

# A new Irish early medieval site type? Exploring the ‘recent’ archaeological evidence for non-circular enclosed settlement and burial sites

JONATHAN KINSELLA \*

Early Medieval Archaeology Project (EMAP), School of Archaeology,  
University College Dublin

[Accepted 17 November 2009. Published 20 April 2010.]

## Abstract

Development-led excavation in Ireland increased dramatically in recent years, which revealed a large number of previously unknown early medieval enclosed settlements and settlement/cemetery sites. Many of these sites are non-circular in shape, which has led to the suggestion of a new site type. It is argued here that this is not the case and that the mistaken perception of the circularity of the Irish ring-fort has led to the incorrect identification of recently discovered early medieval settlements. There is emerging evidence, however, for settlement/cemetery sites that are mostly non-circular with origins, in many instances, in the late Iron Age/early medieval transitional period. It is the association of settlement and burial that differentiates these from the thousands of variously shaped enclosures known as ring-forts and cashels in the Irish country-side. This paper assesses the archaeological settlement landscape evidence and material culture for a range of enclosed early medieval sites and explores these findings against the backdrop of social status and mobility, which were such important aspects of Irish society during the early Middle Ages. The findings are based on a small sample of excavated non-circular enclosures—in some cases from interim excavation reports and unpublished research—and an examination of a larger corpus of material may reveal differing outcomes. The aim of this paper is to continue the critical evaluation of archaeological findings as they reveal themselves at a pace not seen before in Irish archaeology.

## Introduction

This paper will explore and assess the recently excavated non-circular sites variously referred to as D-, heart- and plectrum-shaped enclosures. It is the writer’s belief that these sites were the dwelling-places for a variety of social classes, as described in the seventh- and eighth-century law texts, from the ordinary small farmer (*ócaire*); to the strong farmer (*bóaire*); and the lordly classes (*aire/ri*)—see Kelly (1988, 1997) for an in-depth analysis of the law tracts and society in early medieval Ireland during the seventh and eighth centuries. The archaeo-

---

\* Author’s e-mail: kinsella.jonathan@gmail.com  
doi: 10.3318/PRIAC.2010.110.89

logical remains reflect diversity in the agriculture and industry practised by the occupants and retainers of these households. It is argued—as opposed to Coyne and Collins (2003) and Coyne (2006)—that the majority of non-circular enclosures do not represent a new early medieval settlement type but that they mirror the type of material remains discovered on previously excavated ring-forts. This paper begins with a detailed examination of the morphological, chronological, landscape and artefactual evidence for early medieval ring-forts. The archaeological evidence suggests social hierarchical divisions within both circular and non-circular enclosures and reveals that enclosure shape had no relevance to the types of activities or status of the people within these settlements. It is suggested that a simplified approach has been taken regarding the classification of ring-forts and their supposedly uniform circular plan, and that this has led to the wrongful identification of a host of ‘newly recognised’ early medieval settlement types. However, excavations are now revealing mainly non-circular settlement/cemetery sites that emerged in the late Iron Age/early medieval transitional period and they can be differentiated archaeologically from the evidence discovered at many ring-fort excavations. Often, it was the settlement’s relationship with the cemetery that resulted in its development and prominence in the surrounding landscape.

The author has chosen a small sample of previously published ring-fort excavations displaying variations in material wealth, size, shape, landscape setting and longevity of use. These are compared with the newly published and grey literature from more recent non-circular enclosure excavations. It is the author’s view that the sample referred to in this paper is representative of the types of enclosed settlement found throughout early medieval Ireland.

## Ring-forts

### Introduction

This first section of this paper utilises a range of publications on early medieval ring-forts. General texts include Stout (1997) and Edwards (1990, 6–33). More recently Comber (2008) has written comprehensively on ring-fort economy, which is a much valued addition to the original work by Proudfoot (1961) on the same subject. A range of other papers deal mainly with morphology (Barrett 1980; Stout 1991, 1998); dating (Barrett and Graham 1975; Limbert 1996); and settlement (Kerr 2007). Of course there is considerable overlap in the findings presented by the various authors. Stout (1997, 22–31) presents a very useful chronological assessment of the radiocarbon dates from ring-forts. Kerr (2007, 86–100) interrogates this data further and suggests variations in the construction dates between univallate and platform ring-forts. The location of ring-forts—including soil preferences and altitude—has also been comprehensively covered in a range of papers including some of those mentioned above (for example Barrett and Graham 1975; Fahy 1969; Kerr 2007; Monk 1998; Stout 1991, 1997, 1998). The range of publications on ring-forts is, therefore, plentiful. However, there has been a recent introduction into archaeological discourse of ‘newly discovered’ non-circular early medieval enclosures, an issue that is specifically addressed in this paper.

## Morphology and the problems associated with defining a ring-fort

Before non-circular, enclosed early medieval settlements are discussed, it is necessary to examine the perceived morphology of a ring-fort and if, in fact, circularity is a crucial factor in its classification. It becomes apparent that scholars and researchers, past and present, have different views on what defines a ring-fort. Ó Riordáin (1942a, 29) in his *Antiquities of the Irish countryside*, stated that ‘In its simplest form the ringfort may be described as a space most frequently circular, surrounded by a bank and fosse or simply by a rampart of stone’. Nineteen years later, Proudfoot (1961, 94) declared that the enclosed spaces of ring-forts or cashels were generally circular although ‘oval or rectilinear’ examples were also found. Edwards (1990, 14) has since stated that ring-forts can be circular, oval or pear-shaped enclosed areas. More recently, Stout (1997, 14–15) suggests that the circular shape of the ring-fort was achieved using a line connected to a central stake and that circularity was the defining characteristic according to the seventh- and eighth-century law tracts. The circular shape of the ring-fort is, therefore, often seen as one of its essential characteristics today, even though former scholars recognised smaller numbers of oval-, pear- or rectilinear-shaped enclosures as ring-forts. The easy availability of Stout’s (1997) work has, perhaps, led to the view that many non-circular early medieval enclosures represent a new site-type but the archaeological evidence outlined in this paper demonstrates this to be inaccurate.

A number of contemporary terms exist for early medieval enclosed sites such as ráth, cashel and dún. The former relates to earthen enclosures while ‘cashel’ describes stone-built examples. The latter appears to relate to enclosures of greater prestige and prominence. ‘Ráth’ is a term that is favoured in Northern Ireland while ‘ring-fort’ is a more common term south of the border. As early as 1928—in *Ulster; its archaeology and antiquities*—the term ráth was used in preference to ring-fort (Lawlor 1928) while Kerr (2007, 1) has noted that this preference still prevails. It is now time to re-evaluate the use of these terms because neither accurately reflects the archaeological evidence. This author suggests that the term ‘enclosed settlement’ is more agreeable with the large numbers of differently sized, and shaped, early medieval enclosed sites that are identifiable in the archaeological record. This term accurately refers to the dwelling-places of early medieval families and their retainers who were engaged in farming and small-scale industrial and craft activities. There are also enclosed early medieval sites with non-settlement functions such as livestock enclosures, specialist industrial sites (see Cahircalla More, Co. Clare, below, which was an enclosed iron-smithing forge) and defensive fortifications etc. To avoid using misleading terms such as ring-fort and ráth, these can simply be classified by their function such as livestock enclosure, enclosed iron-smithing forge etc. Therefore, these terms will be used throughout the remainder of this paper and it is hoped to influence the future classification of enclosed early medieval sites.

## Chronology

The dating of early medieval enclosed settlements has been a contentious issue (see Limbert 1996 on Iron Age origins) but Stout (1997, 24) has shown that the majority were constructed from the beginning of the seventh until the end of the ninth

centuries, covering a 300-year period. More recently, Thomas Kerr (2007, 99–100) has interrogated this evidence and has identified that platform enclosures were constructed later than univallate types between the mid-eighth and mid-tenth centuries.

Identifying chronological phases and morphological changes for enclosed settlements has caused further disagreement. Monk (1995), after excavation of an enclosure at Lisleagh 1, Co. Cork, demonstrated that it was enlarged and replaced with a more formidable defence after only a short period. Conversely, its neighbouring site, Lisleagh 2, began as a large enclosure but the following phase witnessed the levelling of the bank and the construction of a shallow ditch and palisade. The final phase saw the infilling of the ditch as occupation occurred over it. At Rathgurreen, Co. Galway, a secondary large bank and fosse were built inside the original bank and fosse (Comber 2002). Mytum (1992, 123), conversely, states that enclosure banks were ‘generally unsubstantial and only constructed once’. He supports his view by declaring that only 4 of the 16 excavated enclosed settlements from Co. Antrim, which allowed for confident interpretation, showed evidence of more than one phase of enclosure bank while 12 (of 21) sites from Co. Down, and all 9 excavated enclosures from Cush, Co. Limerick (Ó Ríordáin 1940), produced similar evidence. However, the evidence from the majority of recently excavated early medieval enclosed settlements shows that their banks and ditches were re-cut and modified on more than one occasion and the validity of Mytum’s claims can now be seriously questioned.

It appears that the majority of excavated enclosed settlements were occupied for one (Lynn 1978) or two centuries (Monk 1998). It is possible that high-status sites may have been occupied over a longer period and, as a result, produced archaeological evidence for numerous ditch re-cuts, bank/wall re-builds and a higher number of artefacts when compared to the majority of enclosed settlements. Based on their morphology and rich artefactual evidence, some raised enclosed settlements were arguably high-status sites, which were occupied for long periods of time. The raised enclosure at Gransha, Co. Down, revealed three occupational phases dating from the sixth/seventh century to the tenth century (Lynn 1988a). A similar dating sequence was recorded at Deer Park Farms, Co. Antrim (Lynn 1988b), while another raised enclosure at Rathmullan, Co. Down, revealed five phases of early and later medieval activity (Lynn 1981/2). Many less-substantial and lower-status enclosed settlements probably saw only occasional repairs. However, very few have actually been excavated, and even fewer have seen total excavation and publication. The most recent research shows that 168 early medieval enclosures have been excavated (Comber 2008, 225–8). This represents a tiny percentage of the total amount in the country, anywhere between 30,000 (Stout 1997) and 60,000 (Mytum 1992). An increased understanding of the activities, chronologies and social roles associated with enclosed settlements will not become apparent until a much larger sample has been excavated and/or more comparative surveys of their surface features have been undertaken.

### Size

Early medieval enclosures commonly have an enclosed space between 15m and 35m in diameter (Barrett 1980, 42; Edwards 1990, 14), with the majority approximately 30m in diameter. Most are univallate (one enclosing element), though where bivallate (two enclosing elements) and multivallate (more than two enclosing elements) examples

occur, they tend to enclose a space greater than 35m in diameter (Edwards 1990, 14). Raised and platform types represent another variation due to the artificial heightening of their interiors. They, like multivallate enclosures, comprise only a small percentage of the overall number. In the barony of Ikerrin, Co. Tipperary, for example, raised and platform enclosed settlements comprised only 13% of the total recorded (Stout, G.T., 1984), while none were noted in the survey of south Donegal (Barrett 1980). However, more recent studies have shown that there are more raised enclosed settlements in Co. Offaly than elsewhere but the boggy nature of the county's landscape necessitated the need to raise the interior above the water table (Stout 1998, 33).

The relatively small number of multivallate, raised and platform examples, in comparison to the vast numbers of univallate enclosures, has contributed to their identification as high-status settlements (Edwards 1990; Graham 1993; Mallory and McNeill 1991; Stout 1997). Many multivallate sites also enclose a larger space compared to enclosures with just one bank and ditch. It has been suggested that raised and platform types were deliberately heightened to convey their status and wealth as they were positioned on prominent locations in the landscape and could be seen from greater distances (Edwards 1990, 20; Graham 1993, 44).

However, such morphological identifications of status should be viewed with caution until a greater number are excavated. The enclosure at Garryduff I, Co. Cork (O'Kelly 1963), for example, was univallate yet it produced a large quantity of prestige artefacts, evidence for copper-alloy working and a possible wooden gate tower at its entrance. This was clearly a dwelling of some prestige yet it was surrounded by only one bank/wall and ditch. The quantity, variety and quality of artefacts uncovered at Ballycatteen (Ó Ríordáin and Hartnett 1943), also in Cork, were much less impressive than Garryduff I yet this was a very large trivallate enclosure. This suggests that the classification of sites, based on multivallation alone, can be misleading when attempting to identify the status of its inhabitants. However, it is worth noting that only 25% of the interior of Ballycatteen was excavated, compared to the 100% excavation of the interior at Garryduff and this has implications for our understanding of the functions and status of early medieval enclosures. The suggestion that raised and platform enclosed settlements were constructed as a means of conveying and displaying status does not correspond with the evidence for the sites at Inchigaggin, Co. Cork (Hartnett 1946; Fig. 1); and Lackan, Co. Wicklow (O'Connor 1944; Fig. 2); discussed below. Their raised construction was an obvious attempt by the builders to avoid the surrounding damp and wet conditions. Their location within bog and marshland, coupled with a paucity of finds from both sites, demonstrates that their inhabitants were of low status.

## Landscape

Just as it is a perception that enclosed early medieval settlements are wholly circular in plan, it is commonly proposed that they occur exclusively on agriculturally productive lands. Edwards (1990, 19), for example, declares that as the majority of enclosures functioned primarily as farms, poor soils were avoided and only good land was exploited. This is also a view held by Stout (1991, 206; 1997, 106–07) who states that enclosed settlements avoided areas that could not support farming activity.

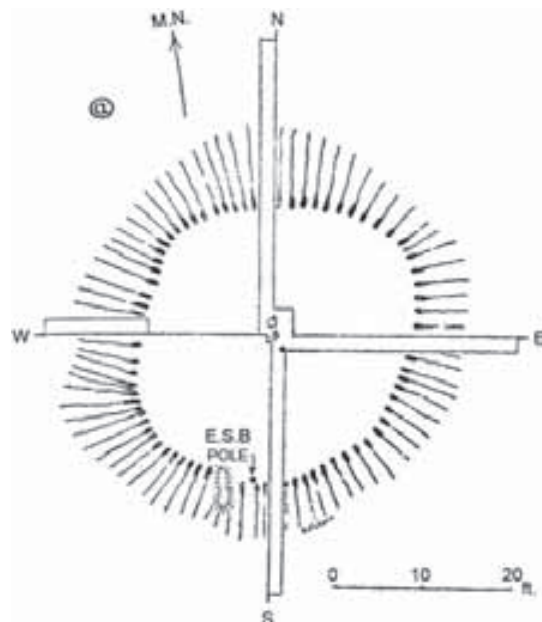


FIG. 1—Plan of Inchigaggin Rath, Co. Cork (after Hartnett 1946, 127).

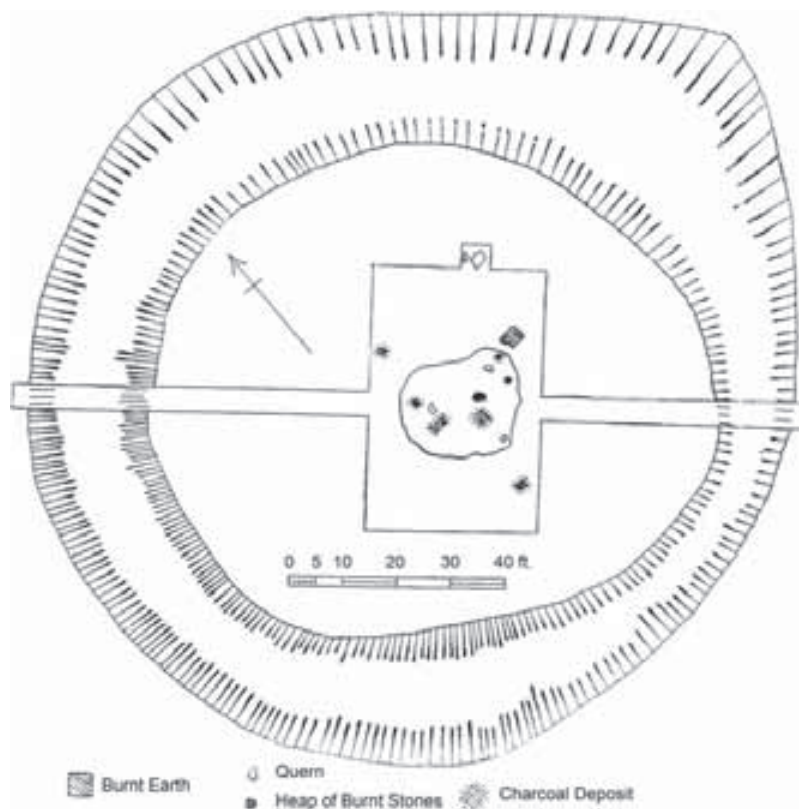


FIG. 2—Plan of Lackan Rath 1, Co. Wicklow (after O'Connor 1944, 55).

Further studies also indicate that enclosed settlements utilised only the best soils and avoided the inhospitable uplands and waterlogged lowlands (Fahy 1969; Kerr 2007; Monk 1998, 42). Therefore, uplands and lowlands were avoided in favour of free-draining and sloping ground. In many cases, the law tracts have been used to support this hypothesis as land was valued according to its agricultural capability. The best land was considered to be flat and agriculturally productive while the least favoured, unsurprisingly, was mountain and bogland (Kelly 1997, 394–6).

However, not all early medieval enclosures are circular and, equally, not all are to be found on the best land. Hartnett (1946, 126), for example, excavated a platform enclosed settlement in Inchigaggin. The surrounding landscape was prone to flooding but he observed that the upper levels of the platform remained dry in adverse weather. O'Connor (1944, 53), in his excavation of three enclosed settlements in Lackan showed that the largest was situated on a slightly raised platform while a second, known as Quinn's Rath, occurred on a naturally raised platform. All three were situated on marshland. An enclosure at Boho, Co. Fermanagh, was also located on the summit of a natural mound, above the surrounding poorly drained soils (Proudfoot 1953, 41; Fig. 3). Ó Ríordáin (1949, 128) has shown, using the stratigraphy from his excavation at Grange, Co. Limerick, that the area was covered in peat prior to the construction of the site and an enclosure at Ballykennedy, Co. Antrim, just below the 121m contour, was situated on poor-quality marshland (Brannon 1980, 65; Fig. 4). There are, therefore, many examples of early medieval enclosed settlements that were built and located in areas that diverge from the perceived ideal ring-fort environment.

### Material culture

The finds from the majority of 'regular' early medieval enclosed settlements tend to be small in number and are usually dominated by utilitarian items. Iron artefacts, where they survive, consist of knives, needles, nails and various pieces of scrap and slag. Stone and bone functional items include rotary querns, hone stones, flints, spindle whorls and needles. Personal and dress items are rarer and are represented by copper alloy and iron ringed pins and brooches, glass beads and bracelets, lignite bracelets and bone combs and pins.

Generally, higher-status settlements produce similar artefacts, though greater in number and variety to those listed above. Moreover, personal and dress items, such as brooches and ringed pins, are usually more frequent than those found at 'regular' enclosures. They occasionally display decoration and, in rare cases, the use of precious metals such as gold and silver. Imported pottery, primarily B- and E-wares, demonstrates contact with the Mediterranean world and western Gaul respectively (Thomas 1976, 1990; Wooding 1996). The presence of crucibles, moulds, ingots and motif pieces shows that the production of bronze and glass items occurred on many sites belonging to wealthy farmers and the noble social grades (see Comber 2004, 2008 for an in-depth analysis of non-ferrous metallurgy in early medieval Ireland).

One way of archaeologically identifying the difference in status between early medieval sites is by an analysis of the number, variety and sophistication of the artefacts discovered. Fredengren (2002, 244) demonstrated this by comparing the

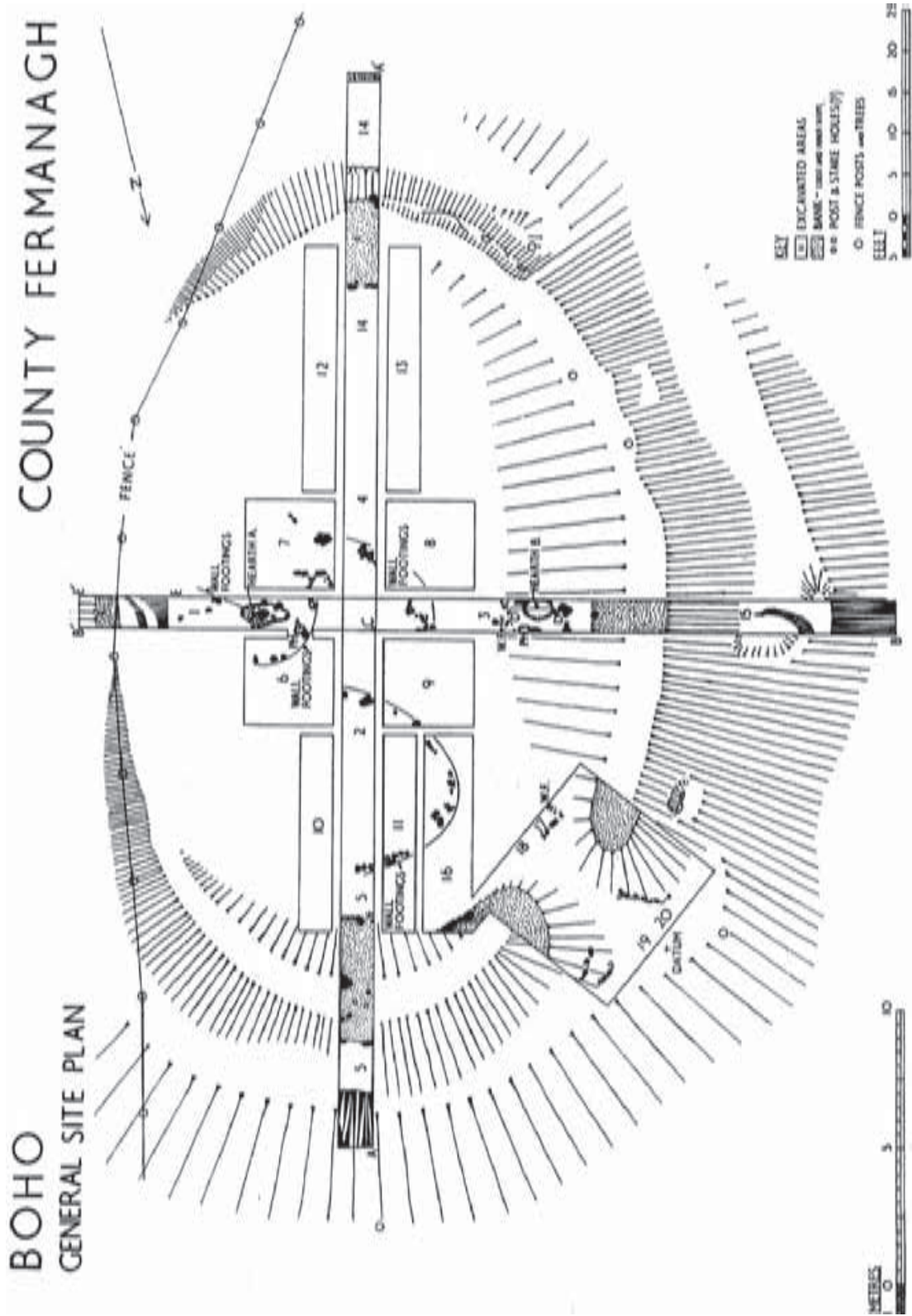


FIG. 3—Plan of Boho Rath, Co. Fermanagh (after Proudfoot 1953).

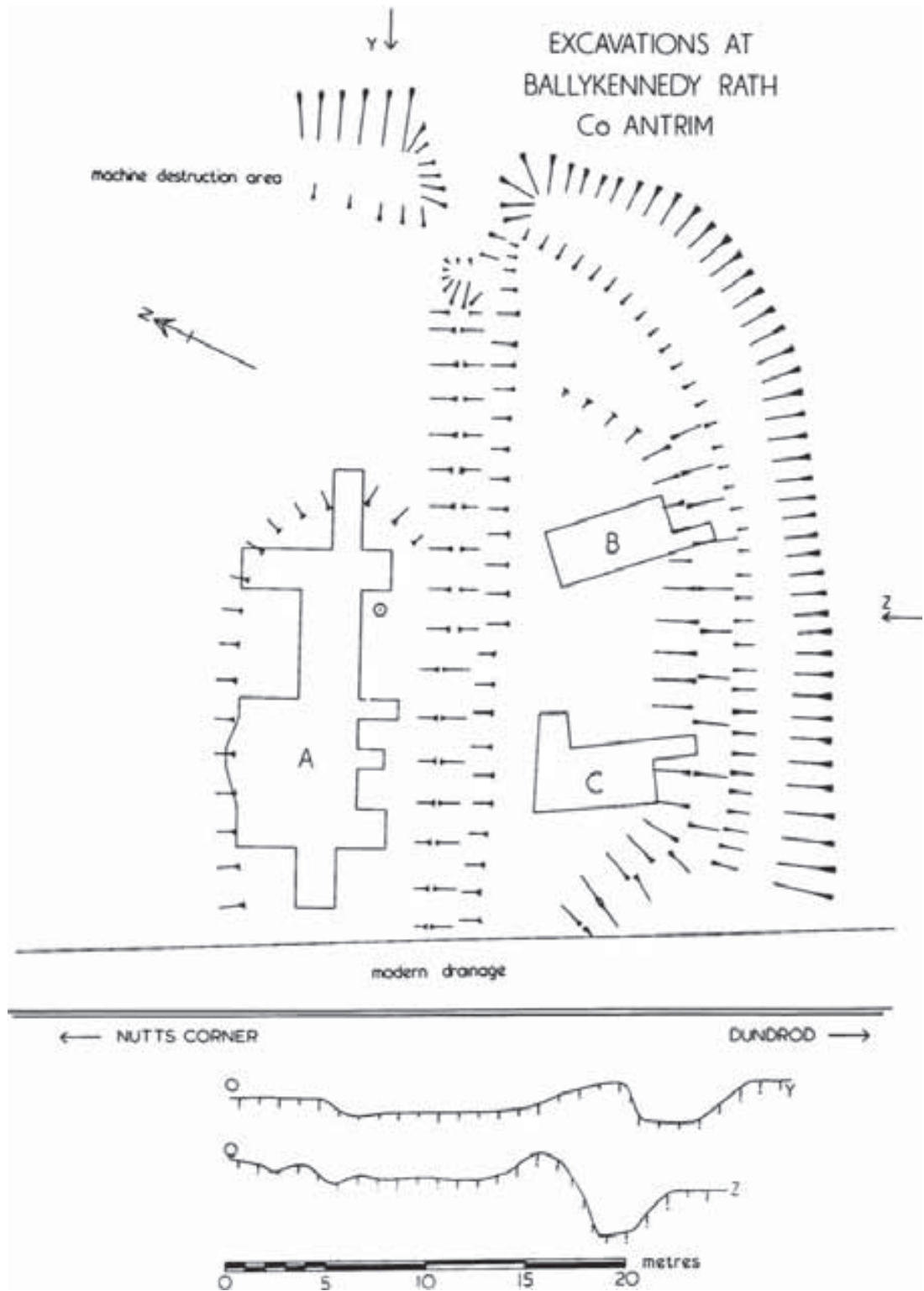


FIG. 4—Plan of Ballykenny Rath, Co. Antrim (after Brannon 1980, 66).

artefacts excavated at the small crannóg at Sroove, Lough Gara, Co. Sligo, with those found on larger high-status crannógs such as Rathinaun Crannóg (Raftery 1957) on the same lake, and Lagore Crannóg, Co. Meath (Hencken 1950). She concluded that the items from Sroove were fewer in number and showed less variation in the materials used (see also Comber 2008 for discussions on metallurgical craft production).

It is apparent that the majority of early medieval individuals and kin groups had access to a range of functional items to assist in their day-to-day farming and domestic activities while personal and dress items were less common. Wealthier individuals, however, had access to similar objects and greater quantities of dress items, and the wearing of brooches, in particular, was seen as an indicator of high status (Nieke 1993).

## Discussion

When a holistic approach is taken to analysing the morphological, chronological, landscape and artefactual evidence for enclosed settlement in early medieval Ireland, a hierarchical division of society is immediately apparent.

The vast majority of the population were self-sufficient farmers with limited material means. They probably resided in simple and small univallate enclosures with many located on agriculturally productive lands. Others, however, were situated in marginal and upland places. Very few artefacts are discovered from these sites, and those that are usually consist of everyday utilitarian items for practical farming and domestic use. The enclosed settlements discussed above at Inchigaggin, Lackan, Boho and Ballykennedy shared similar characteristics in that they were all small univallate enclosures located on lands unsuited to agriculture and they each produced a meagre collection of artefacts. Some examples of enclosures that were located on lands more suited to agriculture but that revealed little in the way of material remains include Ballyduff (Cleary 1985; Fig. 5) and Croom (Shee-Twohig 1977; Fig. 6), both in Co. Limerick; Ballyhenry 1, Co. Antrim (Lynn 1983; Fig. 7); and Crossnacreevy, Co. Down (Harper 1973/4; Fig. 8). In many instances, the scale of excavation and levels of preservation differ at these sites but it is the author's belief that their interpretation would not significantly change should all have experienced 100% excavation. It is apparent from a quick glance through Figs 1–8 that the enclosures comprise a variety of shapes including circular, oval and D-shaped examples.

It can be reasonably argued that these enclosed settlements were inhabited by poorer individuals including the *ócaire* social grades and, perhaps, others once belonging to the free social classes who had descended into the ranks of the semi-free. The law tracts list the *fuidri* and *bothachs* as semi-free individuals who were dependants of their lords (Kelly 1988, 33–5). Ten types of *fuidir* are listed and some are clearly people who were reduced to semi-free status through the severance of connection to their kin (Kelly 1988, 34). A quote taken from a law tract describes the predicament that faced the free members of early medieval society when the lines between the free and unfree became blurred 'It is not easy for each of them to be a *bóaire* when four or five men are heirs of a *bóaire*' (cited in Ó Cróinín 1995, 89). Therefore, the law of inheritance was a major contributory factor in maintaining

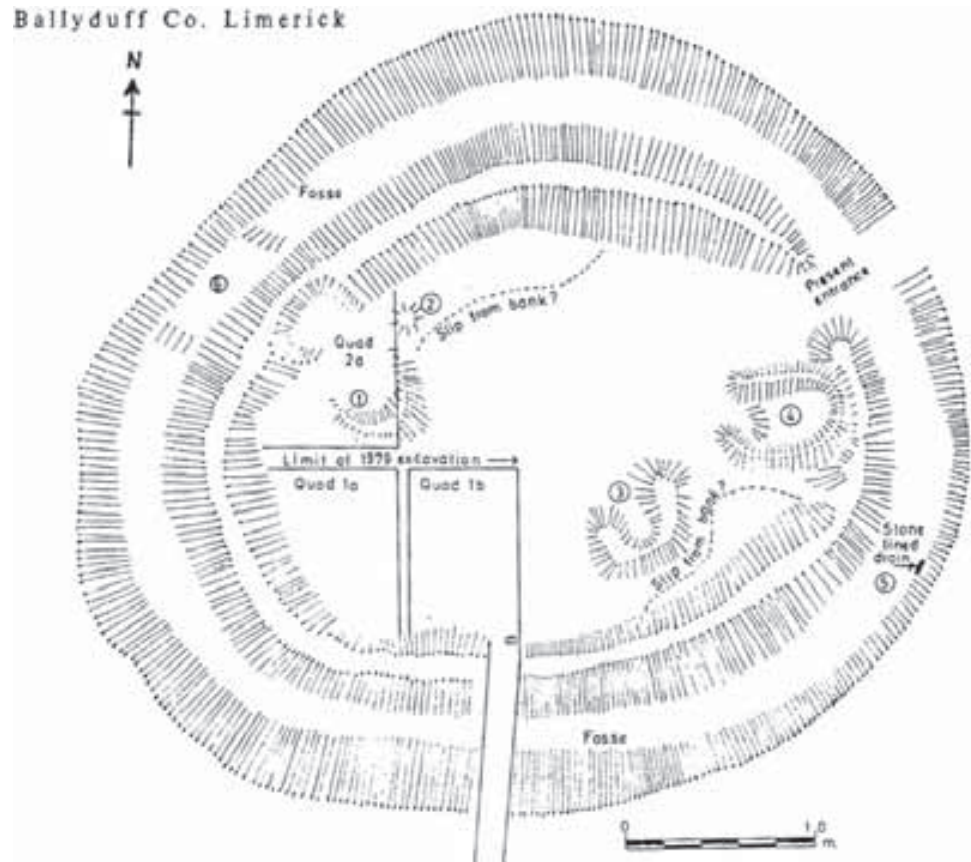


FIG. 5—Plan of Ballyduff Rath, Co. Limerick (after Cleary 1985, 4).

wealth and status within a kin group, but as family sizes increased, it became more difficult to distribute wealth. For some of the youngest family members, who did not receive their inheritance share, it is not difficult to conceive that this resulted in competition and pressure for resources such as land and livestock. Within this socially unstable climate, many members of large kin groups, already experiencing economic hardships, must have been precariously close to dropping into the ranks of the semi-free. The author's interpretation of the archaeological evidence from the enclosed settlements discussed above indicates that this fate may well have befallen some of those individuals.

This paper adds to the growing number of publications identifying the presence of the lower social grades within early medieval enclosed settlements (Comber 2008; Kinsella 2005; O'Sullivan and Harney 2008; Stout 1997). Some previous narratives have maintained that enclosures were occupied exclusively by the free in early medieval society (for example Graham 1993; Mallory and McNeill 1991; Mytum 1992), yet they have not considered how status fluctuated throughout the early Middle Ages. Settlements, therefore, must also have enclosed those marginally above and below the free social grades (for a further analysis of the archaeology of the lower social grades in early medieval Ireland see Boyle 2004; Kinsella 2005).

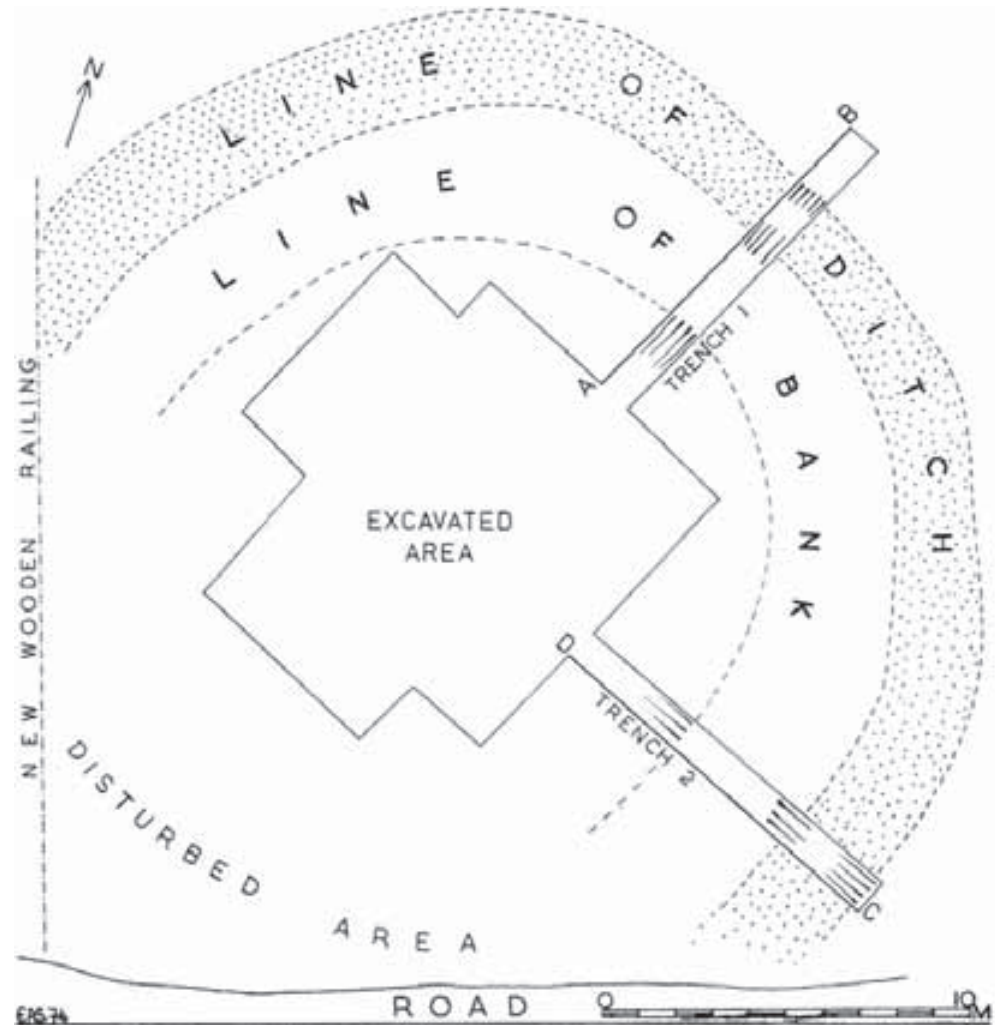


FIG. 6—Plan of Croom Rath, Co. Limerick (after Shee-Twohig 1977, 28).

The law tracts list the *bóaire* as a prosperous farmer while various grades of lords are described from the *aire désó* to the *aire forgill* (Kelly 1988). Archaeologically, the prosperous free classes resided in univallate, multivallate, raised and platform enclosed settlements. The enclosed spaces were probably larger than that of the lower social grades, with diameters greater than 30m. The artefacts discovered within these dwellings include items similar to those from the *óaire* and semi-free settlements but in greater quantities and varieties. Status symbols such as items of personal ornament and evidence of foreign trade are also often present. The latter includes imported pottery such as B- and E-ware and resources such as tin. There may also be evidence for non-ferrous and/or glass-working. Another feature of wealthier settlements is their longer period of occupation compared to ‘regular’ enclosures. Therefore, the archaeological evidence indicates a social group in a position

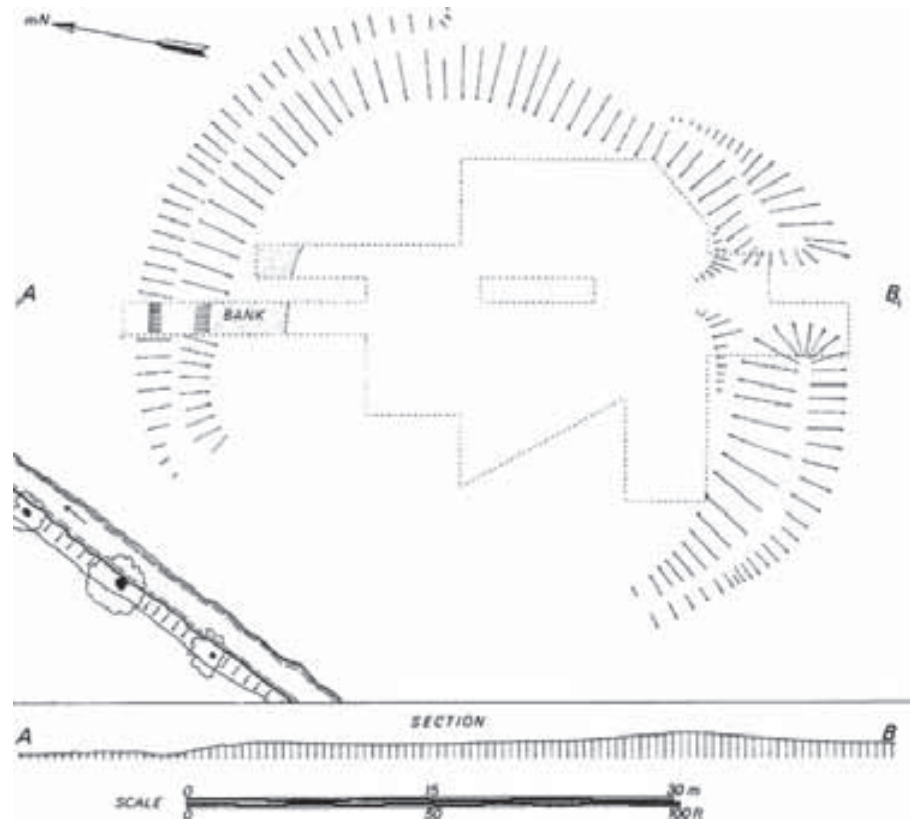


FIG. 7—Plan of Ballyhenry Rath 1, Co. Antrim (after Lynn 1983, 68).

of wealth above the majority of the population, but clearly below that found in the minority of royal sites (see below).

Some of the raised and platform enclosed settlements described above are probable examples of *bóaire* or lordly settlements. The raised settlement at Gransha was first occupied in the early medieval period *c.* AD 600 when a natural ridge approximately 4.5m in height was utilised. The second phase witnessed its heightening by a further 1.5m due to the accumulation of occupational debris representing continuous settlement. The final phase, during the tenth century, involved its deliberate heightening, which created a flat-topped mound approximately 45m in diameter. The wealth of the site is attested to by a bronze zoomorphic brooch with enamel and millefiori ornament and E-ware from the first phase, motif pieces, a stylus and clay moulds from Phase 2 and a bronze ringed pin and glass bead from the final phase (Lynn 1988a, 38–41). Phase 2 represented the longest occupational phase and displayed both settlement and industrial evidence in the form of copper-alloy working and textile production (Lynn 1988a).

Another raised enclosed settlement, at Deer Park Farms, was occupied over a prolonged period between the sixth and tenth centuries. It appeared as a flat-topped mound, 25m in diameter, and 6m high. Unlike Gransha, its height was largely the result of continued occupation over approximately four centuries. The artefacts included a

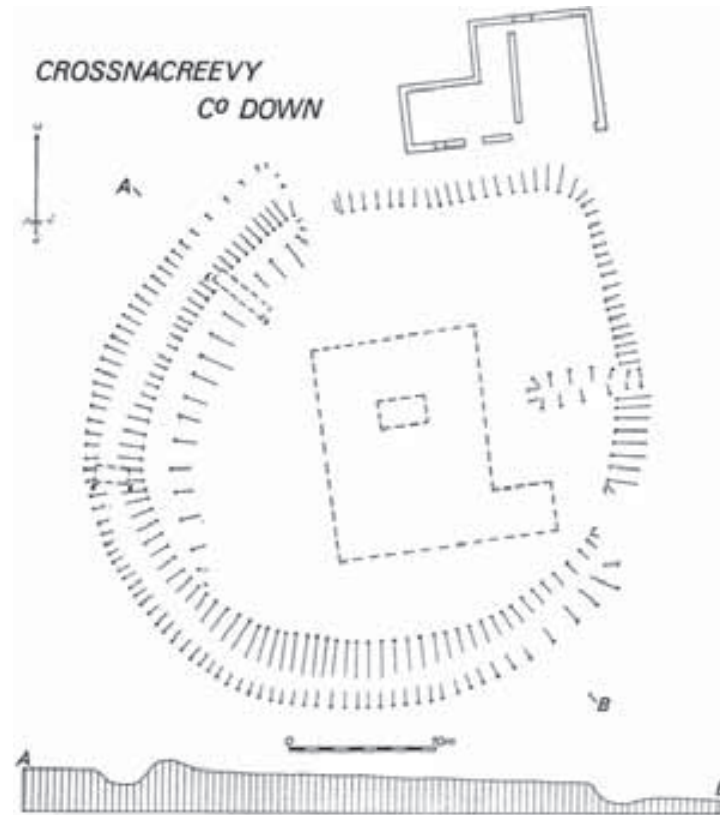


FIG. 8—Plan of Crossnacreevy Rath, Co. Down (after Harper 1973/74, 33).

bronze brooch and roughly 50 coloured and decorated glass beads. Also discovered were over 700 sherds of native souterrain ware alongside other functional artefacts. A massive revetment wall was added to the outside of the mound during its penultimate phase, which made it appear as a large impressive cashel (Lynn 1988b, 47).

A more recently excavated example is the multivallate and multiphase hill-top enclosure at Rosepark, Co. Dublin, which was utilised from approximately the late Iron Age until the eighth or ninth centuries (Carroll 2008). It appears that an unenclosed settlement of seven souterrains replaced the initial elevated enclosed settlement. The former was located downhill, and nearby, to the latter. Other noteworthy aspects of the site were the occurrence of eleven cereal-drying kilns and large quantities of E-ware sherds. The large settlement of Cathair Fionnúrach at Ballynavenoor, Co. Kerry, enclosed a figure-of-eight house, a souterrain and produced B-ware and a crucible fragments among other finds (Gibbons 1998). The scale and size of these sites indicate that the inhabitants had access to a considerable labour supply—in the form of base clientship—which reflected their elevated position within early medieval society.

Lagore Crannóg (Eogan 2000; Hencken 1950) and the settlement atop the passage-tomb mound at Knowth (Byrne *et al.* 2008; Eogan 1974, 1977), both in Co. Meath; the enclosure at Clogher, Co. Tyrone (Warner 1988); and the trivallate

enclosure at Garranes, Co. Cork (Ó Ríordáin 1942b); are archaeologically and historically recognised as royal dwellings. Much has been written about these sites already so they are not discussed in great detail here. They are recorded in contemporary literature as royal settlements and have produced large and impressive collections of artefacts, with many dress items demonstrating the work of highly skilled craftspeople working under the patronage of their respective kings. The quantity of artefacts from each royal site far exceeds that uncovered from the *bóaire* and lordly enclosures discussed above. Common to each is the presence of non-ferrous metal-working and glass-working while evidence for foreign contacts, involving trade and exchange, is demonstrated by the presence of imported pottery wares. The archaeological record of the royal sites clearly identifies a much wider social and political gap between prosperous freemen and the royal social grades than between the former and lower-status individuals such as the *ócaire* and the semi-free.

### Non-circular early medieval enclosures

A total of fifteen recently excavated non-circular enclosures form the basis of the following discussion. The circular enclosures at Dowdstown (Cagney and O'Hara 2009; Pl. I) and Colp West (Clarke and Murphy 2001; Fig. 9), both in Co. Meath, are incorporated within this research because non-circular enclosures were annexed onto both. Firstly, the chronological, morphological, landscape and artefactual evidence for all sites within the sampled group is examined (including settlement/cemetery sites) and an integrated investigation of the results follows. Moving on from this,



Pl. I—Aerial view of the rath and associated enclosures at Dowdstown 2, Co. Meath. Courtesy of Studio Lab.



FIG. 9—Plan of Colp West Rath and associated annexes, Co. Meath. Courtesy of Archaeological Consultancy Services Ltd.

the final part of the paper looks more specifically at the archaeological evidence for recently recognised settlement/cemetery sites including Castlefarm (O’Connell 2006, 2009), Johnstown (Clarke 2002; Clarke and Carlin 2008, Pl. II), Laytown (McConway 2002, 2003, 2004) Raystown (Seaver 2005, 2006; Fig 10), all in Co. Meath and Balrigan (Delaney and Roycroft 2003; Roycroft 2005) and Millockstown (Manning 1986), both in Co. Louth.

### Chronology

A certain amount of variation is apparent in the dating of non-circular enclosures. The sites that were radiocarbon dated (thirteen of the fifteen; see Table 1 for non-circular settlement enclosures and Table 2 for non-circular settlement/cemetery sites) produced dates spanning the fifth to sixteenth centuries AD. The two circular enclosures at Colp West and Dowdstown, later expanded into larger non-circular enclosures, were dated between the seventh and eighth centuries and seventh and ninth centuries respectively, fitting with Stout’s (1997) chronology for early medieval enclosed settlement occupation. The D-shaped enclosure at Cahircalla More was utilised between the mid-sixth and mid-seventh centuries (Taylor 2006). The D-shaped enclosure at Killickaweeny, Co. Kildare (Walsh and Harrison 2003; Walsh



PL. II—Aerial view of Johnstown settlement/cemetery, Co. Meath. Courtesy of Ian Russell, Archaeological Consultancy Services Ltd.

2008, Pl. III); and the sub-rectangular enclosure at Ballycasey More, Co. Clare (O'Neill 2003; Fig. 11); were dated between the eighth and tenth centuries and the seventh and late ninth centuries respectively, again roughly corresponding with the construction of enclosed settlements in early medieval Ireland.



FIG. 10—Reconstruction of Raystown *c.* AD 900 (image by Simon Dick; after Seaver 2006, 86).

TABLE 1—Radiocarbon dates from non-circular enclosures. (All dates calibrated at 2 sigma.)

<i>Site name</i>	<i>Dates from enclosing ditches</i>	<i>Dates from internal features</i>	<i>Dates from external features</i>
Ballynacarriga, Co. Cork	AD 420–670 (Beta-165324). Charcoal from primary fill of square enclosure ditch. AD 620–700 (Beta-165323). Charcoal from primary fill of upper L-shaped enclosure ditch.	AD 780–1020 (Beta-165322). Charcoal from fill of drying chamber within cereal-drying kiln. Located in upper L-shaped enclosure.	—
Ballycasey More, Co. Clare	AD 640–900 (Beta-178773). Animal bone from primary ditch-fill of D-shaped enclosure. AD 980–1210 (Beta-178769). Charcoal from ditch re-cut of D-shaped enclosure.	AD 810–1030 (Beta-178768). Animal bone from spread of animal bone.	AD 780–1020 (Beta-178770). Charcoal from a large hearth. AD 670–970 (Beta-178774). Charcoal from a pit related to metalworking at NW extent of stone rectangular enclosure. (Enclosure 1 of two conjoined rectangular stone enclosures). AD 650–880 (Beta-178773). Charcoal from a pit related to metalworking at NW extent of Enclosure 1. AD 1260–1410 (Beta-178771). Charcoal from spread overlying Enclosure 1 wall. AD 1210–1390 (Beta-178772). Charcoal from a pit partly beneath the wall of Enclosure 1. AD 1440–1640. A human burial (from three uncovered).

*(continued)*

<i>Site name</i>	<i>Dates from enclosing ditches</i>	<i>Dates from internal features</i>	<i>Dates from external features</i>
Cahircalla More, Co. Clare	AD 530–650 (Beta-211571). Cattle limb bone within enclosure ditch.	AD 560–670 (Beta-211572). Cereal grains from slot trench of smithy.	AD 680–880 (Beta-211573). Cereal grains from ditch fill. Part of series of field ditches to north and west of the enclosure.  AD 980–1150 (Beta-207730). Cereal grains from ditch fill. Part of series of field ditches to north and west of the enclosure.
Colp West, Co. Meath	AD 598–684 (UB-4673). Animal bone from ditch-fill of circular enclosure.  AD 625–771 (UB-4675). Animal bone from ditch-fill of northern sub-rectangular enclosure (annexed to circular enclosure).  AD 569–679 (UB-4674). Animal bone from ditch-fill of southern circular enclosure (annexed to enclosure).  AD 610–761 (UB-4672). Animal bone from ditch-fill of sub-rectangular enclosure south of enclosure. Northern part of ditch was cut by ditch of southern circular enclosure.	50 BC–AD 210 (UB-4669). Charcoal from circular hut. Cut by circular enclosure ditch.	AD 212–404 (UB-4667). Charcoal from pit.  AD 240–434 (UCD-0135) Charcoal from pit.  409–203 BC (UCD-0133). Charcoal from kiln/roasting pit.  108 BC–AD 220 (UCD-0140). Charcoal from kiln/roasting pit.  46 BC–AD 134 (UB-4668). Charcoal from kiln/roasting pit.  AD 231–434 (UCD-0138). Charcoal from cereal-drying kiln.  AD 240–610 (Beta-159619). Charcoal from cereal-drying kiln.  AD 370–640 (Beta-159620). Charcoal from cereal-drying kiln.  AD 400–640 (Beta-159621). Charcoal from cereal-drying kiln.  AD 400–650 (Beta-159618). Charcoal from cereal-drying kiln.

*(continued)*

<i>Site name</i>	<i>Dates from enclosing ditches</i>	<i>Dates from internal features</i>	<i>Dates from external features</i>
Dowdstown 2, Co. Meath	AD 554–651 (QUB-7039). Animal bone from primary fill of circular enclosure ditch. AD 420–620 (Beta-220119). Animal bone from primary fill of circular enclosure ditch. AD 680–890 (Beta-220117). Animal bone from primary fill of re-cut circular enclosure ditch. AD 660–790 (Beta-220120). Animal bone from primary fill of expanded D-shaped enclosure.	–	AD 605–762 (QUB-7009). Animal bone from fill of rectangular enclosure.
Killickaweeny, Co. Kildare	AD 560–810 (Beta-185557). Charcoal from first phase enclosure ditch. AD 880–1190 (Beta-185555). Charcoal from backfill of second (main occupation) phase enclosure ditch.	AD 670–950 (Beta-185553). Charcoal from posthole of Structure 2. AD 650–890 (Beta-185549). Charcoal from linear pit near Structure 1. AD 650–890 (Beta-185550). Charcoal from pit near Structure 1. AD 650–900 (Beta-185552). Charcoal from a well. AD 660–880 (Beta-185556). Charcoal from gully in Metalworking Area A. AD 610–820 (GU-11625). Charcoal from a smithing hearth.	–

*(continued)*

<i>Site name</i>	<i>Dates from enclosing ditches</i>	<i>Dates from internal features</i>	<i>Dates from external features</i>
Newtown, Co. Limerick	AD 795–1030 (Beta-182317). Charcoal from primary fill of enclosure ditch. AD 1010–1300 (Beta-182323). Charcoal from upper fill of enclosure ditch.	AD 700–1015 (Beta-182313). Charcoal from slot-trench of figure-of-eight building. AD 795–1280 (Beta-182314). Charcoal from central posthole of figure-of-eight building.	–
Roestown 2, Co. Meath	AD 530–650 (Beta-220115). Animal bone from D-shaped enclosure ditch, Area B (settlement). AD 770–980 (Beta-220116). Animal bone from recut of D-shaped enclosure ditch, Area B. AD 650–780 (Beta-219002). Animal bone from primary fill of Phase 1 enclosure, Area A (animal enclosure). AD 630–710 (Beta-219003). Animal bone from Phase 1 enclosure ditch, Area A. AD 620–90 (Beta-219005). Animal bone from primary fill of enclosure ditch, Area A. AD 630–710 (Beta-219003). Animal bone from Phase 1 ancillary enclosure, Area A.	–	–

TABLE 2—Radiocarbon dates from non-circular settlement/cemetery sites. (All dates calibrated at 2 sigma.)

<i>Site name</i>	<i>Dates from enclosing ditches</i>	<i>Dates from internal features</i>	<i>Dates from external features</i>
Castlefarm, Co. Meath	AD 450–640 (Beta-220131). Animal bone from primary fill of inner enclosure ditch. AD 770–980 (Beta-220132). Animal bone from fill of outer enclosure ditch. AD 780–980 (Beta-220133). Animal bone from primary fill of outer enclosure ditch recut.	AD 410–580 (Beta-229298). Right femur shaft fragment from burial 1 (the burials were mostly located between the inner and outer enclosure ditches). AD 420–610 (Beta-229299). Left fibula shaft fragment from burial 7. AD 660–810 (Beta-229300). Right femur shaft fragment from burial 10.	—
Johnstown 1, Co. Meath	AD 430–660 (Beta-177959). Animal bone from Phase 1 enclosure ditch. AD 430–670 (Beta-177960). Animal bone from primary context of Phase 2 enclosure ditch. AD 660–950 (Beta-176808). Charcoal from spread overlying upper fills of Phase 2 enclosure ditch. AD 1040–1280 (Beta-176807). Charcoal from pit at base of Phase 3 enclosure ditch. AD 980–1260 (Beta-180653). Human bone from Burial 269 in middle fill of Phase 3 enclosure ditch. AD 1420–1640 (Beta-177962). Animal bone from upper fill of Phase 3 enclosure ditch.	AD 340–650 (Beta-178197). Human bone from charnel pit containing partial remains of at least three disarticulated adults. Associated with central burial mound. AD 420–670 (Beta-184610). Human bone from Burial 33 associated with central burial mound. AD 670–890 (Beta-184704). Human bone from Burial 128 in proximity to the mound. AD 860–1030 (Beta-184702). Human bone from Burial 26 in proximity to mound. AD 680–980 (Beta-184700). Charcoal from a smelting furnace.	AD 1650–1950 (Beta-178200). Human bone from Burial 400 outside main enclosure ditches. AD 890–1160 (Beta-181478). Charcoal from a refuse pit.

*(continued)*

<i>Site name</i>	<i>Dates from enclosing ditches</i>	<i>Dates from internal features</i>	<i>Dates from external features</i>
Milllockstown, Co. Louth	AD 660–960 (GU-1782). Charcoal from the fill of Phase 3 enclosure ditch.	AD 400–590 (GU-1781). Charcoal from occupation spread.	
Raystown, Co. Meath	AD 650–780 (Wk-17910). Single barley grain from sub-rectangular enclosure.	AD 260–540 (Wk-16823). Human bone from articulated burial within ring-ditch. AD 430–610 (Wk-16306). Human bone from articulated burial within ring-ditch. AD 640–780 (Wk-16307). Human bone from articulated burial within ring-ditch. AD 780–990 (Wk-16309). Human bone from articulated burial cutting ring-ditch with blue glass bead. AD 700–950 (Wk-16310). Human bone from articulated burial outside ring-ditch. AD 410–570 (Wk-16819). Human bone from north-south flexed burial. AD 660–780 (Wk-16820b). Human bone from burial south of ring-ditch. AD 660–890 (Wk-16302). Charcoal from fill of pit cut by souterrain.	AD 660–782 (UB-6521). Oak timber from Southern Mill 1. AD 653–772 (UB-6522). Oak timber from Southern Mill 4. AD 691–935 (UB-6523). Oak timber from Southern Mill 5. AD 710–970 (Wk-16300). Burnt oak in feature within southern mill complex. AD 887–1017 (UB-6524). Oak timber from Northern Mill 2. AD 1020–1170 (Wk-16295). Charcoal from backfill of Northern Mill 2. AD 410–560 (Wk-17907). Oat grain from cereal-drying kiln. AD 570–660 (Wk-17908). Wheat grain from cereal-drying kiln.

Sites occupied for more than five centuries (as evidenced by their radiocarbon dates) include Roestown, Co. Meath (O'Hara 2007, 2009; Pl. IV); Castlefarm, Raystown, Johnstown, Laytown, Ballynacarriga, Co. Cork (Noonan *et al.* 2004; Fig. 12); and Millockstown. The material culture from the non-circular enclosed settlement at Balriggera indicates that it was occupied during the second half of the first millennium and into the second millennium.

Six sites from the sampled group suggest that they were occupied before the sixth century and include Castlefarm, Raystown, Johnstown, Laytown, Millockstown, and Ballynacarriga.

Interestingly, five of these are settlement/cemetery sites. Only Ballynacarriga is not associated with a cemetery. Therefore, it appears that the majority of these settlement/cemetery sites have their origins in the late Iron Age/early medieval transitional period (O'Sullivan and Harney 2008, 91). Non-circular enclosed settlements without associated cemeteries, however, were generally constructed approximately a century later—*c.* AD 600 onwards—which agrees with Stout's (1997) early medieval enclosed settlement chronology. A distinct difference is, therefore, evident between these two types of non-circular enclosure.

### Size

Early medieval enclosures have an average diameter of 30m and it has been argued that larger enclosed spaces equated to increased status. Similar arguments have suggested that multivallation and raised or platform types also reflected the wealth of



Pl. III—Aerial view of Killickaweeny Rath, Co. Kildare. Courtesy of Rupert Flood, Irish Archaeological Consultancy Ltd.

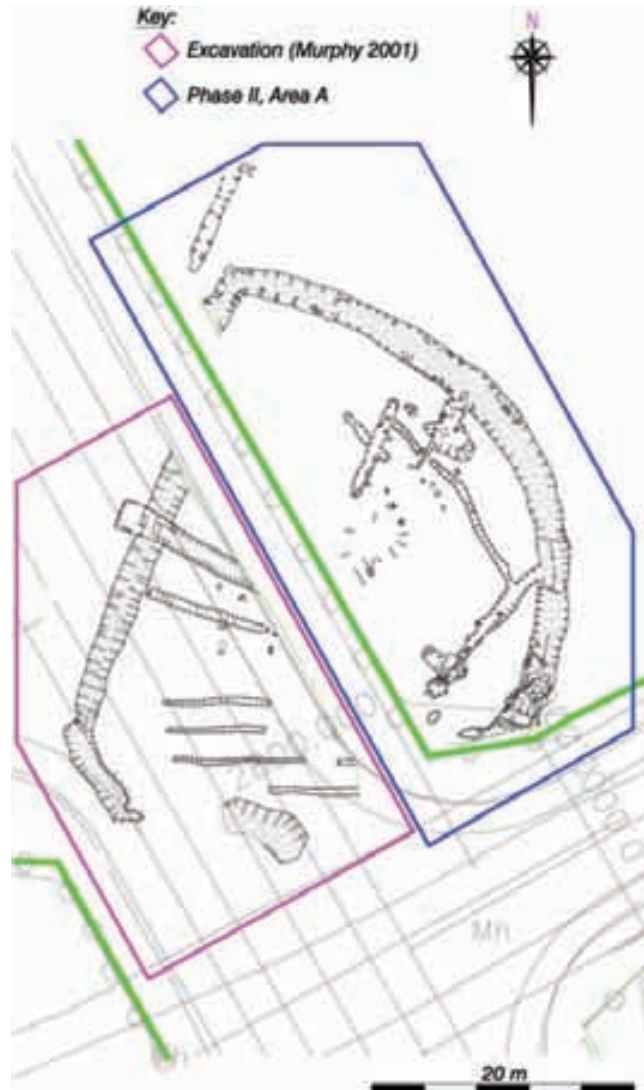


FIG. 11—Plan of Ballycasey More Rath, Co. Clare. Courtesy of Archaeological Consultancy Services Ltd.

their inhabitants (see above). The majority of non-circular enclosures have considerably larger diameters than average-sized enclosed settlements. The only examples of similar or smaller enclosures include those at Colp West, with a diameter of 29m, and Cahircalla More (D-shaped) which was 38m wide. The former site, however, had a large sub-rectangular enclosure, measuring 55m east–west by 20m north–south (partly excavated), annexed to its northern side, and it also had a smaller oval enclosure attached to its southern side, and it is possible that all three were contemporary. The majority of the remaining non-circular enclosures had average diameters between 50m and 70m while some were very large. Castlefarm, for example, had an inner enclosed space of c. 90m by 70m and an outer, later, enclosed area of 120m by 100m.



PL. IV—Aerial view of Roestown 2 Rath and associated enclosures, Co. Meath. Courtesy of Studio Lab.

### Landscape

Some degree of variation is present in the location of the non-circular enclosures. Eight sites were situated on the highest point of the surrounding landscape, be it on a ridge, hill or small rise. Four settlements were located on relatively flat land while Balriggeran differed as it was situated within a large saucer-shaped depression. Killickaweeny was positioned on the slope of a hill; Cahircalla More and Ballynacarriga in a valley; and Laytown on a ridge. Many of the enclosures were located on agriculturally productive lands. Seven sites (Roestown, Raystown, Johnstown, Killickaweeny, Balriggeran, Cahircalla More and Ballycasey More) were in proximity to bog or marshland while Laytown was located on the coast. Therefore, the builders and inhabitants of non-circular enclosures demonstrated considerable variation in their choice of location, a variation also noted in the discussion of enclosed settlements (see above).

### Material culture

The quantity and quality of artefacts uncovered from the 15 non-circular enclosures varied (see Table 3 for artefacts related to non-circular enclosures and Table 4 for items associated with non-circular settlement/cemetery sites). It is suggested that the status of each settlement can be partially determined through an examination of the personal and dress items that were discovered. Some sites, such as Roestown

and Castlefarm, produced large quantities of finds including impressive items of adornment, abundant animal bone, exotic pottery and evidence for non-ferrous metalworking that demonstrated their occupants' elevated position within society.

Laytown, Raystown and Johnstown produced a similar range of material culture, but not in the same quantity or variety when compared with Roestown and



FIG. 12—Plan of Ballynacarriga Rath, Co. Cork. Courtesy of Archaeological Consultancy Services Ltd.

TABLE 3—Personal and functional artefacts from non-circular enclosures.

<i>Site name</i>	<i>Personal and dress items</i>	<i>Functional items</i>	<i>Ecofacts</i>
Ballynacarriga, Co. Cork	Glass dumb-bell bead, white glass bead, polychrome glass bead.	Worked flint, possible anvil stone, whetstone, fragments of quern stones, iron knife.	Burnt animal bone (poor soil preservation meant animal bone was not recovered in large quantities), iron slag.
Ballycasey More, Co. Clare	Ringed pin, two glass beads, fragment of perforated bronze, decorated bone comb, fragment of bone comb handle.	Worked and polished stone, iron fragments, perforated bone plate, iron knives, whetstones, worked bone implement, fragments of bronze, fragments of clay moulds, iron nails, possible iron belt tooth, possible iron clasp, bone gouges, cut bone, bone needle, fragment of a bone weaving plaque, bullaun stone fragments.	Large amounts of animal bone, large quantities of iron slag.
Cahircalla More, Co. Clare	Copper-alloy ringed pin	Quernstones, possible iron chisel, whetstones, pin sharpener, possible mini anvils, struck chert pieces.	Animal bone, large quantities of iron slag.
Colp West, Co. Meath	Bronze pin, decorated bone comb, decorated blue glass bead, stone toggle.	Knives, hook, nails, worked flint, worked stone, polished stones, bone rough-out, bone handles, glazed earthenware, sharpening stone, whetstone fragment, Normandy pottery fragments, possible Merida pottery sherd.	Large quantities of animal bone, cereal remains, furnace bottom.
Dowdstown 2, Co. Meath	Spiral-ringed loop-headed pin, shaft of a brooch pin, brooch head, bone combs.	Spindle whorls, bone needles, rotary querns, iron knives, shears, four iron spear or arrowheads, iron billhook.	Large quantities of animal bone, cereal remains.
Killickaweeny, Co. Kildare	Four iron outwardly scrolled dress pins, two incomplete pins, incomplete copper-alloy wire pin, five glass beads, two antler comb fragments, fragments of bone pins.	Tuyère, unfinished iron objects, scrap metal, 16 iron knives, possible shears blade, iron needle, two possible weaving tensioners, iron slotted-and-pointed object, 18 iron nails, copper-alloy tubing, small amount of flint, chert and coarse stone artefacts, whetstone/grinding wheel, one stone and one bone spindle whorl, two red deer antler picks, fragments of bone needles, two wooden staves and a lid.	Nine thousand pieces of animal bone (butchered and unbutchered), cereal grains, 86kg of ferrous metallurgical waste.
Lusk, Co. Dublin	None	Small quantity of rough flint tools.	Large quantities of butchered animal bone, large quantity of cereal grains, small amounts of ferrous metallurgical waste.

(continued)

<i>Site name</i>	<i>Personal and dress items</i>	<i>Functional items</i>	<i>Ecofacts</i>
Newtown, Co. Limerick	Two glass beads, glass armlet.	Iron knife, socketed iron implement, flint scraper, hone stone.	Human skull, horse teeth.
Roestown, Co. Meath	Comb fragments, bone pins, gaming boards, possible bone flute, decorated bronze strip, piece of silver, lignite bracelets, stud-headed pin, glass beads, assortment of copper-alloy and iron ringed pins, stick pins, 'bifid' type pin.	Iron knives, crucibles, ingot moulds, hack silver, motif pieces, bodkin-style spearhead, Dublin-type pottery wares, hone stone, copper-alloy and bone needles, wooden cask stave vessel and fragments of wooden vessels, stone lamp, struck flint (poorly worked and possibly strike-a-lights), E-ware pottery.	Large amounts of butchered and unbutchered animal bone, small amount of iron slag, cereal grains.

TABLE 4—Personal and functional artefacts from non-circular settlement/cemetery sites.

<i>Site name</i>	<i>Personal and dress items</i>	<i>Functional items</i>	<i>Ecofacts</i>
Balriggeran, Co. Louth	Three copper-alloy stick pins, glass beads, lignite bracelet.	Spindle whorls, possible net-weights, stone pin, over 800 sherds of souterrain pottery ware, iron fragments, struck flints.	Animal bone was not uncovered in large quantities due to acidic soils, cereal grains, over 500kg of iron slag.
Castlefarm, Co. Meath	Spiral- and plain-ringed loop-headed pins, bone pins, bone combs, glass beads, lignite bracelets, glass bracelet, bone stick pin, omega pin, decorated copper-alloy mount, copper-alloy penannular ring brooch, penannular brooch with traces of bronze gilt, metal stick pins.	Iron knives, worked antler (knife handles), spindle whorls, wooden bucket fragments, worked timbers, leather fragments, metal needles, loom-beater pin, Dublin-type pottery wares.	Large quantities of animal bone, quantities of iron slag.
Johnstown, Co. Meath	Copper-alloy pseudo penannular ring pin, bone pin, blue glass bead, iron ringed pin, two iron stick pins.	Souterrain pottery ware; Leinster cooking pottery ware; iron objects such as arrowheads, hammer head, fish hook, pronged fork, awls/punches, chisel, rods, knives, nails, needles, key, horseshoes and unfinished items; bone needle.	Large quantities of butchered and unbutchered animal bone, very large quantities of ferrous metallurgical waste.
Laytown, Co. Meath	Bone combs, glass beads, three ringed pins, E-ware pottery, jet bracelet.	Bone points, bone needles, knives, worked wood, wooden stave, bone peg, hand-built pottery.	Animal bone, shells, cereals, iron slag, glass slag.

(continued)

<i>Site name</i>	<i>Personal and dress items</i>	<i>Functional items</i>	<i>Ecofacts</i>
Millockstown, Co. Louth	Bronze artefacts including a penannular brooch terminal, toilet implement, stick pin and three ringed pins. Iron pin with oval head and possible brooch ring fragment.	Iron artefacts included three knives, two awls, nails, possible key, possible staple, possible ferrule, needles, socketed object and some miscellaneous objects. Fragment of souterrain pottery ware. Stone artefacts included a spindle whorl, quernstone fragments, sharpening/rubbing stones and discs. Some worked flint.	Animal bone
Raystown, Co. Meath	Iron pins, copper-alloy pins, bone pins, copper-alloy ring, glass beads, lignite bracelets, bone combs. (More than 900 artefacts in total.)	Iron knives, iron socketed tools, needles, horse bits, spindle whorls, rotary querns, hone stones.	More than 700kg of animal bone, large quantities of cereals.

Castlefarm. Laytown, considering its length of occupation, produced only a small quantity of personal items; namely three ringed pins, glass beads and some bone combs (the final report has yet to be published). The recovery of a jet bracelet and E-ware indicated contacts with western Britain and Gaul while glass-making slag demonstrated the presence of highly specialised craft activities. Personal items at Raystown were represented by a range of pins, beads and bracelets, while horse bits are also suggestive of high-status occupation. Johnstown produced a copper-alloy pseudo-penannular brooch; iron ringed and stick pins; and a glass bead. All four sites also produced high quantities of animal bone and it is apparent that their inhabitants were people of some importance within their respective communities.

The only other non-circular sites with comparable material culture to the non-circular enclosures at Laytown, Raystown and Johnstown, located outside Co. Meath, are Killickaweeny and Millockstown (see Tables 3 and 4).

The remaining non-circular enclosures have produced a similar range of material culture but in less quantity and, notably, with fewer items of personal adornment. The remaining county Meath sites—at Dowdstown and Colp West—produced only a handful of personal items. A similar number and range of personal artefacts were found at Balriggeran, Ballycasey More and Ballynacarriga. The non-circular enclosures at Newtown, Co. Limerick (Coyne and Collins 2003; Coyne 2006; Fig. 13); Lusk, Co. Dublin (Giacometti 2006); and Cahircalla More produced very few personal or functional artefacts. The latter probably functioned as an enclosed iron-smithing forge due to the presence of a smithy and general lack of occupational evidence (Taylor 2006, 35).

The material culture from the non-circular enclosures under discussion demonstrates a hierarchical division of wealth. The following discussion integrates these



FIG. 13—Plan of Newtown Rath, Co. Limerick (after Coyne 2006, 65).

findings with the chronological, morphological and topographical results to consider how non-circular enclosures are understood in terms of their role in early medieval Ireland.

## Discussion

There is sufficient archaeological evidence to suggest that many of the non-circular enclosures were the dwelling-places of the *bóaire* and lordly social grades. Roestown, for example, probably belonged to a family of noble rank. Its sustained chronological sequence and range of material culture reflects that it was a settlement of importance in the early medieval kingdom of south Brega. Roestown was just 3km from Lagore and produced very similar artefacts, most notably motif pieces bearing designs that may have come from the same hand or workshop as those found on the crannóg. Both sites were occupied from approximately the seventh until the late tenth/early eleventh centuries (although a later medieval phase was also evident at Roestown—see O’Hara 2007, 2009). The evidence suggests that Roestown and Lagore were socially and politically related and that perhaps the inhabitants of the former were the noble free clients of the royal crannóg residents.

Castlefarm is another possible lordly residence. The inner, and chronologically earliest, enclosing ditch was substantial, surrounding an area *c.* 90m by 70m. The final outer enclosing ditch was more impressive, measuring 120m by 100m. The artefactual evidence included many fine items of personal adornment and the enclosure was occupied for a considerable period between the fifth/sixth and twelfth/thirteenth centuries. Although the recovered assemblage lacks evidence of foreign

trade and non-ferrous metalworking, only half of the enclosure was excavated. The archaeological evidence certainly indicates that Castlefarm was a high-status site during the early medieval period.

Many of the remaining enclosures were probably the homes of well-to-do early medieval farmers such as those of *bóaire* rank. This is suggested by the large size of the enclosures; artefacts including a range of functional agricultural and domestic items; personal items such as ringed pins and occasionally brooches; and evidence for prolonged occupation. Killickaweeny, for example, has been described as the dwelling-place of a prosperous farming family (Walsh 2008, 27–54). The range of artefacts recovered, the enclosure size and its chronology are comparable to those from the settlement at Ballycasey More. The sites at Colp West and Dowdstown differ slightly in that they were initially constructed as smaller circular enclosures, which were enlarged at a later phase. The modification of both sites may have been the result of familial pressures on resources, requiring the enclosure of more land, or perhaps a reflection of upward social mobility/increased wealth.

The square enclosure at Ballynacarriga produced just a handful of personal artefacts. However, the remaining archaeological evidence indicates that prosperous farmers of free rank resided here. Firstly, a number of occupational phases were identified, both within the square enclosure and an associated L-shaped enclosure, with settlement dated between approximately the fifth and eleventh centuries. Secondly, the square enclosure contained a number of structures including a round house, a later rectangular house, four possible structures, two souterrains, a possible sunken oven, a corn-drying kiln and several large pits. Finally, three round structures, two corn-drying kilns, a cooking pit and a possible souterrain were found within the L-shaped enclosure. The length of occupation, number of structures, and evidence for cereal processing indicates continued farming practices over a number of centuries.

Although highly schematic, the law tracts do contain valuable information on life in early medieval Ireland. The hierarchical divisions portrayed by the writers of these texts are supported by the archaeological evidence. A system of clientship—whereby clients provided their lord with food rent and services in return for advances of stock and legal protection (see Kelly 1988, 29–33)—features prominently in these early writings and one of the roles of the base client was to build and maintain the home of his lord (Charles-Edwards 2000, 71; Kelly 1997, 439–44). Prosperous freemen each held a number of base clients who performed the labour-intensive work in and around their dwellings (Kelly 1988, 30). When considered alongside the archaeological evidence from many of the enclosures discussed above, this lends credence to their identification as the homes of wealthy free farmers and lords. These sites witnessed prolonged occupation and enclosed large spaces/areas. Associated field systems, for example at Dowdstown and Roestown, testify to the considerable labour that was required to farm the surrounding lands, the majority of which was provided by low-status individuals.

A smaller number of non-circular enclosures were probably the homes of ordinary or low-status farmers and the archaeological evidence suggests that they were people of limited wealth. Some of the enclosures had different or specialist functions such as the iron-working forge at Cahircalla More. Only a handful of finds were uncovered at the sub-square enclosure at Lusk although this is offset somewhat

by the large quantities of animal bone. The enclosure was relatively small (less than 40m in diameter) and the site awaits radiocarbon dating to determine its length of occupation. The low quantity of finds, however, suggests a relatively short chronological sequence more in keeping with the majority of early medieval enclosed settlements that were occupied for one or two centuries.

Another non-circular enclosure that produced little in the way of finds was Newtown. This plectrum-shaped enclosure had a central figure-of-eight structure measuring 11m internally. Interestingly, the slot trench on the northern side of the structure revealed a flint scraper, some horse teeth and the top of an adult skull, possibly reflecting the retention of pagan beliefs (Coyne 2006, 68–70). Certainly, Newtown is an unusual site and its function remains something of a mystery.

Coyne and Collins (2003, 18–19) were the first to suggest that non-circular enclosures represented a new early medieval site type. They interpreted enclosures such as Newtown and Killickaweeny as high-status sites that favoured hill-top locations rather than the mid-slopes preferred by many early medieval enclosed settlements. The shape and landscape context of these sites were used to identify a new, high-status, early medieval settlement type. Walsh and Delaney (2004), however, disagreed and argued that the shape of the enclosure was the result of topographical constraints rather than a preconceived vision of how the settlement should appear.

They were the first to challenge Coyne and Collins' (2003) identification of a new site type and their association of Newtown with Killickaweeny. Walsh identified topographical constraints as a factor contributing to the shape of the enclosure at Killickaweeny. The presence of bedrock along the eastern side of the D-shaped enclosure at Roestown prevented the easy excavation of a circular enclosure (R. O'Hara pers. comm.). Seven of the non-circular enclosures were located in proximity to bog, marsh or wetland and this, undoubtedly, would have impacted on the shape of the enclosure. Newman (1997, 201) has previously recognised that topography was influential in ordering the size and shape of early medieval enclosures, and this is evident in the above examples.

The presence of pre-existing upstanding structures may also have influenced the shape of an enclosure. Stout (1997, 14–15) suggested that the circular shape of the ring-fort was achieved by running a line from a central post; however, this became impossible if a structure was already present. It has been proposed that the enclosure at Raystown was originally circular but that its D-shape was the result of an expansion that was restricted by the presence of a milling complex (M. Seaver pers. comm.).

The social dynamic was also a factor in determining the shape of an enclosure. Giacometti (2006, 37) has demonstrated that the sub-square enclosure at Lusk appeared circular and larger when approaching the entrance from the south. Large postholes indicated the presence of an impressive wooden bridge over the ditch, the latter being deepest at this point. The adjacent banks were also more substantial here. The ditches and banks surrounding the rest of the enclosure were less impressive, suggesting that the occupants deliberately designed their settlement to appear more substantial than it actually was. The residents of Lusk were probably from the lower social grades of early medieval society, evident by their sparse material culture. However, it appears that they were aspiring to an elevated position in society that belonged to people with greater material wealth and who resided within larger enclosures.

This research demonstrates that the archaeological evidence from non-circular enclosures mirrors the findings from ring-fort/enclosed settlement excavations. The majority of non-circular enclosed settlements equate to the homes of the prosperous free social grades—people who also resided in circular enclosures. Some lower-status individuals designed their enclosures to appear more substantial than they really were, while those who had experienced upward social mobility expanded their settlements to enclose a larger space. Stating that non-circular enclosures differ from ring-forts/enclosed settlements in shape and landscape context is clearly an oversimplification. A number of factors influenced the eventual appearance of *all* early medieval enclosures, with sites of all shapes found in a variety of topographic settings.

This author strongly suggests that terms such as ‘ring-fort’ and ‘ráth’ be replaced with the more encompassing term of ‘enclosed settlement’. The term ‘ring-fort’ is a misnomer, which fails to adequately describe the many non-circular enclosures that are currently being archaeologically discovered. An oversimplified view of the morphology, economy and status of these enclosures has resulted in their incorrect identification as ‘new’ settlement types. The complexity of enclosed early medieval settlement must be recognised anew and a holistic approach to the archaeological evidence must be adopted before identifications of ‘newly recognised site-types’ are postulated. Clearly, ring-forts and non-circular enclosures are variations of the same monument—namely an enclosed form of settlement. They were the dwelling-places for a variety of social grades between the sixth and tenth, and sometimes later centuries. In essence, they are the enclosed settlements of early medieval Ireland.

### Discussion of recently identified settlement/cemetery sites

Non-circular enclosures associated with cemeteries differ in date as well as function to those without burial grounds. The former appear to have evolved during the late Iron Age/early medieval transitional period—most commonly in the fifth century—with burial grounds forming the focus of activity. The non-circular enclosures at Castlefarm, Johnstown, Laytown, Raystown, Balriggeran and Millockstown differ to early medieval enclosed settlement due to the presence of a cemetery. Some of the cemeteries were small, for example only 8 burials were discovered at Castlefarm, while others were very extensive, for example 398 graves at Johnstown. It appears, therefore, that some cemeteries were familial in nature while others contained the remains of the surrounding community over many centuries.

Many of these sites developed around late Iron Age/early medieval transitional period burial grounds. The archaeological evidence from Johnstown demonstrates that the settlement succeeded the first burials and expanded thereafter in tandem with the growth of the cemetery (Clarke and Carlin 2008, 55–86). The evidence from Raystown depicts a similar story. The burials date from the early fifth century (Seaver 2006, 78; see Table 2 for radiocarbon dates), and indicate settlement in the area, which led to agricultural activity and the later cemetery. At Castlefarm, two burials were dated between the mid-fifth and sixth centuries and it appears that the settlement evolved from this. It has been suggested that the cemetery—located within the original enclosure—at Balriggeran was a familial burial ground used throughout the settlement’s life cycle (Delaney and Roycroft 2003, 19). At Laytown, the cemetery

came into existence during McConway's (2003) 'Early Christian Phase' (between the fourth and eighth centuries). It succeeded two inner enclosures, with some of the burials found within the upper fills of these ditches. However, the director does describe a crouched burial amongst the internments (McConway 2004), suggesting prehistoric activity of possible Bronze Age or Iron Age date. Millockstown appears to differ as it has been suggested that the cemetery was established during the later stages of its Phase II and was mostly utilised during its final phase. The latter related to the significant enlarging of the enclosure (Manning 1986). However, a word of caution must be assigned to the dating of the burial ground and the proposed phasing of the site for a number of reasons, Firstly, a spread within the Phase I enclosure was radiocarbon dated but the ditch was not. Secondly, the 'ring-fort' was assigned to Phase II because it was centrally located within the initial enclosure yet was not radiocarbon dated. Finally, only a small part of the cemetery was excavated and this too was not radiocarbon dated. Therefore, the exact chronology of the site remains difficult to determine without radiocarbon dates from the enclosure ditches and burials and it is more plausible that the burial ground relates to the primary phase. Further investigations from the Early Medieval Archaeological Project (EMAP) have identified that, for the most part, settlement/cemetery sites are generally associated with late Iron Age funerary monuments such as ring-ditches and ring-barrows for example (O'Sullivan and Harney 2008, 93).

The number of people buried in each cemetery differed. A total of 398 inhumations were recorded within the main cemetery at Johnstown. Another large cemetery with approximately 133 burials discovered in the excavated half of the burial ground was found at Raystown. Smaller numbers were found at the remaining sites, ranging from 8 burials at Castlefarm; 49 at Balriggeran; 57 at Millockstown; to 80 at Laytown. Therefore, some of these sites enclosed small familial burial plots whilst others must have included the burials of the wider community.

The definition of these sites as secular requires a comparison with known early ecclesiastical foundations. Swan (1983, 274) listed, in order of frequency, the features that are most commonly found at ecclesiastical sites. These include an enclosure, a burial area, place-name evidence with an ecclesiastical element, a structure or structural remains, i.e. church and domestic/workshop buildings; a holy well; a bullaun stone; a carved, shaped, inscribed, or decorated stone cross or slab; the line of a townland boundary forming part of the enclosure; a souterrain; a pillar-stone; a founder's tomb; and, finally, associated traditional ritual or folk custom. Other features not listed by Swan that can be added include round towers and sundials.

He followed this with the assertion that few sites will demonstrate all of the above features but that the majority will have between four and five and none will have less than three. The average size of ecclesiastical enclosures is between 90m and 120m while a significant amount range from 140m to 400m (Swan 1983). The place-name evidence is dominated by the Irish words *cell*, *disert* and *domnach*, since anglicised to kil(l), desert and donough, respectively (Swan 1983, 274). *Cell*, for example, in early Irish translates to church and in a number of texts clearly refers to monastic settlements or foundations (Quin 1983, 110). *Disert* is commonly used in conjunction with the name of a founding or patron saint (Swan 1983, 274) and, similarly, *domnach* is frequently found in place names associated with a church (Quin

1983, 340). During the later medieval period, terms such as grange, glebe and temple were commonly used (Swan 1983, 274). Hamlin (1992, 144) has since argued that clear evidence for both a church and burials must be present for a site to be considered ecclesiastical in nature.

The size and place-name evidence for the settlement/cemeteries discussed above suggests that they were not ecclesiastical sites. The enclosure sizes are generally smaller while none display place-names characteristic of church sites. All settlements were occupied during the latter part of the first millennium and into the second millennium, but none have produced evidence for a church. It has been suggested that stone churches replaced wooden structures between the eighth and tenth centuries and that they were widespread by the twelfth century (Edwards 1990, 112). Church remains, therefore, would be expected within an enclosure of these dates if the enclosure was ecclesiastical in nature.

The archaeological evidence points to the existence of families and communities living, working and burying their dead within the enclosed confines of their settlements. O'Brien (forthcoming) has stated that the laity were buried in familial cemeteries up until the early eighth century, and that burial within monastic cemeteries was reserved for important and high-ranking individuals. After this, the Church began encouraging communities to abandon ancestral burial grounds in favour of ecclesiastical cemeteries. O'Brien (forthcoming) suggests that the Church was successful in dealing with this issue and, by the ninth century, burial in familial cemeteries had ended. It is probable that the majority of communities were Christian but that they maintained links with their pagan past, and that the conversion to burial in consecrated cemeteries was a slow process.

The cemetery, rather than being removed from the daily life of the community, was at its centre (Leigh Fry 1999, 47). This is supported by the evidence from many of the settlement/cemetery sites discussed above, and by further examples of recently excavated early medieval cemeteries with evidence for related industry and settlement. The cemetery at Augherskea, Co. Meath, for example, contained 197 inhumations. To the east of the burial ground was an area of agricultural activity, with settlement evidence to the west (Baker 2004). Tobin (2003, 32–7) has suggested that the cemetery and settlement (a rectangular enclosure identified by geophysical perspective) at Corbally, Co. Kildare, was utilised as a market fair or *óenach*. Twenty-six cereal-drying kilns were located in proximity to the burials. The excavator suggested that pits containing barley, wheat and oats provide evidence for alcohol production on site. Other excavated examples of early medieval settlements in which burial and industrial activities occurred include Mount Offaly (Conway 1999) and Gracedieu (Conway 2000), both in Co. Dublin and Colp West, Co. Meath (Gowen 1989).

Philippe Ariés (cited in Leigh Fry 1999, 47) described a medieval French cemetery as a:

Place for procurements, auctions, proclamations, sentences; scene of community gatherings; promenade; athletic field; haven for illicit encounters and dubious professions ... it was the public place *par excellence*, the centre of collective life ... for a very long time, before it was isolated from the church, the cemetery was the public square.

Similar activities were documented at the early medieval cemetery and *óenach* at Teltown, Co. Meath. The yearly fair/*óenach* originated in the funeral processions of important and high-ranking individuals and consisted of communal gatherings where the business of the *túath* was conducted. Goods were exchanged, social ties and relationships were arranged and games and sports occurred, including horse-racing and athletics (see Swift 2000). Burial mounds, or *fertae*, were perceived during the early medieval period as ancestral burial places. *Fertae* functioned as territorial boundary-markers (Kelly 1988, 186–9), and were places where important legal decisions were determined (see O’Brien forthcoming; Swift 1996). The archaeological evidence from settlement/cemetery sites and information from historical sources indicate that burial mounds and cemeteries were central places in the everyday lives of surrounding communities. A range of important social, economic and political activities were performed in proximity to the resting place of the ancestors.

The scale of agricultural and industrial activities, and general status, varied on different settlement/cemetery sites. They all, however, display evidence for prolonged occupation and economic activity over many centuries. Raystown certainly stands out as a bustling settlement and agricultural complex. Brady (2006, 53) identifies Raystown as a centre of large-scale production and this is not difficult to imagine given the presence of eight watermills and five cereal-drying kilns. Indeed, Raystown must have functioned as a specialist agricultural centre during the site’s most active years. The presence of the burial ground, which was established before the construction of the mills, and the quantity of finds (over 900), indicate that it developed from an important cemetery and settlement into a thriving agricultural estate. Perhaps this was the burial place of important and prominent people within the community, and this led to its development as a significant site in south Brega. The site was located on a contested political boundary and may have been utilised as a neutral place, removed from the autonomy of the Church, where legal decisions and related matters could be addressed (O’Sullivan and Harney 2008, 96).

A number of other settlement/cemetery sites were also large, busy and important places. Laytown, overlooking the sea on the east coast, was prominent in both its location and scale. The site produced multiple phases of use, spanning a number of centuries and consisted of many large enclosures—surrounding settlement, industrial and burial activity as well as those used as animal corrals—souter-rains and open settlements (McConway 2002). The appearance of the site altered throughout the centuries but it remained an important place until its demise probably during the later medieval period. Balriggeran consisted of a large enclosure with evidence for a potential outer enclosure. Another enclosure, potentially a large livestock enclosure, was situated beside it to the west. Industrial and farming activities were prominent and the small cemetery lay within the inner enclosure (Delaney and Roycroft 2003). Johnstown was a multi-phased enclosure that expanded from its inception as an Iron Age ring-ditch (Clarke and Carlin 2008). Large quantities of ferrous metallurgical waste were recovered—over two tonnes—indicating that iron-working was a major component of the industrial activities at the site. A possible watermill and mill race were also discovered, reflecting large-scale cereal

processing. Finally, at Castlefarm the presence of nine large wells is suggestive of some form of semi-industrial textile production (O'Connell 2009). This interpretation is supported by the numerous needles that were recovered from the ditch fills. Again, this was a multi-phase large enclosure intimately related to earlier burial activity.

What differentiates non-circular settlement/cemetery sites from enclosed settlements? The fundamental difference is the site's relationship to and, in most cases, development from earlier burial activity. Settlement/cemetery sites tend to be slightly earlier in date—usually originating during the fifth century—and generally expand throughout their life cycle until their abandonment several hundred years later. It is this connection with the past (familial and ancestral bonds) that resulted in their special significance and their development into important settlement, agricultural and industrial sites.

## Conclusion

It was not possible to investigate the archaeological evidence for early medieval non-circular enclosures without first examining perceptions of the social and economic function of ring-forts. It is argued that a simplistic narrative is apparent in certain archaeological literature that depicts free social grades living within circular enclosures found uniquely on agriculturally productive lands. It is this oversimplified view of ring-fort settlement that has resulted in the identification of 'new' early medieval enclosures that are non-circular in shape and located on hill-tops.

When the archaeological evidence from a range of circular and non-circular enclosures was examined, it was found that there is variation in their chronological, topographical and artefactual evidence. The circularity of the enclosure was not an issue in determining the function and status of the enclosure and enclosed settlements *of all shapes* housed a variety of social grades. The findings revealed that most of the non-circular enclosures were the homes of prosperous farmers and that a smaller number could be considered low-status settlements or specialist sites. To avoid future confusion, the author suggests that the term enclosed settlement should replace misleading terms such as ring-fort and ráth.

There does appear to be a case for describing settlement/cemetery sites—that are mostly non-circular—as a new site-type of the early medieval period. These tend to originate in the late Iron Age/early medieval transitional period, continue in use for several centuries, are associated with a variety of agricultural and industrial activities, and produce 'high-status' artefacts. Enclosed early medieval settlements were mostly constructed at least a century later, many were occupied over a much shorter period, and the majority have not revealed the same scale of agricultural or industrial activities. Therefore, it is the association with the cemetery—and possibly with the burial of high-ranking individuals—that allowed for the development and success of many of these settlements.

Finally, it must be stated that many of the sites discussed above are awaiting the publication of their final reports and, as such, these research findings and interpretations may alter as new information comes to light. However, these interim findings seek to encourage and continue discussions in early medieval archaeological settlement landscape and material culture research.

**Acknowledgements** I would like to dedicate this paper to the memory of my grand-uncle, the late Father Bob Ahern, who was formerly a headmaster at Belvedere College, Dublin, and a parish priest at Gardiner Street and later at Salthill in Galway. I discovered, during his latter years, his interest in many things antiquarian and historical and it is comforting to think that we shared that interest even if, for many years, it was unknown to us.

I want to thank Donald Murphy and everyone within Archaeological Consultancy Services Ltd (ACS) for allowing me the time to research and write this paper. Equally, similar sentiments go to Mary Deevy and the National Roads Authority who facilitated my research throughout excavations in advance of the M3 road scheme, Co. Meath: indeed this paper utilises the interim findings from some of those sites. Most recently, thanks also to Dr Aidan O’Sullivan and my colleagues in EMAP, School of Archaeology, UCD, for reading the final drafts of the paper and offering feedback and advice.

A special thanks must go to the directors who allowed me to refer to their sites prior to publication including Linda Clarke, Lydia Cagney, Tara O’Neill and Dan Noonan. A number of people have read early drafts of this paper including Dr Eoin Grogan, Dr Michelle Comber, Niall Kenny and Eimear O’Connor. I would like to offer my thanks for all their comments and advice. Finally, thanks to Vicky Ginn who spotted any grammatical and spelling errors and last, but by no means least, thank you to Martin Halpin and the drafts department at ACS for supplying many of the images and plans used in this paper.

## References

- Baker, C. 2004 Augherskea, Co. Meath. In I. Bennett (ed.), *Excavations 2002: summary accounts of archaeological excavations in Ireland*, 403. Bray. Wordwell.
- Barrett, G.F. 1980 A field survey and morphological study of ringforts in southern Co. Donegal. *Ulster Journal of Archaeology* **43**, 39–51.
- Barrett, G.F. and Graham, B.J. 1975 Some considerations concerning the dating and distribution of ringforts in Ireland. *Ulster Journal of Archaeology* **38**, 33–45.
- Boyle, J.W. 2004 Lest the lowliest be forgotten: locating the impoverished in early medieval Ireland. *International Journal of Historical Archaeology* **8(2)**, 85–99.
- Brady, N. 2006 Mills in medieval Ireland: looking beyond design. In S.A. Walton (ed.), *Wind and water in the Middle Ages: fluid technologies from antiquity to the Renaissance*, 39–68. Arizona. Arizona Centre for Medieval and Renaissance Studies.
- Brannon, N.F. 1980 The excavation of a rath in Ballykennedy townland, Co. Antrim. *Ulster Journal of Archaeology* **43**, 65–70.
- Byrne, F.J., Jenkins, W., Kenny, G. and Swift, C. 2008 *Historical Knowth and its hinterland*. Excavations at Knowth 4. Dublin. Royal Irish Academy.
- Cagney, L. and O’Hara, R. 2009 An early medieval complex at Dowdstown 2. In M. Deevy and D. Murphy (eds), *Places along the way: first findings on the M3*, 123–34. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority/Wordwell.

- Carroll, J. 2008 *Archaeological excavations at Rosepark, Balrothery, Co. Dublin*. Volume 1 Balrothery Excavations. Dublin. Judith Carroll and Co./Heritage Council.
- Charles-Edwards, T.M. 2000 *Early Christian Ireland*. Cambridge. Cambridge University Press.
- Clarke, L. 2002 An early medieval enclosure and burials, Johnstown, Co. Meath. *Archaeology Ireland* **16(4)**, 13–15.
- Clarke, L. and Carlin, N. 2008 Living with the dead: an enclosed burial, settlement and industrial site. In N. Carlin, L. Clarke and F. Walsh (eds), *Life and death in the Boyne Floodplain: findings from the archaeological excavations along the route of the M4 Motorway*, 55–86. National Roads Authority Scheme Monograph Series 3. Dublin. National Roads Authority/Wordwell.
- Clarke, L. and Murphy, D. 2001 *Report on the archaeological resolution of a multiperiod settlement site at Colp West, Co. Meath*. Unpublished report, Archaeological Consultancy Services Ltd.
- Cleary, R.M. 1985 Archaeological investigation of a ringfort at Ballyduff, Co. Limerick. *North Munster Antiquarian Journal* **27**, 3–7.
- Comber, M. 2002 M.V. Duignan's excavations at the ringfort of Rathgurreen, County Galway, 1948–1949. *Proceedings of the Royal Irish Academy* **102C**, 137–97.
- Comber, M. 2004 *Native evidence of non-ferrous metalworking in early historic Ireland*. British Archaeological Report, International Series 1296. Oxford. Archaeopress.
- Comber, M. 2008 *The economy of the ringfort and contemporary settlement in early medieval Ireland*. British Archaeological Report, International Series 1773. Oxford. Archaeopress.
- Conway, M. 1999 *Director's first findings from excavations in Cabinteely*. Dublin. Margaret Gowen and Co. Ltd.
- Conway, M. 2000 Gracedieu, Co. Dublin. In I. Bennett (ed.), *Excavations 1998: summary accounts of archaeological excavations in Ireland*, 83–4. Bray. Wordwell.
- Coyne, F. 2006 Excavation of an early medieval 'plectrum-shaped' enclosure at Newtown, Co. Limerick. In J. O'Sullivan and M. Stanley (eds), *Settlement, industry and ritual*, 63–72. National Roads Authority Monograph Series 3. Dublin. National Roads Authority/Wordwell.
- Coyne, F. and Collins, T. 2003 Plectrum shaped enclosures—a new site type at Newtown, Co. Limerick. *Archaeology Ireland* **17(4)**, 17–19.
- Delaney, S. and Roycroft, N. 2003 Early medieval enclosure at Balriggeran, Co. Louth. *Archaeology Ireland* **17(2)**, 16–19.
- Edwards, N. 1990 *The archaeology of early medieval Ireland*. London. Batsford.
- Eogan, G. 1974 Report on the excavation of some passage graves, unprotected inhumation burials and a settlement site at Knowth. *Proceedings of the Royal Irish Academy* **74C**, 11–112.
- Eogan, G. 1977 The Iron Age—early Christian settlement at Knowth, Co. Meath, Ireland. In V. Markotic (ed.), *Ancient Europe and the Mediterranean: studies presented in honour of Hugh Hencken*, 69–76. Wiltshire. Aris and Philips.

- Eogan, G. 2000 Life and living at Lagore. In A.P. Smyth (ed.), *Seanchas: studies in early and medieval Irish archaeology, history and literature in honour of Francis J. Byrne*, 64–82. Dublin. Four Courts Press.
- Fahy, E.M. 1969 Early settlement in the Skibbereen area. *Journal of the Cork Historical and Archaeological Society* **75**, 147–56.
- Fredengren, C. 2002 *Crannógs: a study of people's interaction with lakes, with particular reference to Lough Gara in the north-west of Ireland*. Bray. Wordwell.
- Giacometti, A. 2006 Living in the landscape. *Archaeology Ireland* **20(2)**, 36–9.
- Gibbons, E. 1998 Cathair Fionnurach, Ballynavenooragh, Co. Kerry. In I. Bennett (ed.), *Excavations 1997: summary accounts of archaeological excavations in Ireland*, 80–1. Bray. Wordwell.
- Gowen, M. 1989 Westreave, Colp West. In I. Bennett (ed.), *Excavations 1988: summary accounts of archaeological excavations in Ireland*, 31–2. Bray. Wordwell.
- Graham, B.J. 1993 Early medieval Ireland: settlement as an indicator of economic and social transformation c. 500–1000. In B.J. Graham and L.J. Proudfoot (eds), *An historical geography of Ireland*, 19–57. London. Academic Press.
- Hamlin, A. 1992 The early Irish church: problems of identification. In N. Edwards and A. Lane (eds), *The early church in Wales and the west: recent work in early Christian archaeology, history and placenames*, 138–44. Oxford. Oxbow.
- Harper, A.E.T. 1973/4 The excavation of a rath in Crossnacreevy townland, Co. Down. *Ulster Journal of Archaeology* **36–7**, 32–41.
- Hartnett, P.J. 1946 Excavation of an earthwork at Inchigaggin, near Cork City. *Journal of the Cork Historical and Archaeological Society* **51**, 126–36.
- Hencken, H. 1950 Lagore crannog: an Irish royal residence of the seventh to tenth century A.D. *Proceedings of the Royal Irish Academy* **53C**, 1–248.
- Kelly, F. 1988 *A guide to early Irish law*. Dublin. Dublin Institute for Advanced Studies.
- Kelly, F. 1997 *Early Irish farming*. Dublin. Dublin Institute for Advanced Studies.
- Kerr, T. 2007 *Early Christian settlement in north-west Ulster*. British Archaeological Report, British Series 430. Oxford. Archaeopress.
- Kinsella, J. 2005 *Locating the poor and unfree of early medieval Ireland*. Unpublished MA thesis, University College Dublin.
- Lawlor, H.C. 1928 *Ulster, its archaeology and antiquities*. Belfast. R. Carswell.
- Leigh Fry, S. 1999 *Burial in medieval Ireland 900–1500, a review of the written sources*. Dublin. Four Courts Press.
- Limbirt, D. 1996 Irish ringforts: a review of their origins. *The Archaeological Journal* **153**, 243–90.
- Lynn, C.J. 1978 Early Christian period domestic structures: a change from round to rectangular plans? *Irish Archaeological Research Forum* **5**, 29–45.
- Lynn, C.J. 1981/2 The excavation of Rathmullan, a raised rath and motte in County Down. *Ulster Journal of Archaeology* **44–5**, 65–171.

- Lynn, C.J. 1983 Two raths at Ballyhenry, County Antrim. *Ulster Journal of Archaeology* **46**, 67–91.
- Lynn, C.J. 1988a The story in a mound, Gransha, Co. Down. In A. Hamlin and C. Lynn (eds), *Pieces of the past: archaeological excavations by the Department of the Environment for Northern Ireland 1970–1986*, 38–41. Belfast. Her Majesty's Stationery Office (HMSO).
- Lynn, C.J. 1988b Deer Park Farms, Glenarm, Co. Antrim. In A. Hamlin and C. Lynn (eds), *Pieces of the past: archaeological excavations by the Department of the Environment for Northern Ireland 1970–1986*, 44–7. Belfast. HMSO.
- Mallory, J.P. and McNeill, T.E. 1991 *The archaeology of Ulster: from colonisation to plantation*, 181–248. Belfast. The Institute of Irish Studies, Queen's University Belfast.
- Manning, C. 1986 Archaeological excavation of a succession of enclosures at Millockstown, Co. Louth. *Proceedings of the Royal Irish Academy* **86C**, 135–81.
- McConway, C. 2002 Excavations at Laytown reveal coastal settlement in Meath. *Archaeology Ireland* **16(1)**, 16–9.
- McConway, C. 2003 Ninch, Laytown, Co. Meath. In I. Bennett (ed.), *Excavations 2001: summary accounts of archaeological excavations in Ireland*, 311–3. Bray. Wordwell.
- McConway, C. 2004 Ninch, Laytown. In I. Bennett (ed.), *Excavations 2002: summary accounts of archaeological excavations in Ireland*, 421–5. Bray. Wordwell.
- Monk, M.A. 1995 A tale of two ringforts: Lisleagh I and II. *Journal of the Cork Historical and Archaeological Society* **100**, 105–16.
- Monk, M.A. 1998 Early medieval secular and ecclesiastical settlement in Munster. In M.A. Monk and J. Sheehan (eds), *Early medieval Munster: archaeology, history and society*, 33–52. Cork. Cork University Press.
- Mytum, H. 1992 *The origins of early Christian Ireland*. London. Routledge.
- Newman, C. 1997 *Tara: an archaeological survey*. Discovery Programme Monographs 2. Dublin. Discovery Programme/Royal Irish Academy.
- Nieke, M.R. 1993 Penannular and related brooches: secular ornament or symbol in action? In R.M. Spearman and J. Higgitt (eds), *The age of migrating ideas: early medieval art in Northern Britain and Ireland*, 128–34. Edinburgh. National Museum of Scotland.
- Noonan, D., Conway, C., O'Hara, R. and O'Meadhra, J. 2004 *Report on the archaeological excavation at Ballynacarriga early Christian settlement, Youghal By-Pass, Co. Cork*. Unpublished report, Archaeological Consultancy Services Limited.
- O'Brien, E. forthcoming Pagan or Christian? Burial in Ireland during the 5<sup>th</sup> to 8<sup>th</sup> centuries AD. In N. Edwards (ed.), *The archaeology of the early medieval Celtic Churches*. Leeds. Society for Medieval Archaeology Monograph.
- O'Connell, A. 2006 The many lives of Castlefarm. *Seanda* **1**, 19–24.
- O'Connell, A. 2009 Excavations at Castlefarm—director's first findings. In M. Deevy and D. Murphy (eds), *Places along the way: first findings on the M3*, 43–56. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority/Wordwell.

- O'Connor, M. 1944 The excavation of three earthen ringforts in the Liffey Valley. *Journal of the Royal Society of Antiquaries of Ireland* **74**, 53–60.
- Ó Cróinín, D. 1995 *Early medieval Ireland 400–1200*. London. Longman.
- O'Hara, R. 2007 Roestown 2, Co. Meath: an excavation on the M3 Clonee to North of Kells. In J. O'Sullivan and M. Stanley (eds), *New routes to the past*, 141–52. National Roads Authority Monograph Series 4. Dublin. National Roads Authority/Wordwell.
- O'Hara, R. 2009 Early medieval settlement at Roestown 2. In M. Deevy and D. Murphy (eds), *Places along the way: first findings on the M3*, 57–82. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority/Wordwell.
- O'Kelly, M.J. 1963 The excavations of two earthen ringforts at Garryduff, Co. Cork. *Proceedings of the Royal Irish Academy* **63C**, 17–125.
- O'Neill, T. 2003 *Archaeological Investigations at Ballycasey More, Co. Clare*. Unpublished report, Archaeological Consultancy Services Ltd.
- Ó Ríordáin, S.P. 1940 Excavations at Cush, Co. Limerick. *Proceedings of the Royal Irish Academy* **45C**, 83–181.
- Ó Ríordáin, S.P. 1942a *Antiquities of the Irish countryside*. Cork. Cork University Press.
- Ó Ríordáin, S.P. 1942b The excavation of a large earthen ringfort at Garranes, Co. Cork. *Proceedings of the Royal Irish Academy* **47C**, 77–150.
- Ó Ríordáin, S.P. 1949 Lough Gur excavations, three marshland habitation sites. *Journal of the Royal Society of Antiquaries of Ireland* **79**, 126–38.
- Ó Ríordáin, S.P. and Hartnett, P.J. 1943 The excavation at Ballycatteen Fort, Co. Cork. *Proceedings of the Royal Irish Academy* **49C**, 1–43.
- O'Sullivan, A. and Harney, L. 2008 *The early medieval archaeology project: investigating the character of early medieval archaeological excavations, 1970–2002*. Unpublished report, Heritage Council.
- Proudfoot, V.B. 1953 Excavation of a rath at Boho, Co. Fermanagh. *Ulster Journal of Archaeology* **16**, 41–57.
- Proudfoot, V.B. 1961 The economy of the Irish rath. *Medieval Archaeology* **5**, 94–122.
- Quin, E.G. (ed.) 1983 *Dictionary of the Irish language: based mainly on Old and Middle Irish materials*. Dublin. Royal Irish Academy.
- Raftery, J. 1957 Lake dwellings in Ireland. *Scientific Service* **4(3)**, 5–15.
- Roycroft, N. 2005 Around the bay on the Great North Road: the archaeology of the M1 Dundalk Western Bypass. In J. O'Sullivan and M. Stanley (eds), *Recent archaeological discoveries on national road schemes 2004*, 65–82. National Roads Authority Monograph Series 2. Dublin. National Roads Authority/Wordwell.
- Seaver, M. 2005 Run of the mill? Excavation of an early medieval settlement at Raystown, Co. Meath. *Archaeology Ireland* **19(4)**, 9–12.
- Seaver, M. 2006 Through the mill—excavation of an early medieval settlement at Raystown. In J. O'Sullivan and M. Stanley (eds), *Settlement, industry and ritual*, 73–88. National Roads Authority Monograph Series 3. Dublin. National Roads Authority/Wordwell.

- Shee-Twohig, E. 1977 Excavation of a ringfort at Croom, Co. Limerick. *North Munster Antiquarian Journal* **19**, 27–37.
- Stout, G.T. 1984 *Archaeological survey of the Barony of Ikerrin*. Roscrea. Roscrea Heritage Society.
- Stout, M. 1991 Ringforts in the south-west midlands of Ireland. *Proceedings of the Royal Irish Academy* **91C**, 200–43.
- Stout, M. 1997 *The Irish ringfort*. Dublin. Four Courts Press.
- Stout, M. 1998 Early Christian settlement, society and economy in Offaly. In W. Nolan and T.P. O’Neill (eds), *Offaly: history & society: interdisciplinary essays on the history of an Irish county*, 29–92. Dublin. Geography Publications.
- Swan, L. 1983 Enclosed ecclesiastical sites and their relevance to settlement patterns of the first millennium A.D. In T. Reeves Smyth and F. Hammond (eds), *Landscape archaeology in Ireland*, 269–80. British Archaeological Reports, International Series 116. Oxford. Archaeopress.
- Swift, C. 1996 Pagan monuments and Christian legal centres in early Meath. *Ríocht na Midhe* **9(2)**, 1–26.
- Swift, C. 2000 Óenach Tailten, the Blackwater Valley and the Uí Néill kings of Tara. In A.P. Smyth (ed.), *Seanchas; studies in early and medieval Irish archaeology, history and literature in honour of Francis J. Byrne*, 109–20. Dublin. Four Courts Press.
- Taylor, K. 2006 N18 Ennis Bypass and N85 Western Relief Road. Site AR128, Cahircalla More, Co. Clare. Final archaeological report, Clare County Council.
- Thomas, C. 1976 Imported late-Roman Mediterranean pottery in Ireland and western Britain: chronologies and implications. *Proceedings of the Royal Irish Academy* **76C**, 245–55.
- Thomas, C. 1990 Gallici Nautae de Galliarum Provinciis—A 6<sup>th</sup>/7<sup>th</sup> century trade with Gaul reconsidered. *Medieval Archaeology* **34**, 1–26.
- Tobin, R. 2003 Houses, enclosures and kilns, excavations at Corbally, Co. Kildare. *Archaeology Ireland* **17(3)**, 32–7.
- Walsh, F. 2008 Killickaweeny—high class early medieval living. In N. Carlin, L. Clarke and F. Walsh (eds), *Life and death in the Boyne Floodplain: findings from the archaeological excavations along the route of the M4 Motorway*, 27–54. National Roads Authority Scheme Monograph Series 3. Dublin. National Roads Authority/Wordwell.
- Walsh, F. and Delaney, S. 2004 Plectrum shaped enclosures. *Archaeology Ireland* **17(4)**, 20.
- Walsh, F. and Harrison, J. 2003 Early medieval enclosure at Killickaweeny, Co. Kildare. *Archaeology Ireland* **17(1)**, 33–6.
- Warner, R.B. 1988 The archaeology of early Irish historic kingship. In S.T. Driscoll and M.R. Níe (eds), *Power and politics in early medieval Britain and Ireland*, 22–46. Edinburgh. Edinburgh University Press.
- Wooding, J.M. 1996 *Communication and commerce along the western sea lanes, AD 400–800*. British Archaeological Report, International Series 654. Oxford. Archaeopress.