
	House 2B: porch added to south-west of house 2A
	House 3: round (incorporating two surviving house 2 posts)

#### *The bank*

The rath bank in 1953 stood fairly high almost all round (*c.* 1.5m), except on



EMJ HMJ 1954.

FIG. 2—Ballymacash: plan of the rath interior and its structures.

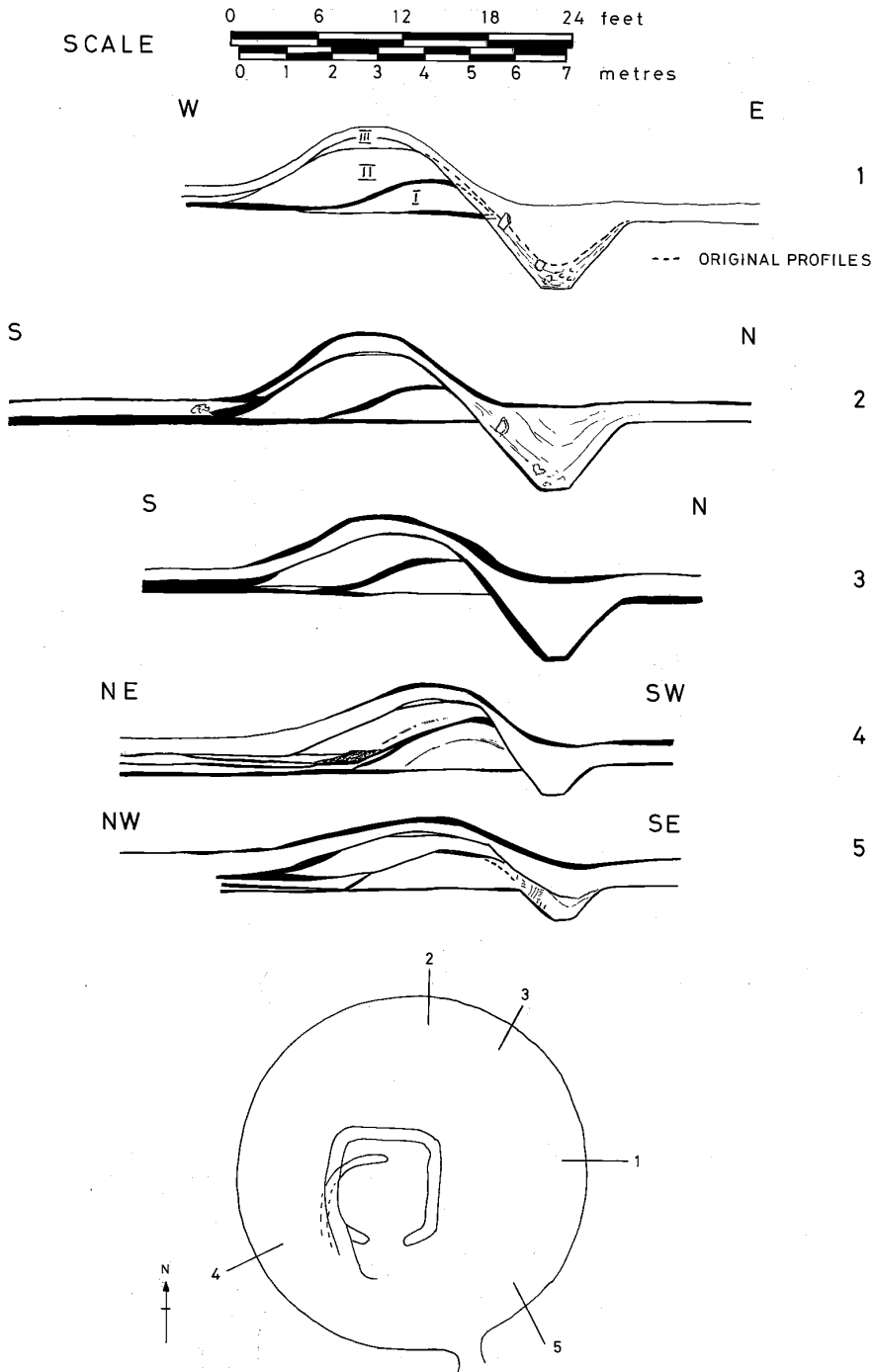


FIG. 3—Ballymacash: sections through the bank and ditch.

either side of the entrance, but, as we have seen (Fig. 3), this was due to nineteenth-century dumping, when the ditch was cleared, the surviving height before that being *c.* 0.9–1.2m and the original height perhaps 1.85m.

The bank was sectioned in five places; in one place on the north both bank and ditch were cut through in a continuous section (Fig. 3.2). In all of these sections two phases of construction were clearly visible (Fig. 3). The first was the remains of a bank about one-third to a half of the present height, set on the outer half of the present bank width. This was mostly of a dark brown and greyish clayey soil with a very small amount of small stone, over which a buried dark brown turf-line was clearly traceable. It has in places a stone kerbing along its inner edge. Above and extending inwards from this phase I profile was the phase II bank of orange-yellow clay. The latter deposit was often not easily distinguished from the undisturbed glacial till, thus making the further nineteenth-century heightening (phase III) difficult to distinguish precisely in section.

These sections show that a rath 38.4m across had had its bank extended inwards and heightened, giving a succession of exactly concentric raths. Superposition of this nature is not always the case, e.g. Lisnagade no. 2 (Proudfoot 1966).

Extending inwards from the stone kerbing of the phase I bank, under the inner half of the phase II bank, was an occupation layer of dark grey, friable clay (Fig. 3) containing much small charcoal<sup>3</sup> (willow and ash) and with a high potassium content<sup>4</sup> (presumably due to wood ash). Much of this layer was cleared; it contained no pottery nor any other artefacts, except a few pieces of struck flint. It extended 6m towards the rath interior, underlying the phase II occupation layer lapping against the base of the phase II bank (Fig. 3). Beyond *c.* 3.65m this phase I layer feathered towards the surface, almost merging with the main occupation layer of phase II. Very few features of phase I could be identified within the rath; this is probably because the relevant phase I clayey surface had been trodden and eroded away during phase II use.

The main phase II occupation layer lapped up against the inner foot of the phase II bank, *c.* 0.15–0.23m above where the earlier layer runs in beneath the bank (Fig. 3). No inner revetment of the phase II bank could be found (*cf.* the kerbing of the phase I bank).

Along the top of the bank a 9.14m stretch was cleared down to 0.6m, but no trace of post- or palisade-holes could be found (although it should be remembered that such holes consolidate back in this clay to present a homogeneous aspect). It may also be that any fence was of a comparatively light construction, such as that found at Killyliss, Co. Tyrone (Ivens 1984a, 20–2).

#### *The rath ditch*

The main rath ditch had been recut in the nineteenth century, except for a short length on either side of the entrance at the south (Fig. 3.5). A complete section of the ditch was cut on the northern side. It proved to have a narrow, flat bottom with steep V-shaped sides (Fig. 3.2); this was probably only a sharpening of the original ditch profile. It was filled with grey, slimy clay and large stones, but no recognisable worked wood was found, although a piece of glazed earthenware lying against the ditch side within 0.3m of the bottom made it finally clear that this

<sup>3</sup>The charcoal identification was carried out by A. Smith, Palaeoecology Laboratory, Queen's University Belfast.

<sup>4</sup>The potassium and phosphate analyses were carried out by EMJ.

was the filling of the nineteenth-century recut ditch, with lenses of slide-back and vegetable matter, pockets of stones and a few boulders.

A section was attempted where the ditch had not been recut on the east of the rath entrance; but here washed-in clay fill had so consolidated with the glacial till as to make it very difficult to distinguish the original ditch profile, although it seems to have been the same V-shape, probably with a flat bottom (Fig. 3.5), which is not unusual for such raths. This section was extended at its centre along the ditch towards the entrance to the west to test whether the ditch had been carried up to and across the entrance, which would have implied a bridge structure, as at Lissue (Bersu 1947). There had probably been a ditch shallowing up towards the entrance; across the entrance, however, the glacial till was so firm (though wet) that it had probably never been dug out. There would thus have been a causeway rather than a bridge entrance, again as was found at Killyliss, Co. Tyrone (Ivens 1984a, 15), and indeed this is the commonest form of entrance to raths.

### Central house structures (and their sequence)

The position of the houses was eccentrically located in the south-west quadrant, and this area was completely excavated (Fig. 2).

The only remains surviving *in situ* that indicate the presence of a substantial phase I (house 1) building consisted of a squared timber slot and post-hole set just north of the mid-point of the northern gully of house 2 (Fig. 2); this slot had evidently been cut through by the house 2 gully.

As it first appeared, house 2A was *c.* 6.1m square with rounded corners; this then had a porch added to the south-western side (house 2B). The square house 2 was found to have been overlaid by a much less substantially built round house (house 3), apparently using some posts of the square house.

The outline of house 2 was marked by a shallow gully filled at the bottom with stiff, sandy clay (containing fragmentary charcoal, largely of willow and ash), rather similar to that under the phase II bank, and above this was less densely packed dark clay. Stones, some quite large, lay in this shallow gully, mostly near the inner and outer edges. Inside the gully the square house had been built on a platform of boulder clay. The entrance lay to the south (Fig. 2). In the centre were four deep (0.61m) and regularly arranged post-pits *c.* 0.51m in diameter, with packing stones arranged to take posts of *c.* 0.2m scantling; these were of oak, as charcoal from within the fill indicated. In the centre of these was a hearth that had been used for a turf fire, as its potash- and phosphate-rich ash had no recognisable fragments of wood charcoal.

The entrance to house 2A was on its lower, southern, side and apparently had no porch structure. The post-hole to the west of the entrance may have been for a door post, but it had no counterpart on the east, except in a rather ragged series of packing emplacements in the end of the house 2 ditch. This poor, *ad hoc* arrangement suggests modifications associated with house 2B.

House 2B retained the main structure of 2A, but a porch was added on the western side of the southern entrance, presumably to protect it from the prevailing south-westerly winds. This porch was asymmetric and entirely open on the east. It was traceable only on the south-western side of the entrance passage and not on the south-east; this was clear because the lip of the house 2A gully was deliberately blocked with hard-packed orange clay on the south-west only; this clay

formed the porch floor. On the open eastern side the gully was not thus hard filled, and its end contained a ragged complex of packing stones, apparently for several replacements of 2B porch timbers. Several post-holes revealed the structure of this added porch, and one sloping post suggests a height of 1.68m; these posts were evidently of oak. The house entrance itself had at this period been well cobbled with carefully chosen round cobbles very securely set in the orange boulder clay. The entrance to house 2A seems to have passed a little to the west of this 2B entrance line, and its cobbles (if it had any) have not survived. House 2B retained the hard-packed clay floor of house 2A, and there were no clearly stratified deposits distinguishing the two phases.

#### *House 2 gully*

House 2 (A and B) was surrounded by a shallow gully *c.* 0.25–0.5m deep and *c.* 1.22–1.52m wide (Fig. 2). By its shallowness and its filling, the ditch could not have been intended to carry a row of posts packed in and must have been designed to ensure the dryness of the house. Into this gully had slid, from the house platform, grey clay flecked with orange (with a high potassium and phosphate content), presumably remains of the house 2 low walling. Under this deposit was a thinner layer of fine, more sandy, dark material, presumably wash from a turf roof. Over the grey clay was another slide layer of dirty material more like the glacial till, and above this the gully was filled with dirty brown soil. The few stones in this gully hardly allow for a continuous wall kerb around the house, but some may have been taken for reuse.

#### *The hearth*

In the centre of the post-square was a shallow trench, partly stone lined, surrounded by much grey ash and a little fragmentary charcoal. The latter was mainly of willow and ash brushwood, with a little from larger oaks; this probably represents remains of a screen to the north of the fire, of which two main post-holes and a row of withy-holes were found (similar, though slighter, remains were also noted to the west). The hearth itself contained a potash- and phosphate-rich ash but no recognisable charcoal fragments, and was probably fuelled with turf; it also contained the remains of some blackened fragments of souterrain ware pottery vessels (sixteen sherds) and other artefacts (a fragment of a nail and a glass bead, Fig. 9.3).

#### *House 2 reconstruction*

The surviving structural remains of house 2 must now be interpreted. The four central posts of the house imply a strong central frame *c.* 3.65m square overall, made of four oak corner posts of 0.2–0.25m scantling, as indicated by the packing in the emplacement pits, which were 0.5m across (Fig. 2). As they stood in the ground, these posts were tree trunks, but it does not follow that they had not been trimmed square in the superstructure (*cf.* the Husterknupp, in Herrnbrodth 1958; White Fort, Co. Down, in Waterman 1956). Their height is uncertain, but, with 0.2–0.25m scantlings set 0.61m into the ground, the minimum height of 3.65m for Waterman's postulated louvre reconstruction for the White Fort House (with similar scantling post arrangements) seems hardly feasible here; wind pressures would probably have been too great.

The walls of this small house (maximum interior 6.10m × 7.32m) present a problem. There was no wall material *in situ* (it had been cleared necessarily for house 3), and, in the absence of any stone or post-hole system or sill-beam evidence, we must conclude that house 2 had nothing but low clay walls, the remains of which we have noted pushed into the house gully. The material in the ditch would have given a wall only *c.* 0.3m high (this may have been packing for a sill beam, but there is no positive evidence). Even allowing a wallplate, this would have given a height of no more than 2.13–2.44m above the floor level for the central roofing (without a louvre reconstruction); this seems reasonable in the context of a rath on a site vulnerable to often considerable wind pressure, as was Ballymacash.

### *House 3*

When house 2B had fallen into decay another house of entirely different layout (circular) and much less substantial structure was built eccentrically over the site. Remains of its walling were most easily traced on the north, where a packing trench for its wall posts had been dug across the floor of house 2. This could be traced extending out over the loosely filled gully of house 2 and beyond it. Although less clear to the south and east, much of its line could be traced out, but provision for real post emplacements was slight; a few shallow post emplacements could be traced on the eastern side, together with slight remains of a low orange clay wall footing. The limits of house 3 could be traced by its floor, with a litter of occupation material: black ash, charcoal, clay and pottery sherds (some of which could be survivals from the occupation of house 2). House 3 was larger in area than house 2 and was roughly circular, as marked off by the limits of the cobbling outside it (Fig. 2).

Few good post-holes could be connected specifically with house 3, with one exception (containing oak charcoal), which was in the wall foundations at the north-north-western corner. The wall foundation trench of house 3 was quite different from the broad trench marking off house 2; it was only 0.56–0.61m wide and was packed with black earth, charcoal and stones (many of which were burnt), in which post emplacements could be traced at intervals, although only one was a good deeply-set post. It was thus a foundation trench for a post-row.

It seemed clear, however, that when house 3 was built two of the main posts of house 2 (the north-eastern and south-western) were still partly standing above ground. It seems that these were pressed into service in supporting what must have been the ramshackle roofing of house 3. A number of emplacements in the interior, sitting on the glacial till (or even 2–3cm above it), must represent efforts to keep up the roof of house 3. The abundance of ash and willow charcoal from the gully of house 3 and the loose filling of the post emplacements suggest that wicker hurdling (possibly covered with clay) was used for the wall filling.

The makeshift character of house 3 stands in marked contrast to the ordered regularity of house 2 in both its A and B phases. It is clear from the way the cobbling comes up to the outline of house 3 that the stockyard aspect of this farmstead remained very active in the house 3 phase, although its character as a residence seems to have greatly declined, to little more than a shelter for farmhands. The curious entrance gap on the northern side could even suggest that the original house had come to be used as a byre in the house 3 phase, with the cobbled quagmire to the south almost merging into the sheltered area of house 3. Such a sequence of change is frequent enough amongst farming communities.

*Peripheral structures*

A small low wall footing of clay and dry stone was found to extend all round the northern two-thirds of the inside of the rath II bank, *c.* 0.6–0.9m from its inner lip.

Lying against this low wall (at all points tested) was a succession of floor layers (in most places three)—thinly laminated layers of fine, dark grey, sandy clay (almost varved). These were of the rath II occupation.

*Rath I occupation.* Underlying these floor layers (0.15–0.2m deep) was a spread of dark occupation material extending under the inner part of rath bank II and ending against the inner lip of rath bank I, marked by a few kerb stones (Fig. 3). This was the occupation layer of rath I and consisted of black soil with much fragmented charcoal, the identifiable pieces being mostly ash with a little willow; but no pottery or other identifiable artefacts were observed in this layer (although it was quite extensively excavated). No *in situ* structural remains could be observed associated with this lower occupation layer, and it had no sharply marked inner limit; it just thinned away some 6m in from the edge of the later bank, and towards the centre of the rath's interior it had probably been eroded away by the activities of rath II occupation. This occupation layer seemed to lap right against the inner lip of the rath I bank (Fig. 3), leaving no perimeter space (unlike the rath II layout arrangement); the charcoal of ash (with a little willow) suggests some wattle structures.

*Rath II occupation.* The floors of the peripheral structure followed immediately above this lower phase I layer, and this close sequence with no intervening sterile layer demonstrates the continuity of occupation between raths I and II.

Three phases of low wall construction and associated floors of rath phase II could be distinguished in most places. The first low wall footing (to which lapped the lowest floor) was of orange clay, laid over the inner lip of the rath II bank. Above this were two further floor layers associated with a rough stone footing laid partly over the orange clay. There was uniformly *c.* 0.6–0.9m of free space between this wall footing and the rise of rath bank II.

These laminated floors extended into the rath for 2.44–4.88m, ending against a slight rise of orange clay set on the natural till (Fig. 2). Within this orange clay, at its most extensive on the eastern side of the rath, was a complex series of narrow sleeper (or sill-) beam trenches 0.18–0.2m wide and squarish in section and an associated system of deep (0.51–0.61m), round-section post-holes. This structural evidence seems to imply a sloping roof, with beams carried on posts at the inner end and resting on the low wall at the outer end; posts rising 2.13m out of the ground would give a 25° roof-angle. This post structure had presumably been filled with wattling (indicated by the ash charcoal) and was carried on sill-beams set in the now empty slots. There was no direct evidence of wattling, as there had been heavy burning, but the carbonised remains of ash and willow (evidently used for hurdling in preference to hazel) are a good indicator.

This apparently continuous range of peripheral structures showed the finely laminated floor layering almost everywhere, which seems to demonstrate that the area had not been trodden by animals, except possibly on the south-west, where soundings showed the floor deposits to be more disturbed and the low buildings might have been used, for instance, for calves.

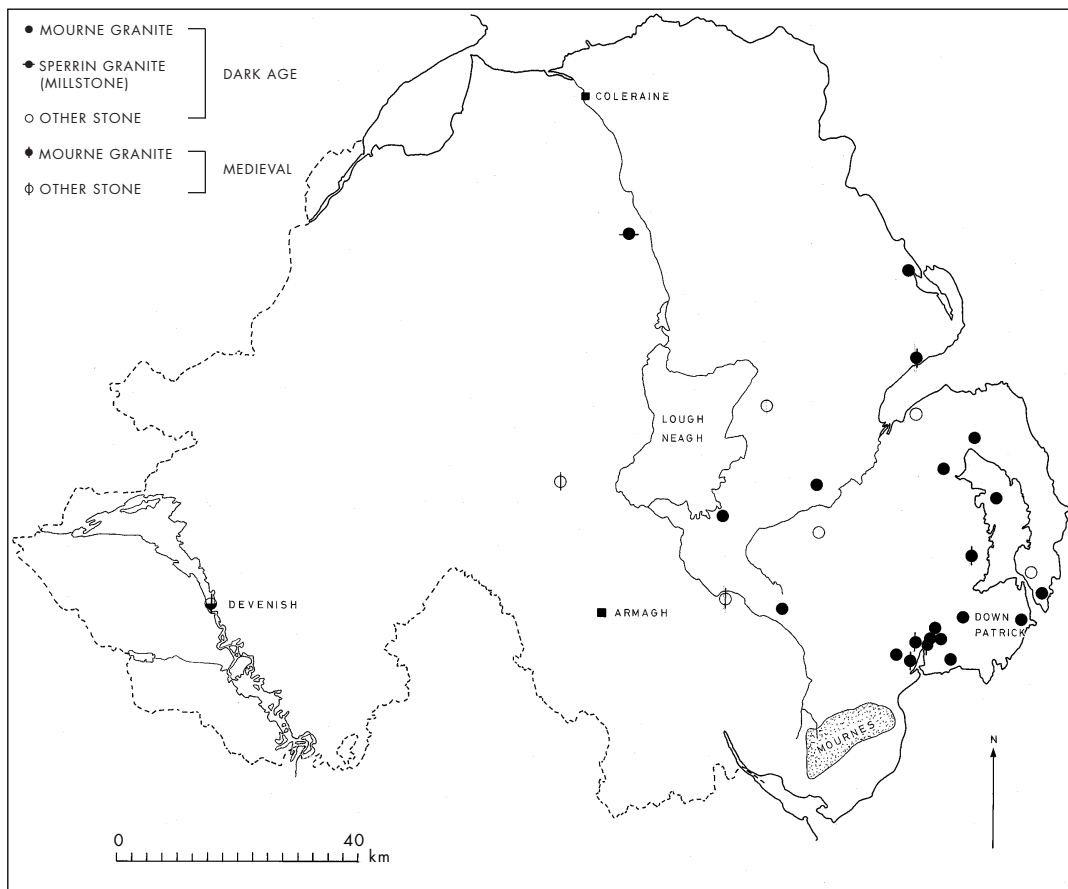


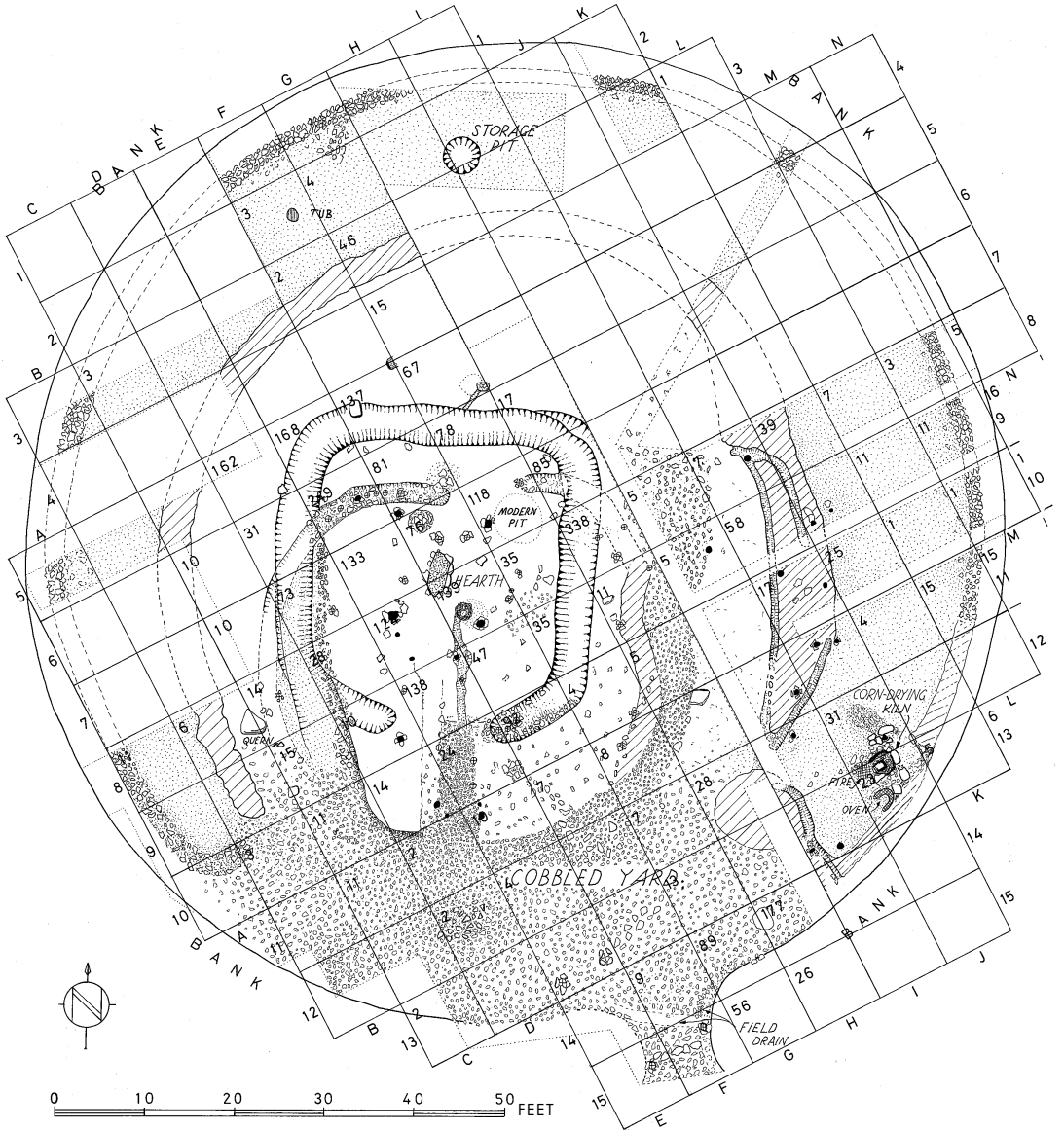
FIG. 4—Map showing the distribution of querns of Mourne Granite and other stones.

Parts of a quern of Mourne Granite (not illustrated, but see Fig. 4 for the distribution of similar finds across Northern Ireland)<sup>5</sup> were found just outside the western part of this peripheral structure, close against the wall trench of house 3.

A small storage pit was identified within the northern part of this peripheral range, and in the grey clay a little to the west of the pit a very black, oval (0.3m × 0.45m) area proved to be the remains of an apparently stave-built container, much blackened and consolidated, almost as if tarred. On excavation this went

<sup>5</sup>The sites marked on Fig. 4 as yielding Dark Age and medieval querns of Mourne Granite (and other stone) are as follows. *Dark Ages*—Mourne Granite: Ballyfounder, Co. Down; Ballymacash, Co. Antrim; Ballynarry, Co. Down; Clea Lakes Crossing, Co. Down; Clanriolla, Co. Antrim (EMJ fieldwork); Clough, Co. Down; Comber, Co. Down (rath near Comber House, EMJ fieldwork); Downpatrick, Co. Down; Drumarod, Co. Down; Lisnagade, Co. Down; Larne, Co. Antrim; Lough Faughan, Co. Down; Movilla Abbey, Co. Down; Nendrum, Co. Down; Rathmullan, Co. Down; White Fort, Co. Down. Sperrin Granite millstone: Drumarod, Co. Down. Other stone: Derry, Co. Down; Hillsborough, Co. Down; Hollywood, Co. Down; Seacash, Co. Antrim. *Medieval*—Mourne Granite: Carrickfergus, Co. Antrim; Castleskreen, Co. Down; Clough Castle, Co. Down; Devenish, Co. Fermanagh; Dundrum, Co. Down. Other stone: Devenish, Co. Fermanagh; Tully, Co. Tyrone; Tullyish, Co. Down.

We thank C. J. Lynn for his help in compiling this list.



EMJ-HMJ-1954

FIG. 5—Ballymacash: plan showing the excavation grid and the distribution of souterrain ware across the interior of the rath. Sherd numbers per square, 8ft x 8ft (c. 2.4m x 2.4m), are entered in the top left corner of each square.

down with vertical sides for *c.* 0.3m and then tapered down to at least 0.15m; in the centre was a substantial stake, which proved impossible to extract; the whole is most unusual and might possibly have been connected with water supply (less likely it was used for milk products, butter making, brewing or perhaps salting).

The peripheral buildings were at their most substantial on the east, where they included a drying kiln, an oven and a hearth. The area round the hearth yielded a fair amount of pottery (Fig. 5) and was the only peripheral area to do so; this substantial part of the structure may have been used as supplementary accommodation for agricultural labour, especially having regard to the restricted space in the house itself. It is also possible that the pottery used by this community was given its low temperature baking in the hearth—a multi-purpose device.

The phosphate analyses carried out on samples recovered from Ballymacash undoubtedly do not meet the rigorous requirements of work in the 1990s, but they do reveal in a semi-quantitative way a certain amount of useful information about the use of the site during its main time of occupation, in particular about areas where animals were allowed and other areas from which they seem to have been excluded.

We considered phosphate analysis worth pursuing on this site because we (EMJ and HMJ) were recently back from a visit to see Stenberger's excavations at Vallhagar on the Island of Gotland (where Arrhenius (1955) had done the pioneer phosphate work). The methods used were adaptations of those used by Proudfoot (see Hamond 1983).

The confirmation of evidence for animal use of the site was useful for a site where the usual animal remains (bone) were not significantly present (cf. Sanchez *et al.* 1996, 159).

In general this work showed low phosphate levels within the house(s) and average values over the northern part of the yard area and within most of the peripheral structure. Higher values, however, were recorded immediately east of the entrance to the house(s), in and around the causewayed entrance to the rath itself and around the south-western terminal of the peripheral building range. It has already been noted that the south-western corner of the peripheral building was somewhat disturbed (perhaps owing to use as calf pens), and the high phosphate levels could be taken to confirm this interpretation. It is also noteworthy that the other areas of high phosphate are fairly densely cobbled, and perhaps this is also suggestive of their use as a stockyard (note the low phosphate levels and a lack of cobbling north of the house site). The cobbled yard was certainly in place during the life of house 3, as it marks the extent of that house, and it is likely that the area was cobbled during the life of house 2, as its entrance was quite clearly and heavily cobbled.

It should be noted that our data<sup>6</sup> are comparative across the site; they should not be too much seen as having absolute values for comparison with other sites (but cf. Edwards *et al.* 1983).

The single radiocarbon measurement (which must be treated with caution) suggests that the occupation period of rath phases I and II lies within the tenth to thirteenth centuries AD (see radiocarbon measurement below), and this late dating is to some extent supported by the ceramic assemblage (below). Indeed on the evidence of the radiocarbon date for the occupation of house 2 (1000–1265

<sup>6</sup>These data form part of the site archive held by The Archaeological Survey, DoE (NI).

AD) it would seem quite possible that this rath was occupied at the time of the Anglo-Norman Conquest—certainly in the house 3 phase, even if not during the house 2 phase. It is tempting to speculate that the decline in status between the house 2 and 3 phases is in some way a result of that Anglo-Norman Conquest. Thereafter the site was evidently abandoned. In the mid-nineteenth century the ditch was cleaned out and enlarged, probably as part of landscaping associated with the plantation of pine trees around the bank.

### **The finds**

#### *Pottery*

Almost 4000 sherds of pottery were recovered during the course of the excavations. Apart from a small amount of post-medieval stone- and earthenware found in the topsoil, and a handful of medieval glazed and everted-rim wares, these consisted entirely of souterrain ware. Nowhere was it possible to attribute any of this material to rath phase I. Apart from the post-medieval sherds, all the pottery may be attributed to rath II, houses 2 and 3. Houses 2A, 2B and 3 succeeded each other fairly rapidly; house 2B was really a modification of 2A, and the round house, 3, was built sufficiently soon after the decay of house 2 for its posts to be reused. There was therefore a long and more or less continuous period of occupation, and the mass of the souterrain pottery can only be treated as a single ceramic horizon associated with the occupation of rath II. It proved possible, however, to establish a correlation between the house 3 phase and the everted-rim and glazed medieval wares.

#### *The souterrain ware*

This is a very well known class of Ulster pottery, and the Ballymacash collection generally conforms to the norm. Characteristically this ware is handmade and fired to a very low temperature. The sherds from Ballymacash almost invariably show a thick, grey core with buff-orange surface layers and very frequently have heavy carbon deposits on all surfaces. The fabric is soft and easily scratched with a finger nail, and the surface texture is harsh and sandy. As is so often the case with handmade wares formed of local clays, the fabric tends to be somewhat variable; but they may probably be treated as a single group. The mineral inclusions consist of moderate amounts of fine mica, large, angular quartz fragments (up to 2mm), occasional pieces of flint and dark pebbles (basalt?). Noticeably the outer surfaces of base sherds are much harsher and sandier than body and rim sherds. This may be due to the vessels' being manufactured on a surface dusted with sand, in the same way that a pastry board is dusted with flour (Ivens 1984b).

A very few sherds of a different fabric were found. Generally they were quite similar to the main group, but the inclusions were very much finer and consisted solely of mica and quartz (Fig. 6.2, 6.3 and 6.6). This fabric group could not be separated from the main group on the basis of either form or context. It is possible that they were imported from some other, and probably nearby, settlement; or it may be that a different clay source was used on this occasion.

Almost all the souterrain ware is of the standard flat-bottomed, bucket-shaped form, usually with simple pointed or flattened rims (see Figs 6–8 for the range of

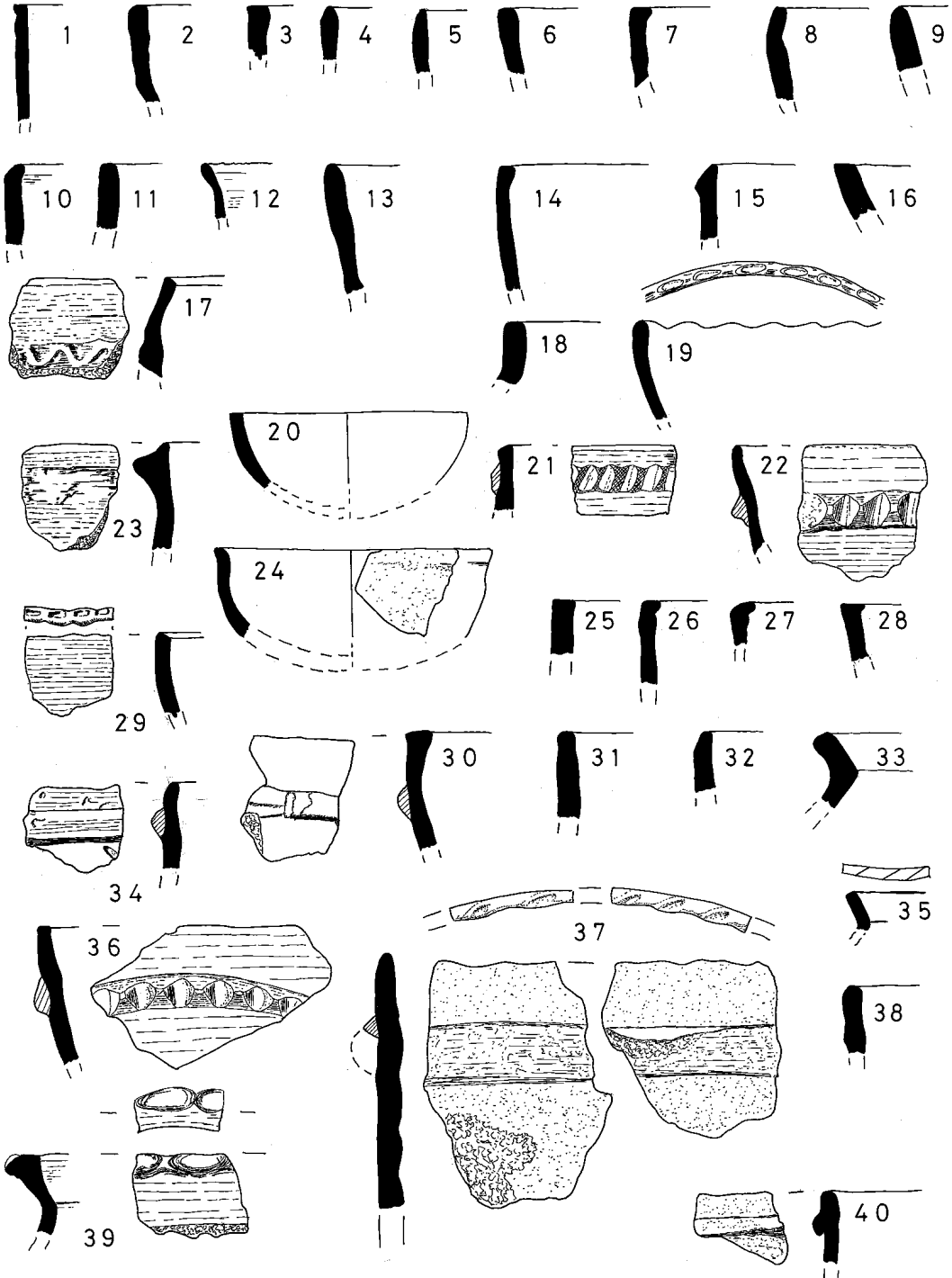


FIG. 6—Ballymacash: souterrain ware, everted-rim (33 and 35) and glazed (39) pottery ( $\times\frac{1}{5}$ ).

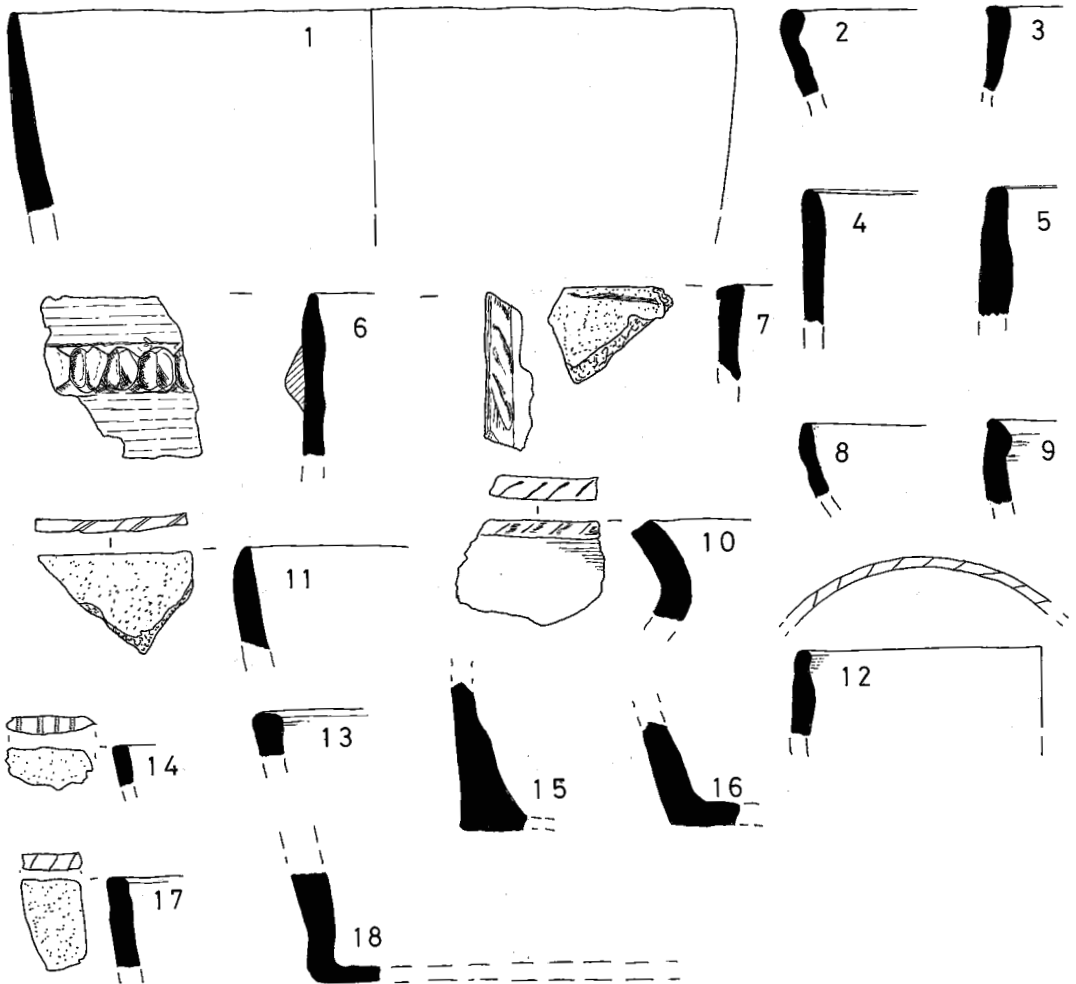
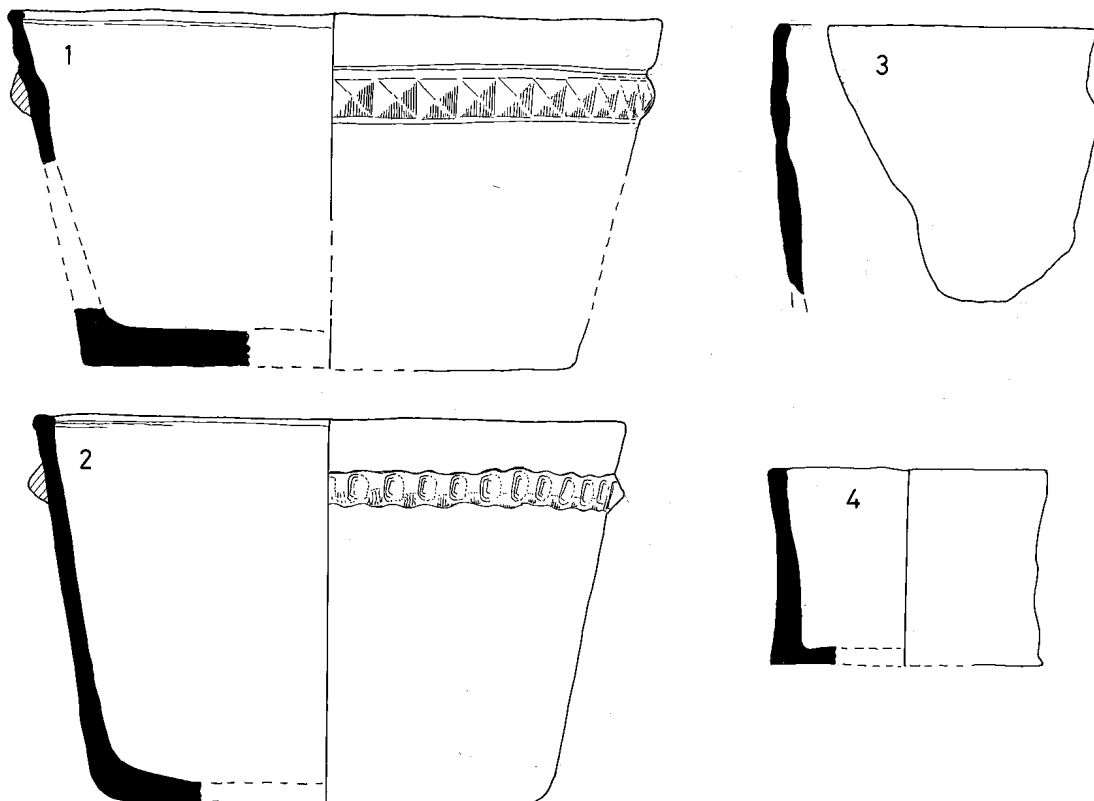


FIG. 7—Ballymacash: souterrain ware and everted-rim (10) pottery ( $\times\frac{1}{5}$ ).

forms). There is, however, considerable variation in size; compare, for example, the large vessel (Fig. 7.1) with the small, rather squat, pot (Fig. 8.2). Decoration too shows considerable variation. It may be entirely absent, for example Figs 6.1 and 7.1, or take the form of a cordon positioned a little below, or in some cases immediately below, the rim (compare Fig. 6.21 and 6.22). Cordons may be plain (Fig. 6.37) or thumbed (Figs 6.21, 6.22 and 7.6). Rarely the cordon takes the form of a continuous swag (Fig. 6.17, note also the curious inverted rim). Otherwise decoration is confined to finger-tipping and slashing of rim tops, which may occur either with or without cordons (Fig. 6.19, 6.29 and 6.37; Fig. 7.11 and 7.12). No thumbed base angles were noted. Commonly the vessels have straight, vertical, or slightly outward-leaning, walls with a simple pointed or flattened rim (even when decorated). There are some exceptions: the inverted rim (Fig. 6.17), the flared

FIG. 8—Ballymacash: souterrain ware pottery ( $\times 1/5$ ).

rim (Fig. 6.12), the slightly incurving rim (Fig. 6.19) and the expanded rim (Fig. 6.23). Generally these simple rims are finished off by folding any surplus clay inwards and then imperceptibly smoothing it into the wall of the vessel. Occasionally this technique resulted in a distinct beading on the inner edge of the rim (Fig. 6.26 and 6.27). Rarely the surplus clay was folded outwards, forming an external bead (Figs 6.1 and 7.7) or an expanded rim with an outward sloping surface (Fig. 6.15 and 6.23).

#### *Round-bottomed bowls*

Several examples of round-bottomed bowls were recovered (Fig. 6.20 and 6.24). Figures 6.16 and 7.8 may also be examples. The fabric and manufacturing techniques were indistinguishable from those of the souterrain ware. Such vessels are not unknown from other sites (e.g. Movilla Abbey, Ivens 1984c) but are by no means common. They should probably be regarded as a late variant within the souterrain ware tradition.

#### *Everted-rim ware*

Only three tiny rim sherds of this class of pottery were recovered (Figs 6.33,

6.35 and 7.10). One of these, Fig. 6.35, was found pressed into the cobbled yard in square G14 (Fig. 5); however, the remaining two sherds were found in contexts associated with or pre-dating house 3. One, Fig. 7.10, was recovered from within the house 3 floor (in square F6), and the other, Fig. 6.33, from a layer of clay that sealed the house 2 gully and was cut by the house 3 trench (square D6). Clearly this class of pottery was in use during the life of house 3, if not earlier.

The fabric was once again indistinguishable from that of the main group of souterrain ware, and it was only when the characteristic rim survived that it was possible to identify the presence of this type of pottery. The vessels are entirely plain, apart from slashing on the rim top. Conventionally this group is regarded as the native 'souterrain ware' potters' response to the import of wheel-thrown medieval pottery following the Anglo-Norman conquest of Ulster, and is consequently thought of as beginning from the earlier thirteenth century. In recent years this type of pottery has been found in late medieval contexts (Rathmullan, Lynn 1981–2, and Tullylish, Ivens 1987); the evidence from the latter site suggests a late thirteenth-century (at the earliest) date for the origin of everted-rim ware. The arguments for re-dating this class of pottery are developed further in Ivens (forthcoming).

#### *Wheel-thrown pottery*

About twenty sherds of this class were recovered, and most were small body sherds. None of the sherds can be attributed to either of the known Ulster medieval kiln sites nor to any of the established local groups. The variety of fabrics and the small numbers found suggest that they are stray imports.

Although few in number, there is a consistent association of these glazed medieval wares with the occupation of house 3. The inevitable conclusion is that house 3 was in use during the later twelfth century, and quite possibly later.

*Fig. 6.39.* Pot rim, unglazed; grey-white fabric and surfaces, coarsely gritted with large angular flint, angular-subround quartz and occasional grey pebbles (*c.* 2mm). The rim is strongly everted with pronounced finger tipping. This sherd was found pressed into the cobble yard in square G14.

#### *Not illustrated.*

1. Body sherds only; buff-red fabric (often grey under the glaze); smooth paste gritted with very fine quartz and mica and occasional larger grains; odd external splashes of purple-green glaze. From fill of house 3 trench, squares E6 and F6.
2. Body sherds only; red-orange surfaces with grey core; eroded internal green glaze; harsh sandy texture, although the only visible gritting was sparse mica flecking. From fill of house 3 trench, square H7.
3. Body sherds only; red-orange throughout; decayed internal green glaze; very smooth paste with a little mica; similar to no. 2 but with much smoother and softer paste. From stone layer sealing house 2B porch, square D8.
4. Body sherd; similar to no. 2 but with grey interior and buff-red exterior layers. From floor of house 3, square H9.
5. Body sherd; red throughout; brown external glaze; very finely gritted with mica. From house 3 floor, square D8.
6. Jug rim; slightly flared, simple rounded rim, small plain cordon a little below rim; fabric dark red throughout with an occasional quartz grain, otherwise grit-

free; olive-green glaze on both surfaces; the glaze had also run into a crack during firing. From house 3 floor, squares F7–8.

7. Jug rim; near-vertical, slight external lip to flat rim, neck heavily rilled; grey core, buff-pink surfaces, harsh sandy texture, densely gritted with small subround quartz (and odd large grains); external green glaze (a body sherd in the same fabric was glazed both internally and externally). From house 3 floor, squares F7–8.

#### *Pottery distribution throughout the site*

No pottery could be certainly assigned to rath phase I; but rather than postulate an aceramic rath occupation phase (of the later first millennium AD), one should explore other explanations. Most of the pottery from the site came from the main rath II house area, around the centre of the rath (Figs 2 and 5). We have seen that the only certain preserved rath I occupation levels were around the perimeter and extending under the inner part of rath bank II. In the interior area rath I occupation levels seem to have been eroded away by rath II activities. It could be that pottery was used on such a site mainly in the central area round the main house, as seems to be the case in rath phase II, where very little pottery was found outside the central area. This argument could be extended back to rath I. Thus an absence of pottery in the perimeter occupation layers cannot be taken as evidence of the phase being aceramic. Any rath I pottery used in the central area (where one square-sectioned beam trench and one post-hole survived as evidence of a good rath I building, house 1) would have been gradually dispersed, and any surviving sherds would be intermixed with rath II deposits.

Thus, pottery would be seen as a prerogative of the main residents of the rath, if the peripheral structures were used as accommodation. Alternatively, if these peripheral buildings were used as workrooms, stores, etc., the pottery would be seen as relevant only to the functions of the central house. This interpretation is probably more acceptable than a postulated aceramic phase in the later first or even early second millennium AD for a rath in south Antrim. There does, however, seem to be a slight concentration of pottery just to the east of the rath entrance, and this might indicate the presence of an earlier entrance. Alternatively, the entranceway may have been narrowed, as was certainly the case in the rath at Killyliss, Co. Tyrone (Ivens 1984a), although in this instance the narrowing was of post-medieval date.

#### *Other finds*

Finds other than pottery were very scarce at Ballymacash. A few largely unidentifiable animal bones were recovered, and scraps of slag-like material were found scattered, sparsely but widely, over the whole of the excavated area. Three chips from lignite (shale?) bracelets were noted, and two larger pieces were found embedded in the fill of the south-west of the house 2 gully (square D9, Fig. 9.5) and in the upper levels (at the height of the cobbled causeway) of the south-eastern terminal of the rath ditch (squares G15, Fig. 9.6). Two glass beads were found: one (Fig. 9.3) in the central hearth (square F7–8), together with the only iron object (a nail fragment), and the other (Fig. 9.4), of blue and white glass in the south-western terminal of the house 2 gully (square D9); a similar bead to Fig. 9.4 was found at Clea Lakes Crossing (Collins and Proudfoot 1959, 96, fig. 2.4).

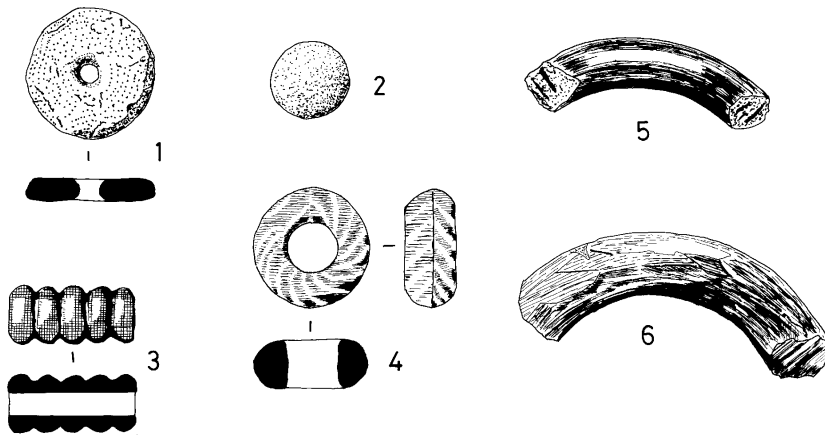


FIG. 9—Ballymacash: objects of stone (1–2,  $\times \frac{1}{3}$ ), glass (3–4,  $\times 2$ ) and lignite (5–6,  $\times \frac{1}{2}$ ).

The only other artefacts were a ball-like object (Fig. 9.2) and a sandstone spindle-whorl (Fig. 9.1), the latter found on the cobbled surface to the west of the entrance to the houses.

The spindle-whorl is made of a fine sandstone and has been only rather roughly chipped out, although the central hole was carefully drilled through, from both sides, *c.* 50mm in diameter, *c.* 6mm thick and with a ‘countersunk’ perforation 13mm across tapering to an 8mm-diameter hole.

With the exception of the spindle-whorl, none of these objects now survives, other than as a drawing made at the time of excavation.

### Dating and Discussion

Ballymacash has long hovered somewhat enigmatically over the study of Ulster’s raths, with its extensive range of peripheral buildings, still unparalleled after nearly half a century of intensive excavation. This same period of survey and investigation has shown that internal structures within raths can be either circular or rectangular, but that there is a distinct trend from early circular to late rectangular buildings (Lynn 1978). Perversely Ballymacash demonstrates that the reverse can also occur.

Early in the study of the pottery from the site it was apparent that everted-rim and medieval glazed pottery were associated (in small amounts) with at least the latest (house 3) occupation of rath II. Neither medieval glazed nor everted-rim pottery could occur before the thirteenth century (or the later twelfth century at the earliest), and there is increasing evidence to suggest that everted-rim pottery begins in the later rather than earlier thirteenth century (see above). The small amounts found may indicate that Ballymacash was abandoned soon after the introduction of these types to Ulster. Equally, their rarity may be an indication of the low socio-economic status of the site in its final occupation. The development of souterrain ware is far from fully understood, but it does seem that certain characteristics appear during the latter stages of the tradition, notably a variety of forms (apart from the simple bucket shape) and decorative ‘tricks’ such as thumbled

rims, base angles and cordons. The assemblage from Ballymacash certainly shows a considerable variety of form and a range of decorative 'tricks'.

It seems then that Ballymacash has yet another twist to its story. The final occupation of the site must last into the late twelfth and quite probably the thirteenth century. If we postulate that the rath had been abandoned as a permanent farmstead and was being used at this late date only as a temporary shelter (or perhaps only for stock) then this might explain the rather poor quality of the round house.

The excavation evidence demonstrates conclusively that there was an unbroken sequence of occupation from phase I onwards. Indeed this continuity through the phase II rath was such that house 2B was merely a modification of house 2A and house 3 utilised some of the house 2 posts. Such a close and unbroken line of occupation and building makes it unlikely that house 2 could be significantly earlier than house 3; even rath phase I must date towards the end of the Early Christian period. In all probability, then, rath II must date to the early second millennium AD, although rath I could extend back to the end of the first millennium AD.

A radiocarbon measurement (1000–1265 AD for the occupation of house 2, see below) suggests that rath II is of a relatively late date and that it was probably

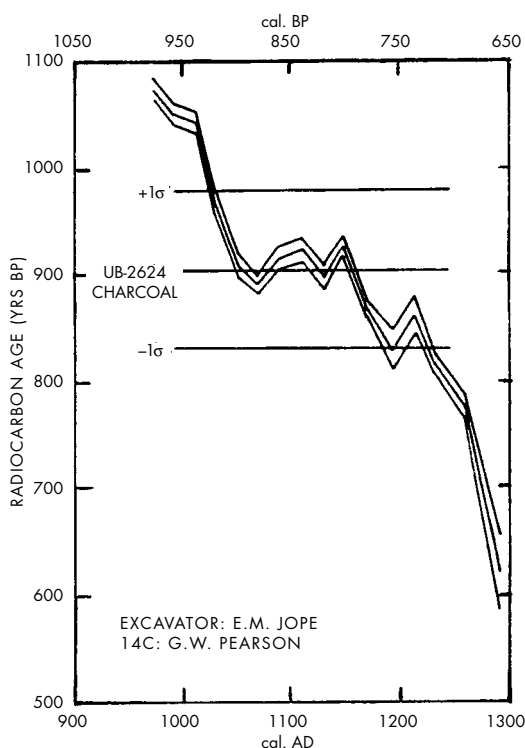


FIG. 10—Radiocarbon dating results of a sample of oak from Ballymacash, near Lisburn, Co. Antrim, Northern Ireland. The sample was a knotty chunk from a hollow (perhaps a post emplacement), probably associated with the period of house 2.

occupied in the eleventh and quite possibly the twelfth century, and perhaps even into the thirteenth century (at least in the house 3 phase). A single radiocarbon measurement must be used with considerable caution (no other suitable sample material survives), but this evidence supports the conclusions based on the study of the pottery.

There seems to be little doubt, therefore, that the rath at Ballymacash was occupied mainly in the eleventh and/or twelfth centuries, with perhaps some final usage running into the thirteenth century. The material culture found during the excavations is essentially an Early Christian one (apart from the small amounts of wheel-thrown and everted-rim pottery). This leads one to suppose that, archaeologically, the Early Christian period lasted rather longer than is generally thought. If it wasn't for a small amount of late pottery and a radiocarbon date, this rath could quite easily be several hundred years earlier than the dating suggested here. It is quite possible that sites attributed to the Early Christian period may in fact date to a time well past the Norman settlement of Ulster, especially in those areas remote from Anglo-Norman influences, and where (as so often) there is poor dating evidence.

#### **Radiocarbon determinations**

Queen's University Belfast Radiocarbon Dating Research Unit

This sample of oak was collected from a hollow (perhaps a post emplacement) in the clay floor of house 2.

Context 224 UB-2624 905 ± 75\* <sup>14</sup>C years BP 1020–1250 AD [1000–1265 ± 2σ bandwidth (years)].

\*Includes lab. error 2σ = ±134

On the admittedly slender evidence of this single radiocarbon date, it would appear that rath phase II was occupied during the first centuries of the second millennium AD (Fig. 10; and see also Jope 1986 for a further discussion of this evidence). The stratigraphic evidence indicates that rath phase I immediately preceded rath II and can therefore hardly be earlier than the very end of the first millennium AD.

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