EARLY MEDIEVAL IRELAND AD 400–1100

THE EVIDENCE FROM ARCHAEOLOGICAL EXCAVATIONS

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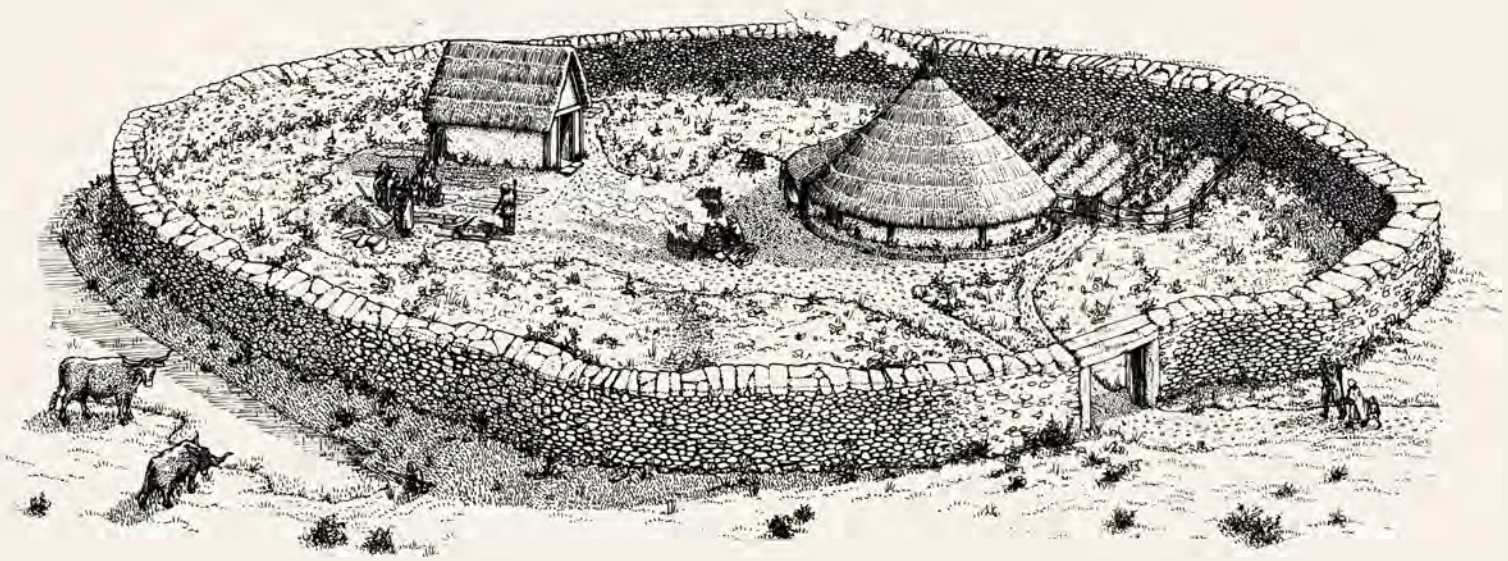

CONTENTS

Chapter 3 Early Medieval Dwellings and Settlements

The early medieval settlement landscape of Ireland is one of the richest archaeological landscapes in the world. A long tradition of archaeological excavation of early medieval Irish settlements has produced a range of evidence relating to the daily lives and dwelling practices of the inhabitants of these settlements, as well as evidence for their use of the surrounding landscapes (see O'Sullivan, A. 2008; Edwards 2005). Such evidence can be used to help reconstruct the social, ideological and economic relationships that bound Irish society at this time together (see, for example, Stout, M. 1997). Early medieval settlement has long been the focus of scholarly interest, and a range of studies have described its classic site types—whether these be raths (Edwards 1990; Stout, M. 2000; Edwards 2005), crannógs (O'Sullivan, A. 1998a; Fredengren 2002a), or Ireland's Viking towns (Wallace 1992b; Hurley 1992; Wallace 2005). In recent years, early medieval settlement archaeology in Ireland has been re-invigorated, as large-scale gas pipeline and roadway developments have revealed new evidence in relation to the diversity and complexity of such settlements. Excavations of settlements with burial grounds, so called settlement-cemeteries, such as at Raystown, Co. Meath (Seaver 2006, 2010), and of non-circular ditched enclosures, for example at Newtown, Co. Limerick (Coyne 2005, 2006a), indicate that Ireland's early medieval people occupied different types of sites. Our knowledge has also been transformed by the identification of a range of archaeological features testifying to the intensity of land-use outside the classic settlement enclosures—such as occasional field systems, corn-drying kilns, horizontal water mills, charcoal production pits, ironworking areas and other enigmatic features. An emerging body of evidence for unenclosed dwelling places—in huts in open country, in caves and along coastal sand dunes—is still not fully understood. This chapter will review the range of evidence for secular settlement activity in early medieval Ireland and the insights this evidence offers about the society of the time. Chapter 4 will focus on the church and monastic settlements (it is acknowledged that many of the secular sites discussed in this chapter could have been owned and used by the church).

The early medieval settlement landscape in Ireland, as in much of the rest of Europe, was largely rural and pastoral, with people living on and working the land around them. Dispersed settlements were known in early medieval northwest Europe, particularly in the Scandinavian regions and in the north Atlantic farmsteads of Scotland, the Faroe Islands, Iceland and Greenland, but nucleated settlements, or more accurately communal rural settlements composed of a group of buildings and used by a number of families, also emerged (Klápste and Nissen Jaubert 2007). In some places these communal settlements formed hamlets, with clusters of longhouses, as is seen in the Netherlands, northern Germany and later Anglo-Saxon England (Hamerow 2002). Several rural settlements of Anglo-Saxon extended farming groups have been excavated, often comprising clusters of halls and *Grubenhäuser* (sunken featured buildings), as are known from elsewhere in northern Europe (Hamerow 2002, 2009, 2012). In Ireland, however, there is little or no evidence for nucleated rural settlement, or even for clusters of houses outside an enclosure. Between the sixth and the tenth century (and

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probably afterwards) the early medieval settlement landscape of Ireland remained largely one of enclosed rural farmsteads, or raths, that were principally the dispersed dwellings of relatively small social groups (mostly extended families). It has been suggested that there is documentary evidence for a shift from dispersed settlements (such as the rath) to some type of settlement nucleation in the form of a *baile* or a cluster of dwellings around a lordly residence (see Doherty 2000) during the early medieval period. Despite a decade or more of large-scale, fairly randomly located roadway development excavations, however, the archaeological evidence for such hypothetical nucleated rural settlements has failed to appear. Early medieval nucleated settlements in Ireland only properly emerge by the late-ninth/early-tenth century, potentially only with the development of monastic towns (and this remains a matter of debate; see Doherty 1985; Bradley 1987; Swift 1998) and certainly with the development of the Viking towns of Dublin, Wexford, Waterford, Cork and Limerick from the early-tenth century AD onwards (Wallace 2001, 2005; Hurley 1992).

Early medieval settlement enclosures

Definitions

Ringforts—raths, cashels, cahers, duns and crannógs

Early medieval settlement in Ireland, AD 400–1100, is overwhelmingly about the inhabitation of enclosures, which were characterised by various types and sizes of enclosing banks, ditches, palisades and stone walls. In early medieval legal texts and narrative literature, domestic houses and dwellings are commonly mentioned as being located within an enclosed area known as a *les*, generally translated as 'farmyard', or 'courtyard'. This *les* or enclosed space was defined by its principal enclosing feature, which was most commonly a *ráth*—a perimeter earthen bank with an external ditch (Kelly 1997, 363–4). Stone walls were also used as an enclosing element, and in Old Irish such stone-built enclosures were known as a *caiseal* (anglicised today to as 'cashel') or a *cathair* 'caher'. The word *dún* (usually anglicised as 'dun' or 'doon') was used to describe various different types of defended enclosures, often those of high status or significance. Other settlement structures closely related to these are 'promontory forts', which are distinguished by their locations, and 'crannógs', which in many ways are essentially settlement enclosures on islands on lakes. In this book, we use the general term early medieval 'settlement enclosure' rather than 'ringfort' (which has military connotations); we use the term 'raths' when referring to earthen enclosures, 'cashels' for stone-built enclosures, and 'other settlement enclosure' when the type of enclosure under discussion is not clear or when a structure seems to be distinctively different in form.

Whether we term them ringforts, raths, cashels or settlement enclosures, it is clear that tens of thousands survive in the modern landscape (Figure 3.1; see Proudfoot 1961; Edwards 1990, 2005; Stout, M. 1997). Estimates of the number of early medieval settlement enclosures in Ireland, based on surviving sites or on cartographic and other records of destroyed sites, vary greatly. Figures available in March 1995, based on data from the records of the Archaeological Survey of Ireland (Republic of Ireland) and the (then) Environment and Heritage Service (Northern

FIG. 3.1—Map indicating the widespread distribution of over 47,000 early medieval ringforts throughout Ireland (Map by, and reproduced by permission of, Matthew Stout; from Stout and Stout 2011, fig. 42.)

Ireland), indicated that there were at least 45,119 probable 'ringforts' in Ireland, but this is almost certainly an underestimate of the original number of such enclosures (Stout 1997, 53). The overwhelming majority of these 'ringforts' are probably raths. Stout and Stout (2011, 44, fig. 42) have recently suggested that there are 'over 47,000 ringforts' (the term to be taken to include raths, cashels, cahers and 'enclosures') in Ireland. If we recognise that large numbers of previously unknown early medieval settlement enclosures have been discovered on recent road schemes, we might suggest that there are potentially tens of thousands of other as yet undiscovered sites. A conservative estimate, therefore, might suggest that there at least 60,000 early medieval settlement enclosures on the island. Relatively large numbers of cashels

and promontory forts (see Table 3.1 in the Appendix of Tables), raths (Table 3.2) and crannógs (Table 3.3) have been excavated, and these provide a wide range of information on early medieval settlement in Ireland.

Raths

The most common early medieval settlement enclosure type is the rath—a modern word derived from the Old Irish *ráth*, meaning 'earthern rampart' (see Plate III.I). Seán P. Ó Ríordáin defined a rath in the first edition of his *Antiquities of the Irish countryside* as being, 'in its simplest form, a space most frequently circular, surrounded by a bank and fosse', and he noted that in 'stony districts', settlement spaces were more likely to be enclosed 'by a stone-built rampart' (Ó Ríordáin 1942b, 1). In terms of shape, as noted by Ó Ríordáin, the enclosed *les* was often circular in plan, but circular, oval and pear-shaped enclosures are known and early medieval peoples may have seen themselves as essentially living within an *enclosure*, whatever its shape (Kelly 1997, 364), with their houses, outbuildings and other features arranged within the enclosed space (see Figure 3.2 for one view of how an early medieval rath may have looked). Early medieval raths in some parts of the island generally range in size in terms of internal enclosed diameter from 15.5m to 75m, with most measuring 28–35m (Stout 1997, 15).

The classification of raths has a superficial simplicity—the terms univallate, bivallate and trivallate reflect the number (one, two or three, respectively) of banks and ditches defining a rath's enclosures. Raised raths (or platform raths) are also a type. The vast majority of raths are univallate, having a single bank and external ditch. Although they vary in size, most univallate raths measure about 28–35m in internal enclosed diameter, with the banks and ditches adding a few metres to their overall dimensions. Stout (1997, 17) states that univallate raths 'account for over 80% of sites' in most areas. He (1997, 18) also notes that most bivallate raths have, in fact, only one ditch (he suggests that a counter scarp bank may often be merely a product of ditch digging). Bivallate raths may also have been the product of generations of occupation, so that a site that began as a univallate enclosure could have been added to across time (see Plate III.II). Trivallate raths—with a triple arrangement of banks and ditches—or multivallate raths are extremely rare; very few examples have been archaeologically excavated, but those that have are at Garranes, Co. Cork (Ó Ríordáin 1942); Ballycatteen, Co. Cork (Ó Ríordáin and Hartnett 1943); and Baunogephlure, Co. Carlow (Stafford and McLoughlin 2011).

Platform and raised raths

Attempts to differentiate between 'platform raths' and 'raised raths' on typological or height (3–4m) grounds have been rather unsuccessful (see Jope 1966, 185–95; McNeill 1975a, 49; Kerr 2009, 64–5). Raised raths, unlike platform raths, have been defined as having 'a perimeter bank around the top area which slopes down towards the entrance…sometimes reached across a causeway or up a ramp' (Jope 1966, 116; McNeill 2007, 11). It seems that the only conclusive way to differentiate between

Pl. III.I—Three early medieval univallate raths at Ballinderry townland, Co. Roscommon. (Photograph © National Monuments Service, Department of Arts, Heritage and the Gaeltacht; reproduced by permission.)

Fig. 3.2—Artist's reconstruction painting of a hypothetical early medieval rath, with its enclosure defences, entrance, interior structures and activities – and a gendered portrayal of male and female roles in the household economy that could be critiqued, but that is also communicated in early Irish sources. (Figure prepared by S. Shaw; image © Crown Copyright. Courtesy of the Northern Ireland Environment Agency.)

Pl. III.II—Rathgurreen bivallate ringfort, Co. Galway, a site excavated in 1948–9 by M.V. Duignan and subsequently published by Michelle Comber (2002). (Photograph reproduced courtesy of Department of Archaeology, National University of Ireland, Galway.)

raised raths and platform raths is by archaeological excavation (Lynn 1981–2, 149). Most platform raths would seem to have been created by scarping a natural knoll or drumlin-top. Raised raths, however, were constructed through a combination of the accumulation of occupation material and the importation of soil and other material, such as at Rathmullen, Co. Down (Lynn 1981–2; 1988f), Gransha, Co. Down (Lynn 1985; 1988c), and at Deer Park Farms, Co. Antrim (Lynn 1987a; 1987b; 1988e, 1989;

Pl. III.III—Excavation of the raised rath at Deer Park Farms, Co. Antrim. (Photograph © Crown Copyright. Courtesy of the Northern Ireland Environment Agency.)

Lynn and McDowell 1988a; Lynn and McDowell 2011; see Plate III.III). In all these instances the sites began as 'flat', univallate raths and were built up over time. In other instances, raised raths were constructed as such in a single event, with habitation being confined to the summit, for example at Big Glebe, Co. Londonderry (Lynn 1988d).

The Northern Ireland Sites and Monuments Record (NISMR) indicates that between 15% and 20% of raths are recognised as 'platform raths' or 'raised raths' (Kerr 2007). The figures for elsewhere in Ireland are similar (see Stout, M. 1997, 17). While univallate raths are regarded as the enclosed homesteads of the majority of Ireland's early medieval people, and multivallate raths are often interpreted as the dwellings of the social elites (see the discussion below), the function of raised raths is less clear. They could not easily have functioned as protective sites for livestock (McCormick 1995a, 33), and their statistically significant association with good quality agricultural land suggests that their inhabitants may have employed a mixed economy incorporating arable alongside pastoral farming (Kerr 2007, 115; O'Sullivan, M. and Downey 2007, 35).

Cashels

Cashels, from the Old Irish *caiseal*—also known in some regions as 'cahers'—can essentially be regarded as stone versions of earthen raths (Edwards 1990, 11–19), and 'the majority occur in rocky country with suitable stone for wall building…as a result they are much more characteristic of western Ireland than the east' (Edwards 1990, 14). Stone cashels can, however, occasionally be found elsewhere, such as at Dromena, Co. Down (Plate III.IV). Cashels also vary quite significantly in terms of their size, scale, defensibility and impressiveness, as can be seen by comparing

Pl. III.IV—Dromena stone cashel, Co. Down. (Photograph © Crown Copyright. Courtesy of the Northern Ireland Environment Agency.)

Dromena cashel with Dún Eochla, on Inis Mór (see Plate I.I above). Ditches were generally not regarded as an integral part of the design of cashels. This suggests that the building stone for cashel walls was sourced through means other than from a quarried ditch, and perhaps involved the use of field-stones. Even when bedrock was quarried into in the construction of rath ditches, as was the case at Ballycatteen (Ó Ríordáin and Hartnett 1943, 3), Garranes (Ó Ríordáin 1942a, 81–2) and Garryduff 1 (O'Kelly 1963, 18, plate II)—all located in Co. Cork, there was no attempt to build cashel-type walls or even stone-faced banks.

Cashels were often used to enclose early church sites and cemeteries, and in some cases may have been granted to the church by secular authorities. The early medieval cashel at Owenbristy, Co. Galway, which was excavated in advance of the N18 road scheme, illustrates well the complexity of interpretation of the construction, history and role of some cashels (Delaney and Tierney 2011; Delaney and Silke 2011). This cashel measured 44m in diameter and revealed evidence for occupation between the fifth and tenth century, for crafts and industry and for agricultural activities. In addition, an enigmatic wooden structure, which could have been a small church or oratory, was excavated at the site (Plate III.V; Figure 3.3). A discrete area on the eastern side of the enclosure was given over to burials, most of which dated between AD 640 and 800, but some outside of this time-frame were also discovered. The early medieval cashel at Owenbristy could, therefore, be a secular settlement, a settlement-cemetery (see below) or even an ecclesiastical site—or it may variously have been one or the other at different times. Radiocarbon dating evidence (see below) suggests that the building of cashels may well be a slightly later phenomenon than the construction of raths (Hull and Comber 2008; Fitzpatrick 2009), although Owenbristy is certainly an 'early cashel' and was occupied at the same time as most raths.

Pl. III.V—Excavations at Owenbristy cashel, Co. Galway, showing enclosing stone wall. (Photograph by John Sunderland; reproduced by permission of Eachtra Archaeological Projects and the National Roads Authority.)

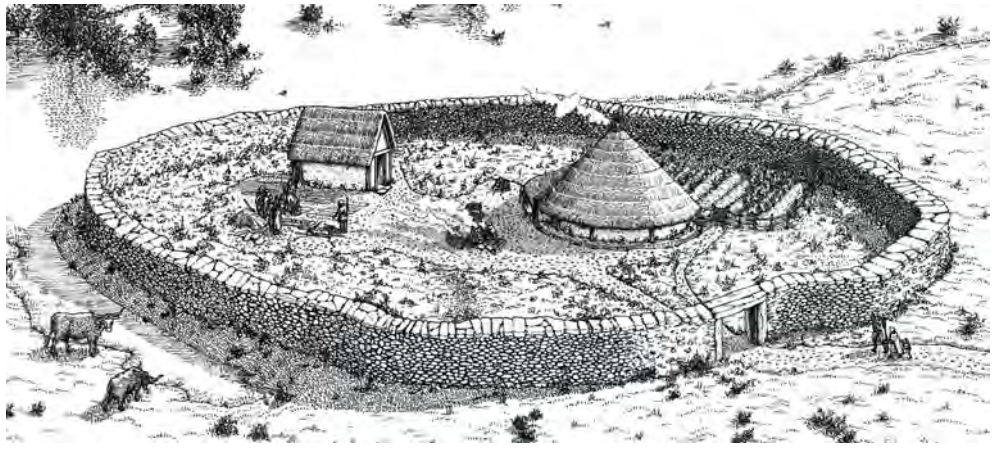

Fig. 3.3—The early medieval cashel and cemetery—and possible wooden church or oratory—at Owenbristy, Co. Galway, as it might have appeared in about AD 700. (Reconstruction drawing by Daniel Tietzsch-Tyler; reproduced with permission of the artist, Eachtra Archaeological Projects and the National Roads Authority; from Delaney and Silke 2011, fig. 5.19.)

Other settlement enclosures

Some recently excavated early medieval sites do not appear to fit into the traditional strictly defined morphology of raths or cashels. These sites have generally been distinguished from raths largely by shape and by size. This, however, is a somewhat modern problem created by the literature. The circular nature of raths was emphasised by Stout (1997, 14–15), largely as part of the classificatory system he designed for his computer statistical analyses; the emphasis on circularity has tended to dominate general recent perceptions of the form of raths. As Kinsella (2010) has pointed out, however, earlier scholars were less dogmatic. Ó Ríordáin's (1942b, 5) definition of a rath stated that it was 'a space most frequently circular'; Proudfoot (1961, 94) described raths as being generally circular, although 'oval or rectilinear' examples were known; and Edwards (1990, 14) stated that raths could be circular, oval or pear-shaped.

Over 100 early medieval settlement enclosures of different forms that are not easily classifiable within the traditional terminologies have been uncovered around Ireland during the large-scale roadworks of the late 1990s and 2000s. Archaeologists have attempted to grapple with the 'odd' morphology of these enclosures in various ways. Most strikingly, there are a growing number of settlement enclosures seemingly not associated with a church structure that have burial areas within them. The early medieval settlement at Parknahown, Co. Laois (Figures 3.4 and 3.5), is a good example of this type of site, having evidence for several phases of enclosure, houses, animal husbandry and a similar material culture to other settlements (O'Neill, T. 2006, 2007a, 2007b, 2010). Settlements such as this have variously been termed secular cemeteries (Stout and Stout 2008), cemetery-settlements (Ó Carragáin 2010a) and settlement/cemeteries (Kinsella 2010). In this book we use the term 'settlement-cemetery', thereby defining these settlements as places where people lived, worked and buried their dead; they will be discussed in more detail in Chapter 8 below on death and burial.

In relation to other settlements with non-traditional morphology, the term 'plectrum-shaped' was coined to describe a site at Newtown, Co. Limerick (Coyne and Collins 2003, 17–18; Coyne 2005, 2006a, 2011); but the enclosure at Killickaweeney, Co. Kildare, is described as a flattened 'heart-shape' (Walsh, F. and Harrison 2003, 34–6; Walsh, F. 2008); and the enclosure discovered at Ballynacarriga 1, Co. Cork, was certainly square in shape (Noonan 2001:115). The dimensions of these enclosures vary, from the rath-sized site at Newtown (approximately 50m in diameter), through to the triple enclosure at Ninch, Co. Meath, which at its largest point measured 80m x 60m (McConway 2002, 17–19). Some of these sites were enclosed by a single ditch (such as Killickaweeney, Co. Kildare), while others had multiple enclosing ditches (Rosepark, Co. Dublin, for example, see Carroll, J. 2000:0209, 2001:340; 2008, 42–54), and yet other sites appear to have been further protected by an outer wooden palisade. At Aghadegnan, Co. Longford (Carroll 1991:091; 1993:152), a 'palisaded enclosure' was re-modelled as a rath, but other 'palisaded enclosures' at Ballynagallagh, Lough Gur, Co. Limerick (Cleary 2006), and Lowpark, Co. Mayo (Gillespie 2007, 2011b), show no similar transformation.

These settlement enclosures do not, however, show a great degree of uniformity in morphology or location. Some, such as the 'plectrum-shaped' enclosures at Newtown, Co. Limerick, Lahinch, Co. Clare, and Tralee, Co. Kerry, are found on top of hills (Coyne and Collins 2003, 18–19); whereas the main enclosure at Ballynacarriga 1, Co. Cork, is located on a valley floor (Noonan 2001:115); and that at Roestown, Co. Meath, is in a low-lying area adjacent to a drained marsh (O'Hara 2007, 141). Settlement enclosures such as these do not seem to be the dwelling places of social groups different from others in the general society of the time, such as the poor or the unfree. Indeed, the artefactual remains from some of these enclosures occasionally suggest that their occupants were of a somewhat high status. Imported E ware was found at Roestown, Co. Meath (O'Hara 2007, 2009a), as well as at Rosepark, Co. Dublin (Doyle, I.W. 2008, 112–5); and a tenth-/eleventh-century Hiberno-Scandinavian ringed-pin from Ninch, Co. Meath (McConway 2002, 17–19), might be suggestive of links with Viking Dublin. In contrast, the small numbers of

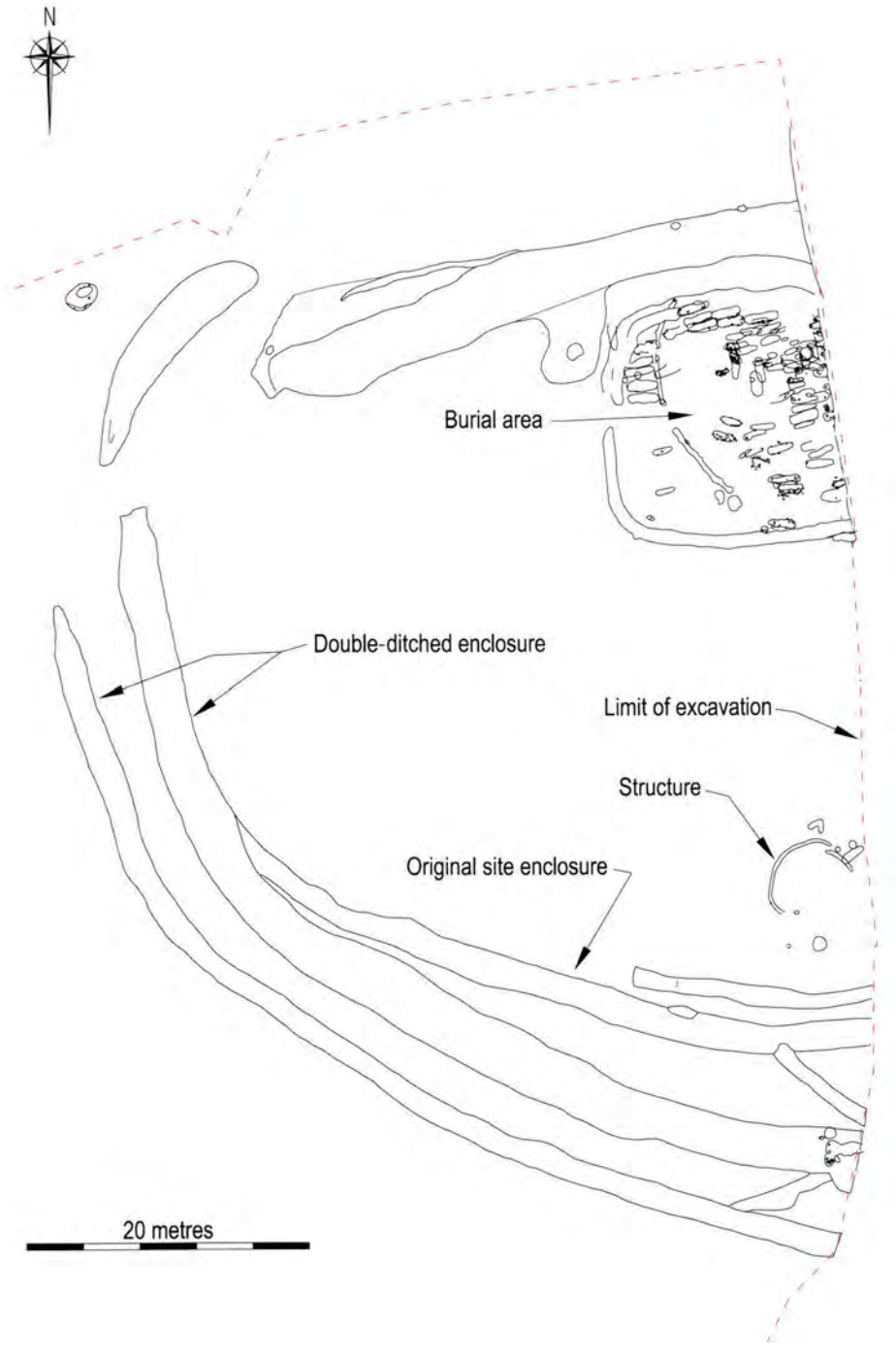

Fig. 3.4—Site plan of Parknahown 5, Co. Laois, an early medieval settlement-cemetery with burials in the interior. (Figure by Archaeological Consultancy Services (ACS); reproduced by permission of ACS and the National Roads Authority; from O'Neill 2007a, illus. 2.)

finds from the 'plectrum-shaped' enclosure at Newtown, Co. Limerick (Coyne and Collins 2003, 17–18, 2011), suggest that it was a low-status habitation. It seems possible that the variations in form of these particular settlements may have been the result of specific local, topographical factors, which influenced the shape and layout of the enclosures constructed (Kinsella 2010).

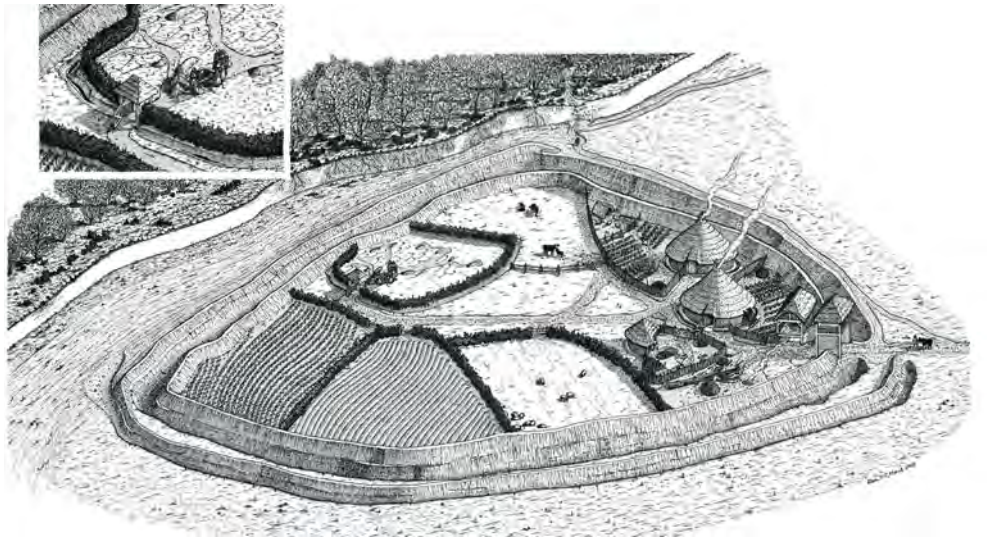

FIG. 3.5—Reconstruction drawing of Parknahown 5, Co. Laois, an early medieval settlement-cemetery as it might have appeared *c.* AD 800. (Reconstruction drawing by Daniel Tietzsch-Tyler, reproduced by permission of the artist, Archaeological Consultancy Services Ltd and the National Roads Authority.)

Crannógs

Early medieval crannógs are also a distinctive Irish settlement enclosure form, with at least 1,200 crannóg sites known (again, this is undoubtedly an under-estimate). Crannógs have traditionally been defined as artificial islets of stone, timber and soil, usually roughly circular or oval in plan, enclosed within a wooden palisade (O'Sullivan, A. 1998a, 1998b, 2000, 2001b; O'Sullivan, A. *et al*. 2007; Fredengren 2001, 2002a). A broader definition of 'crannóg', however, includes stone cairns without palisades; deliberately enhanced natural islands; and occupation platforms situated along lakeshore edges, not necessarily surrounded by water (Fredengren 2002a, 10–12). Unsurprisingly, given the fact that they are by definition lake dwellings, crannógs tend to be found in those regions of Ireland where there are smaller lakes, typically the north midlands, the north-west and Ulster. They are also situated in various different types of modern environment, both deep and shallow lake-waters, lakeshores and peatlands (O'Sullivan, A. 1998a; see Plates III.VI and III.VII; Figure 3.6).

Archaeological surveys and excavation indicate that Irish crannógs vary widely in morphology and construction, ranging in size from relatively large sites (18–25m in diameter), to smaller mounds (8–10m in diameter). Although they are typically found alone, crannógs of various sizes and types may be located in clusters in small lakes and along lakeshores, perhaps indicating different roles and contemporaneity of usage (O'Sullivan *et al*. 2007, 68–74). There appears to be some degree of regional and local variation in construction (see Fredengren 2002a): crannógs constructed on stony cairns are found across the west and north-west of Ireland, and they are built on mounds of peat, clay, timber and other organic materials elsewhere. Most crannógs, however, have been shown to follow the *packwerk* model in terms of how they were constructed: layers of stone boulders at the base, followed by small to medium-sized cobble stones, layers of peat placed over the stones, which were in turn covered by lake-marl, branches and timber and other organic debris. Often, early medieval crannógs show evidence for long periods of construction, occupation and abandonment,

Pl. III.VI—Coolure Demesne crannóg, Lough Derravaragh, Co. Westmeath. Archaeological survey, excavation and dendrochronological and radiocarbon dating revealed evidence for construction and occupation activity in the Late Bronze Age, the Iron Age/early medieval transition at *c*. AD 402 and throughout the early medieval period. (Photograph by Aidan O'Sullivan; reproduced by permission of UCD School of Archaeology, from O'Sullivan, Sands and Kelly 2007.)

Pl. III.VII—Reconstruction of the early medieval crannóg at Coolure Demesne, Lough Derravaragh, Co. Westmeath. (Adobe Photoshop reconstruction by Conor McDermott and Aidan O'Sullivan, based on photographs at Coolure Demesne and the National Heritage Park, Co. Wexford, with thanks to Billy MagFloinn; reproduced by permission of UCD School of Archaeology, from O'Sullivan, Sands and Kelly 2007.)

FIG. 3.6—Distribution map indicating the distribution of crannóg sites, with some dating from prehistory, but mostly of early medieval and late medieval date. Crannógs are most densely located in the drumlin lakelands north of the central plain. (Map by, and reproduced by permission of, Matthew Stout; from Stout and Stout 2011, fig. 48).

resulting in their original low platforms being built up over time by metres of organic, waterlogged occupation deposits, into mounds 4–5 metres in height.

A total of 28 crannógs, ranging in date from the Bronze Age to the later Middle Ages, were excavated between 1930 and 2007 (see Table 3.3). The best-known crannóg excavations are those carried out by the Harvard Archaeological Mission to Ireland in the 1930s, at Ballinderry crannóg No. 1, Co. Westmeath (Hencken 1936); Balllinderry crannóg No. 2, Co. Offaly (Hencken 1942); and

Lagore, Co. Meath (Hencken 1950). The range of evidence that these excavations produced for houses, palisades, crafts and material culture, which was of course spectacularly well-preserved in the waterlogged soils of lake marls and peats, is well-known (O'Sullivan, A. 1998a, 2003a, 20–3). In some ways these mid-twentieth century excavations of what are probably high-status sites have proved distracting, and the general character, occupation and chronology of Irish crannógs has been clarified to a greater extent by more recent investigations. These range from the excavation of the early medieval crannóg at Moynagh Lough, Co. Meath (Bradley 1982–3, 1984a, 1985–6, 1990–1, 1991, 1993, 1994–5; 1997a, 1999, 2011), with its houses, workshops, palisades and metalworking areas; to the possibly relatively low-status crannóg at Sroove, Co. Sligo (Fredengren *et al*. 2004, 164); and small-scale excavations, such as those at Coolure Demesne, Co. Westmeath (O'Sullivan, A. *et al*. 2007). Recent excavations at Drumclay, Co. Fermanagh, have also uncovered a spectacularly preserved historic crannóg, probably dating from the seventh to the fourteenth century AD, built up of multiple phases of occupation into a large peat, clay and timber mound some 25m in diameter and 5–6m in height. This site has also produced evidence for at least 30 round and rectilinear wooden houses, open-air hearths or industrial features, as well as thousands of finds of wood, bone, textile, leather, metal and stone (Nora Bermingham pers. comm.). Other crannógs have also produced evidence, from both archaeological survey and excavation, for round houses (Moynagh Lough, Co. Meath (Bradley 1991; O'Sullivan, A. 1998a, 107, 2011, Fig. 2.20), Ballinderry 1, Co. Westmeath (Hencken 1936), and Sroove, Co. Sligo (Fredengren 2002a)); for outdoor industrial areas and middens; for the enclosing elements of wooden revetments, post and plank palisades and stone walls; as well as for entrances and gateways, shoreline jetties and boats (Ballinderry 1, Co. Westmeath (Hencken 1936, 107–8); and for wooden and stone causeways connecting the settlements to the shore. Not all crannógs were settlement sites, however, and some may have been used as outdoor working platforms for ironworking and other industry/craft activities. One such example is the island iron production site at Bofeenaun, Co. Mayo (Keane 1995); another is one of the phases of activity at Sroove, Co. Sligo (Fredengren *et al*. 2004, 164).

Early Irish historical sources suggest a range of functions for crannógs, and their uses changed over time. Traditionally, scholars have interpreted the social 'function' of crannógs from what were deemed the essential properties of a crannóg—high visibility, difficulty of access and laboriousness of construction. As such, crannógs have often been seen as island strongholds or defensive refuges, providing a secure residence to be occupied at times of conflict and danger (see Warner 1994). The archaeology and the early Irish historical sources suggest that some crannógs were high-status or even royal sites. There is evidence for high-status feasting at crannóg sites (McCormick 2002), and also evidence that they may have been used as re-distribution centres for the patronage of crafts and industry (O'Sullivan, A. 1998a, 141). As was the case with multivallate raths, the size, complexity of construction and impressive architecture of crannógs may have been a means to display the social and ideological power and status of their owners. The early medieval crannógs of Lagore, Co. Meath (Hencken 1950), and Island MacHugh, Co. Tyrone (Davies 1950; Ivens *et al*. 1986), could certainly be interpreted as the island residences of kings or nobles.

It is undoubtedly the case that at least some served as aristocratic residences, either seasonal or permanent, situated in prominent locations on key topographical features in early medieval kingdoms. There are numerous early medieval (and later) historical references that crannógs served as royal sites and were attacked and burned during raids and warfare, and there are hints from the historical sources that some were island fortresses strategically situated on political boundaries (O'Sullivan *et al*. 2007). The occasional archaeological evidence for weaponry at crannóg sites and the impressive scale of their timber and roundwood palisades suggest that some may have had a military purpose. It is also likely that many crannógs may have been used by ecclesiastical communities; some early medieval crannógs are situated close to monasteries and churches. It is possible that the discoveries in recent decades of examples of early medieval ecclesiastical metalwork—hand bells, a cross, a book shrine—on some midlands crannógs that were occupied in proximity to actual church sites and monasteries, such as Lough Kinale, Co. Longford (Kelly 1991, 88; 1993), or Tully Lough, Co. Roscommon (Kelly 2003, 9), reflect their use as safe or restricted storage places for ecclestical relics, or perhaps even as island hermitages or dwelling places for anchorites (O'Sullivan, A. 2004).

It is also clear, however, that most crannógs must have been the dwelling places of social groups of modest prosperity; essentially, crannógs were the equivalent of the early medieval rath. It is clear from archaeological surveys that most crannógs were essentially small islands or lakeshore dwellings, occupied at various times by different people, not necessarily of high social status. Indeed, several crannógs have produced relatively modest material assemblages and could be interpreted as the island homesteads of the 'middle classes' or perhaps even the poor. Recent archaeological excavations at Sroove, on Lough Gara, Co. Sligo (Fredengren *et al*. 2004, 164), support the idea that some small crannógs were the habitations of social groups or households who had little wealth or political power. It has also been demonstrated that many crannógs were small islets situated in shallow water, quite unlike the classic image presented by the larger, early medieval 'royal sites'. The early medieval crannóg at Sroove was one such small island dwelling, situated in shallow water close to the shore, and the location across time of the houses and dwelling spaces of people of relatively low status. The unusually high incidence of the consumption of horse-flesh at Sroove could be an indication of poverty (McCormick 2007, 92). Several other early medieval crannógs have produced relatively modest material assemblages and may have been island settlements, located close to grazing lands and arable fields. They were certainly places that could usefully lay claim to neighbouring land, but were still separated from the shoreline and so were relatively safe from raids or wild animals. Other crannógs, such as Bofeenaun, Co. Mayo (Keane 1995), and Sroove (Fredengren 2001), appear to have been specialist sites, utilised as near-shore sites for ironworking, whether for reasons of safety and resources or because of ritualistic attitudes towards the blacksmith in early medieval society (O'Sullivan, A. 2009).

Promontory forts

Promontory forts can be defined as those enclosures constructed within earthen banks and ditches or stone ramparts and situated on headlands, promontories or cliff-edges

Pl. III.VIII—Caher-carbery Beg promontory fort, on the Atlantic coast at Kerry Head, Co. Kerry. Most excavated promontory forts have produced evidence for early medieval construction and occupation, though their role in the landscape remains largely enigmatic. (Photograph by Aidan O'Sullivan, UCD School of Archaeology.)

either in coastal, riverine or inland locations (that is, situated on ridges, bluffs or cliffs; see Plate III.VIII). There are approximately 250 promontory forts around the coastline of Ireland, with the largest concentrations in the west and east (Raftery, B. 1994, 48). Promontory forts probably range in date of construction and use from the Late Bronze Age to the late Middle Ages (Edwards 1990, 41). Very few have been excavated (see Table 3.1), but most of those that have show some evidence for early medieval activity and settlement, such as Dunbeg Fort, Co. Kerry (Barry 1981); Larrybane, Co. Antrim (Childe 1936; Proudfoot and Wilson 1961–2); Knoxspark, Co. Sligo (an inland promontory fort; see Mount 1994; 2002; 2010); and Dalkey Island, Co. Dublin (Liversage 1968; Doyle, I.W. 1998).

Promontory forts have traditionally been interpreted as refuges or strongholds. This interpretation may be over-simplistic, based on the modern perception of coastal sites as being 'at the edge' of the world. If these sites are considered within wider seascapes, however, it seems that some promontory forts were deliberately placed in prominent positions along coastlines to be highly visible from boats sailing the seaways below them, and also to provide their inhabitants with views across near and distant sailing routes. With the emergence in the early medieval period of hostile fleets raiding coastal districts and of trading routes along sea-ways, promontory forts established by local kings could have both monitored and controlled the sea traffic. The impressive promontory fort at Dunseverick, Co. Antrim, is known to have been an early medieval royal site of the Dál Riada, an extended tribal grouping with strong maritime connections between north-east Ireland and western Scotland (Edwards 1990, 4). Dunseverick is situated on a headland on high cliff tops, and the location provides excellent views across the sea towards Rathlin Island, the Inner Hebrides and the south-west coast of Scotland. The nature of the local tides, currents

and winds along the north coast of Ireland also mean that the Dunseverick promontory fort was located on a significant maritime route-way (O'Sullivan, A. and Breen 2007, 111). The promontory fort at Dunbeg, Co. Kerry (Barry 1981), has extensive views across Dingle Bay, and its inhabitants could have watched any coastal traffic moving around the Kerry coast. Not far from Dunbeg, around the end of the Dingle Peninsula, the early medieval monastic site of Reask has produced imported E ware pottery (Fanning 1981, 113). It was probably brought there by Gaulish wine-traders, which would suggest that this area had a tradition of foreign trade. Although the later phase at Dunbeg is slightly later than the seventh-century Gaulish trade that would have brought such E ware, it is also possible that Dunbeg may have usefully dominated the south-west Irish sailing routes between Viking Cork and Limerick in the tenth and eleventh century AD (O'Sullivan and Breen 2007, 113).

Chronology

Early medieval settlement enclosures, in their many forms, present a range of complex evidence for their origins, occupation histories and abandonment. The origins of raths, cashels and crannógs have long been sought in later prehistory. Certainly, there existed Middle and Late Bronze Age settlement enclosures, such as at Cush, Co. Limerick (Ó Ríordáin, S.P. 1940, 176–7); Carrigillihy, Co. Cork (O'Kelly 1951a; 1951b, 84); and that excavated more recently at Chancellorsland, Co. Limerick (Doody 2008a), that are essentially enclosures defined by ditches of palisades similar to raths. Several raths, including Raheenamadra, Co. Limerick (Stenberger 1966); Feerwore, Co. Galway (Raftery, J. 1944); Carraig Aille, Co. Limerick (Ó Ríordáin, S.P. 1949a); and Cahercommaun, Co. Clare (Hencken 1938); have been thought in the past to show evidence for Iron Age construction (Caulfield 1981, 207–11), and an Iron Age origin for raths has also been argued by Limbert (1996). Lynn (1975a, 45; 1975c, 29; 1983b, 48–50), however, provided a strong refutation of the early-origin theories, and an allied defence of early medieval dates, for raths and cashels. More recently, particularly as a result of evidence obtained on archaeological excavations undertaken in advance of National Roads Authority road-building schemes, several 'rath' type enclosures have proven to have solid Iron Age dates for the earliest phases of their ditches (see Corlett and Potterton 2012). Some of these Iron Age enclosures are small and appear to be ring-ditches for burial or ceremonial purposes, there are also some larger ones that could be settlement enclosures.

Nonetheless, it does appear that the 'orthodox view' for rath construction and occupation as being firmly within the early medieval period has largely been vindicated by modern analysis of radiocarbon dates (see Figure 3.7). Lynn (1981–2, 150) has suggested that their construction/primary occupation phase was within the period AD 600–1000, while (Stout, M. 1997, 24) suggested a slightly narrower phase of occupation of AD 600–900. Notwithstanding that dating of any early medieval site can be difficult, such are the vagaries of radiocarbon dating calibration for the mid-first millennium AD (see O'Sullivan, A. *et al*. 2007, 47), this narrower range of dates can be questioned. In the first instance, Stout's calibrated dates are calculated at one standard deviation (1Σ; Stout 1997, 29), implying a probability of date accuracy of 68.8%, rather than the 95.4% probability that can be obtained when calculating at the more acceptable two standard deviations (2Σ). Second, no account is taken

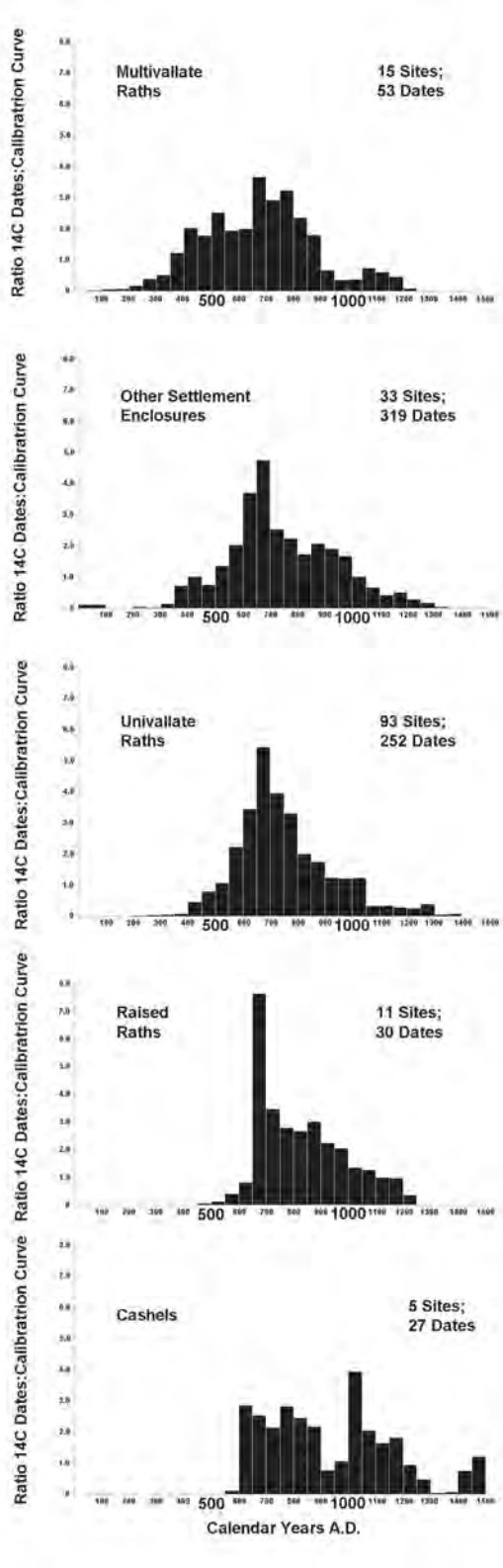

FIG. 3.7—This figure shows the sum of probability curves for radiocarbon dates from the five main early medieval secular site types, after the methodology suggested by Kerr and McCormick (2013). Multivallate raths and 'Other Settlement Enclosures' have produced the earliest dates and have a *floruit* of *c.* AD 400–800; univallate raths are the dominant site type between AD 600 and AD 800; and raised raths and cashels seem to belong to the later part of the early medieval period (although this is based on a low number of sites and dates). (Figure by EMAP.)

of the precise archaeological or stratigraphical context for the dates (for instance, was the charcoal used for the dating process obtained from the lower or upper fills of ditches?), and so the dates may not reflect the construction date of the raths. Kerr (2007, 86–100) has re-appraised the radiocarbon dates more precisely from rath excavations, mostly in Ulster. He concluded that the dating of occupation for the typical univallate and multivallate sites can be refined to *c*. AD 600–850 (2007, 98–9), and that the raised rath, with a mid-eighth to mid-tenth century construction/primary occupation date (2007, 99), has a different chronology from that shared by univallate or multivallate sites. Figure 3.7 illustrates EMAP's recent calibration of radiocarbon dates from 'other enclosures', multivallate raths, univallate raths, raised raths and cashels. As can be seen, all site types sit solidly within the early medieval period. There is a suggestion that 'other settlement enclosures' and multivallate enclosures have earlier origins, potentially before AD 500, and that univallate enclosures are slightly later, but not by much. Raised raths do seem to be later in origin, and continue in use later than the other settlement types.

The rather limited dating evidence for cashels suggest that they have a similar (that is, later) chronology to raised raths, so that their construction is generally later than the main building phase of earthen raths. The cliff-edge cashel at Carraig Aille, Co. Limerick, has been argued to be of Late Iron Age date because of the presence there of Late Roman artefacts (Caulfield 1981, 208–9); the early material from the site, however, probably belonged to pre-cashel occupation deposits (Lynn 1983b, 48–9). The cashel settlement probably dated from between the eighth and eleventh century (Ó Ríordáin, S.P. 1949a, 108), and most of the finds support this claim. Based on the souterrain 'integrated with the wall of the fort' (souterrains *usually* date to the latter part of the first millennium AD) at the cashel of Cahercommaun, Co. Clare (Hencken 1938, 34), a construction date in the eighth/ninth century could be expected for this site. The excavator suggested an early ninth-century date for the site on the basis of a silver pennanular brooch find (Hencken 1938, 2). A later significant re-appraisal of the metal artefacts from the site, however, identified objects dating between the fifth/sixth and eighth century, in addition to the ninth-/tenth-century material (Ó Floinn 1999, 73–9). A similar ninth-/tenth-century date could be ascribed to the cashel at Rinnaraw, Co. Donegal. This site contained a rectangular house with rounded corners (possibly Norse influenced), and radiocarbon dates suggest that the 'main phase of activity… dates to the ninth century' (Comber 2006, 107). William O'Brien's (2012) archaeological excavations of a stone-built, circular enclosure at Site A, Barrees Valley, in the Beara Peninsula, Co. Cork, revealed that this structure was built and used in the later Iron Age, possibly the first or second century AD. O'Brien (2012, 210–11) noted that, in size and form, the Barrees Valley eclosure is unlike early medieval stone cashels, and he also suggested that its function was unclear—as an open-air enclosure, it could have had a ceremonial role, as a 'setting for certain activities' unknown.

There is growing evidence for occupation of both raths and cashels in the later Middle Ages in the west and north-west of Ireland (see Rynne, E. 1964; O'Conor 1998, 73–94). Most recently, such a date of occupation has been argued for the cashels, *cathair* and raths of the Burren in Co. Clare (FitzPatrick 2009, 277–83). A few radiocarbon-dated cashels suggest high medieval phases of actual construction and occupation; for example, archaeological excavations at Caherconnell, Co. Clare,

identified primary occupation between the tenth and early-thirteenth century AD, with radiocarbon dates suggesting that the cashel was built 'sometime between the early tenth and the mid-twelfth centuries' (Comber and Hull 2008, 31). White Fort cashel at Drumaroad, Co. Down (Waterman 1956a), contained a single rectangular house with associated souterrain; and finds included a large quantity of souterrain ware and an iron coulter, suggesting a date of the 'latter part of the first millennium A.D.' (Waterman 1956a, 86). An early radiocarbon date of charcoal from the house suggests a date of between the tenth and thirteenth century (Kerr 2007, 91; McAuley and Watts 1961, 36), while the coulter may well also be indicative of a post-tenth-century AD date (Brady 1994a, 1994b). The chronology of cashels, based on structural typologies, artefacts and radiocarbon dating, thus suggests that the main phases of construction and occupation of some post-date most raths. It is notable, however, that an early medieval stone cashel with a burial ground, or settlement-cemetery, at Owenbristy, Co. Galway, seems to have been built and occupied between the 'fifth and the tenth century' (Delaney and Silke 2011, 107). This site may in fact have been an ecclesiastical enclosure, as a church can be tentatively identified there (see Chapter 4 below). Similarly, an early medieval cashel at Coolagh, Co. Galway, also seems to be firmly within the conventional dating range of raths, from the seventh to the ninth century AD (Hardy 2011 220). Finally, we could also draw attention to a cashel at Carnmore West, Co. Galway, which might be dated to the sixth to eighth century, although there is a suggestion in the radiocarbon dates and the finds evidence for occupation into the 'high medieval period at least' (Sutton 2011).

Various other types of settlement enclosure, non-circular or irregular in shape, or the type known as settlement-cemeteries, that were excavated in the 2000s have now also been well dated. A few show mid-first millennium dates, for example a radiocarbon date of AD 430–650. was obtained from charcoal from a pit that contained souterrain ware at Balriggan, Co. Louth (Delaney, S. 2010, 99); while radiocarbon dates and imported seventh-century E ware suggest a sixth-/seventh-century origin for an extensive early medieval settlement and agricultural complex at Roestown, Co. Meath (O'Hara 2007; 2009a). At Ballynacarriga, Co. Cork, a number of roundhouses set within rectilinear fields (Noonan 2001:0115) have also produced radiocarbon dates from the fifth to seventh century onwards. A small early medieval enclosure at Conva, Co. Cork, was dated to 'between the early sixth and late ninth centuries A.D.' (Doody 2008b, 604). Provisional dating evidence suggests that the majority of these variously shaped settlement enclosures were constructed and occupied in the latter half of the first millennium AD, for example Killickaweeny, Co. Kildare (Walsh 2008, 31; Walsh 2011), and Ballycasey More, Co. Clare (Murphy 2001:045; O'Neill 2002:0079), have radiocarbon dates from the seventh/eighth century through to the tenth century. The material culture from sites such as Cahircalla More (Taylor 2004:0141) and Ballyconneely (Breen 2000:0047), both in Co. Clare, also appears to place these sites to the latter part of the first millennium AD.

This late-first millennium dating is further supported by the presence of souterrains (see above) integrated at a large number of sites, including Roestown, Co. Meath; Ballynacarriga, Co. Cork; Ballywee, Co. Antrim (Lynn 1988b); and Rosepark, Co. Dublin (Carroll 2008, 72–94). Many of these sites showed evidence for multiple phases of continuous occupation, although ironically, Newtown, Co.

Limerick, the type-site for 'plectrum-shaped' enclosures, was found to have only one principal phase of occupation (Coyne and Collins 2003). The radiocarbon dates from Newtown are rather imprecise—a date of AD 700–1015 (2Σ) was returned for the foundation trench of the house, and a date of AD 797–1280 (2Σ) for the central post—and it is argued that the ditch of the enclosure was back-filled sometime between the eleventh and the thirteenth century AD (Coyne 2006a). A small number of sites, such as Roestown (O'Hara 2007, 2009a), Castlefarm (O'Connell 2006; 2009a), Raystown (Seaver 2005b; 2006; 2010) and Ninch (McConway 2002), all in Co. Meath, show evidence for having been occupied through the latter part of the first millennium and into the high medieval period. The radiocarbon dates from most of these settlement enclosures, however, appear to cluster *c*. AD 700–*c*. AD 1000 (Kinsella 2010, 106–11). Few early medieval 'palisaded enclosures' have been identified, and these do not show any recognisable chronological pattern. The palisaded enclosure at Aghadegnan, Co. Longford (Carroll 1991:091), developed into a rath in the fifth/sixth century, whereas the palisaded enclosures at Ballynagallagh, Lough Gur, Co. Limerick (Cleary 2006), and Lowpark, Co. Mayo (Gillespie and Kerrigan 2010), were occupied from the eighth century onwards.

The chronology of crannógs has largely been understood through the analysis of evidence from archaeological excavations, artefactual studies and, latterly, radiocarbon and dendrochronological dating studies. It has long been known that crannógs as a site type could be dated to the Bronze Age, early medieval and late medieval periods. In addition, however, Mesolithic and Neolithic wetland occupation mounds built of stone, peat and wood and placed at the edges of midlands lakes—essentially small, un-palisaded crannógs—have been discovered at Moynagh Lough, Co. Meath, and Lough Kinale, Co. Longford (Bradley 1991; Fredengren 2002b; O'Sullivan, A. 1998a). It is clear, therefore, that some crannóg sites had late-prehistoric origins, while others remained in use until (or were re-used in) the seventeenth century (see O'Sullivan, A. 1998a). Dendrochronology suggests an intensification of crannóg construction in the seventh century (Baillie 1979, 79), making the 'typical' early medieval crannóg synchronous with the primary occupation of univallate and multivallate raths. In the 1980s the emerging dendrochronological dates for crannógs in Ulster and Lynn's (1983b) influential paper on 'early crannógs' led to the widespread view that crannógs—in the narrow definition of palisaded islets of stone, earth and timber—were first constructed in the early medieval period, and were distinctively different from Bronze Age lakeshore settlements. Aidan O'Sullivan (1998a, 131–3), however, noted that the distinction between Bronze Age lake dwellings and early medieval crannógs was not always apparent in the archaeological evidence. Christina Fredengren's (2002a, 94, 103) radiocarbon dating of crannógs on Lough Gara, Co. Sligo, has clearly shown that the classic crannóg type—a small palisaded islet in open-water—was certainly being built in the Late Bronze Age, the Early Iron Age, the early medieval period and the late medieval period. Although there remains a substantial hiatus of evidence between the Early Iron Age and the early medieval period—that is, *c*. 300 BC–AD 400—archaeological excavations at Coolure Demesne crannóg, on Lough Derravaragh, Co. Westmeath, revealed a multi-period crannóg on which an oak palisade was constructed AD 402±9, that is, in the Iron Age/early medieval transition (O'Sullivan *et al*. 2007, 41). Nonetheless, it is clear that the most intensive phases of crannóg building, occupation

and abandonment were within the early medieval period, particularly between the sixth and the eleventh century AD (Baillie 1979, 79). Crannógs were, however, certainly built and re-occupied in the later Middle Ages, variously being used as Gaelic Irish lordly sites, prisons, ammunition stores and as places to keep silver and gold plate (O'Sullivan, A. 2001b). Some smaller, late medieval crannóg islets and platforms may have been peasant seasonal dwellings, or refuges for the poor, or hideouts for outlaws; and documentary sources suggest that some may have been used as late as the eighteenth century (O'Sullivan, A. 1998a, 167–76).

Promontory forts can potentially be dated to the Late Bronze Age, the Late Iron Age, early medieval and late medieval periods. The 40-acre coastal promontory fort at Drumanagh, Co. Dublin, is thought to be sub Roman Iron Age on the basis of Samian Ware discovered in plough-soil (Raftery 1994, 208) and the known recovery there of Roman objects by treasure hunters (O'Sullivan, A. and Breen 2007, 106). *Chevaux de frise* are recognised in Iron Age defensive structures in Iberia (Raftery 1994, 61), and this has led to the suggestion that coastal promontory forts with similar defences in Ireland, such as, Dun Dubhcathair on Inis Mór, Co. Galway, or at the archaeologically excavated site at Doonamo, Co. Mayo (Casey 1999), may also be of similar date (although excavation at the latter site produced no dating evidence). *Chevaux de frise*, however, are not necessarily an indicator of Iron Age date, since they are also present at the cashel at Ballykinvarga, Co. Clare, which is likely to be early medieval in date (Comber and Hull 2008).

Excavations on Dalkey Island, Co. Dublin, revealed not only prehistoric activity on a headland at its northwest end (Liversage 1968), but also an early medieval trading station and evidence for the construction of a promontory fort with simple shelters, midden material and extensive evidence for imported fifth- to sixth-century Mediterranean pottery and sixth- to seventh-century pottery (E ware) and glass (Liversage 1968, 179–81). A possible inland promontory fort at Knoxspark, Co. Sligo, was originally argued to be Iron Age in date (Mount 1994, 23), but more recently the excavator has stated that the construction date of the bank-and-ditch occurred 'some time before AD 668–870' (Mount 2010, 204). The site clearly spans multiple phases, possibly having its origin in a cremation cemetery associated with a stone cairn, and finishing up as an inhumation cemetery, with one such burial radiocarbon dated to AD 724–961 (2Σ; Mount 2010, 203). There was also evidence for 'a number of surviving oval hut platforms', as well as 'large quantities of butchered animal remains, iron tools and nails, and vast quantities of iron smelting slag and furnace bottoms' at Knoxpark (Mount 1994, 23). The enclosure bank overlies two inhumation burials (Mount 1994, 23), and this may suggest that the enclosure, internal house platforms and evidence of industrial activity all belong to the early medieval period, perhaps to a settlement with a burial ground. Kelly (2009) has also suggested that Knoxpark was in fact, a Viking *longphort*.

The site of Dún Aonghusa, on Inis Mór, Co. Galway, could be interpreted as a cliff-top fort, with its internal stone-cashel-like enclosure at the edge of the cliff, datable to the early medieval period. Although the majority of the activity on the site appears to have occurred during the Later Bronze Age (Cotter 1996, 14; 2012), there was also extensive evidence of early medieval activity, including houses and human burials, and probably a building up of the impressive internal 'cashel' enclosure wall

(Cotter 1994; 1995b, 2012, 279–93). While a Late Bronze Age date was returned from a shallow ditch that partially underlay the early medieval stone rampart at Dunbeg, Co. Kerry (Barry 1981, 307), a series of radiocarbon dates suggest that the site was occupied from the ninth to the eleventh century AD, a date supported by the presence of a souterrain on site (Barry 1981, 311). Excavations at Larrybane, Co. Antrim (Childe 1936; Proudfoot and Wilson 1961–62), suggested that the promontory fort there was constructed in the early medieval period. The excavators at Larrybane suggested that the site was constructed *c*. AD 800 (Proudfoot and Wilson 1961–62, 107), and this general date is supported by the presence of souterrain ware in the primary habitation layers (Proudfoot and Wilson 1961–62, 93).

Cultural biographies and occupation histories: construction, use and re-use

Within this broad chronology of early medieval Irish settlements, the archaeological evidence can be used to map patterns of construction, use, repair and abandonment; to trace the shifting social and cultural meanings of settlements across time. It is apparent that the early Irish, with their fascination with place-lore, ancestry and tradition, often constructed settlements on prehistoric sites. At Lisleagh I, Co. Cork, pre-rath activity consisted of hearths, stake-hole alignments, artefacts, pottery and stone, all possibly dating to the Bronze Age (Monk 1995). At Lisanisk, Co. Monaghan, an early medieval rath was located on ground previously used for Neolithic and Late Bronze Age activity (Coughlan 2011b). A rath was also built on the site of a Bronze Age 'village' at Corrstown, Co. Londonderry (Conway 2002:0386; Conway 2002:0387). Excavations on the rath at Carrowkeel, Co. Mayo (Zajac 2002:1382; Zajac 2003:1307), revealed an earlier ditched enclosure, with ritually deposited Neolithic pottery (Zajac 2011). At Carrigaline Middle, Co. Cork (Sherlock 2001:130), excavations revealed an earlier ditch truncated by the rath ditch, enclosing the cremation burials and funerary pyres of a prehistoric cremation cemetery. A settlement at Cappydonnell Big, Co. Offaly, was located on a site which had previously served as an Early Bronze Age cemetery, a Late Bronze Age barrow and a location for an Iron Age cremation burial (Coughlan 2011a). And as we have seen, crannógs too were often built and occupied over prehistoric lake settlements, as at Coolure Demesne, Co. Westmeath (O'Sullivan, A. *et al*. 2007), and Moynagh Lough, Co. Meath (Bradley 1991). Some cashels also show the re-use of an earlier site, for example, extensive prehistoric material was discovered at Cahercommaun Fort, Co. Clare (Hencken 1938).

An increasing number of early medieval sites seem to have been preceded by some kind of Iron Age activity (see Corlett and Potterton 2012 for emerging Iron Age settlement evidence). Radiocarbon dates from the foundation trenches of three circular 'huts' in the interior of a rath at Lislackagh, Co. Mayo (Walsh, G. 1995, 7–8), suggested occupation phases ranging from 200 BC to AD 200. The size of the 'huts'—all less than 5m in diameter—may also suggest that they represent the remains of Iron Age ring barrows, rather than Iron Age habitation sites. The excavation did, however, uncover glass beads, lignite bracelet fragments and a bronze stick pin—all of which are typical of the early medieval period. The potential gap of three/four centuries in occupation between the Iron Age and early medieval period weakens the argument for continual habitation of the site at Lislackagh. At Cloongownagh, Co. Roscommon (Henry 1999:765), an unenclosed Iron Age settlement dating from

the first to the fourth century AD was later enclosed and developed into a rath. In addition, it seems that a small number of raths may have evolved from pre-existing palisaded enclosures. The best example is found at Aghadegnan, Co. Longford (Carroll 1991:091; Kerr *et al*. 2010, 397), where the earliest phase of occupation was marked by a series of unenclosed, round 'structures', presumably houses. This developed into an early medieval palisaded enclosure, which, in turn, was replaced by a later rath. Radiocarbon dates from Aghadegnan imply a continuity of settlement from the fifth to the tenth century (Kerr 2007, 88). A similar progression has been argued for Coolcran, Co. Fermanagh, where stake-holes 'may have formed a perimeter fence in an enclosure that predated the rath' (Williams 1985a, 71).

On some early medieval sites, there seems to have been a deliberate re-use of earlier monuments, possibly as a claim to a place of some ancestral or ideological importance. It has been argued that the builders of the early medieval cashels within the ramparts of the Late Bronze Age hillfort at Mooghaun, Co. Clare, 'were positioning the forts in order to support a historic claim to the hillfort' (Grogan 2005, 126). A similar desire to enforce an ancestral claim doubtless encouraged the kings of Northern Brega to construct their rath over the passage tomb at Knowth, Co. Meath (Eogan 2012, 698–700, 751–5). Whereas there was a clear break in occupation at both Mooghaun and Knowth, continuity of settlement and, by implication perhaps, continuity of political power, occurred at Clogher, Co. Tyrone (Warner 1973, 6), where the late prehistoric hillfort was succeeded by an early medieval rath.

Mytum has argued that once they had been settled in the early medieval period, most raths operated for a relatively short period of time, with occupation 'perhaps to be measured in decades rather than centuries' (1992, 13). In contrast, an early Irish poem lists seven successive owners of the rath at Rathangan, Co Kildare (Stout 1997, 115; and see Plate I.II in Chapter 1 above), which suggests an occupation span of two centuries or slightly more. Excavations in the 1990s and 2000s have produced abundant evidence for raths being occupied over long periods of time, and also for them being re-modelled to deal with changing political, economic and social challenges. Most settlements would have waxed and waned in keeping with the changing fortunes of households, as families prospered economically, or suffered through famines, disease epidemics and the impact of war. Some sites may not have been occupied for more than a couple of generations. At a rath at Curraheen, Co. Cork, there was 'a single phase of construction and use of this site, occurring over a few generations in the seventh century AD' (Danaher 2011, 126).

On other sites there is clearly evidence for multi-phase activity. Morphological or typological changes to the enclosure, and/or reorganisation of the interior, are clear indicators of multi-phase activity. Such evidence is apparent on a number of sites, such as at Kiltrough, Co. Meath (Gallagher and Bailey 2011), or the settlement-cemetery at Raystown, Co. Meath (Seaver 2006). At Twomileborris, Co. Tipperary, a series of early medieval enclosures succeeded each other, changing in 'form dramatically over time' (Ó Droma 2008, 51). Enclosure B was plectrum-shaped, datable to AD 400–560. A small 'ringfort', Enclosure A, was then constructed over the remains of Enclosure B. The ditch of the ringfort was dated to AD 677–774. This may have been associated with some burials. In the third phase, the ringfort was enhanced and a much larger enclosure, Enclosure C, was built beside it. This was the location

for a range of industrial activities (Ó Droma 2008, 51–5; see also Figure 3.8). An early medieval enclosure complex at Lowpark, Co. Mayo, revealed a similar pattern of ditch digging and palisade building, and a fascinating history of use across time (Gillespie 2011b; Gillespie and Kerrigan 2010; see also Figure 3.9). At Lisleagh I, Co. Cork, an earlier univallate rath was razed and replaced by a substantially larger

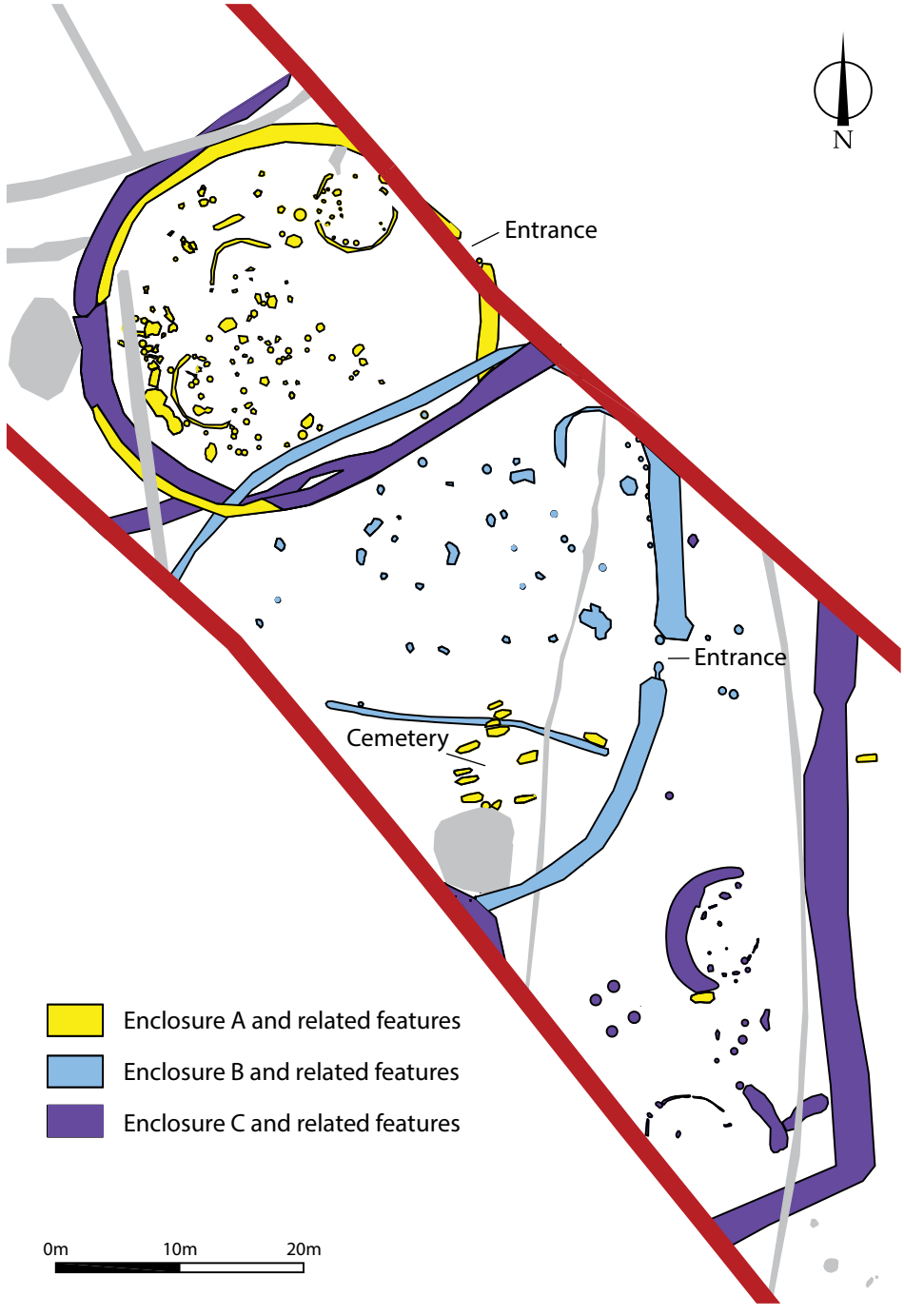

FIG. 3.8—Early medieval settlement enclosures complex at Twomileborris, Co. Tipperary; the earliest enclosure was Enclosure B, a 'plectrum-shaped' enclosure, with its lowest ditch fills dated to AD 400–560, which when abandoned was used for burials. This phase was succeeded by Enclosure A, a 'ringfort' with lowest ditch fills dated to *c.* AD 677–774. Enclosure C phase sees an enhancement of the ringfort and its use as part of a much larger rectangular enclosure. (Figure © Valerie J. Keeley Ltd (VJK), and reproduced by permission of VJK and the National Roads Authority; from Ó Droma 2008, illus. 7.)

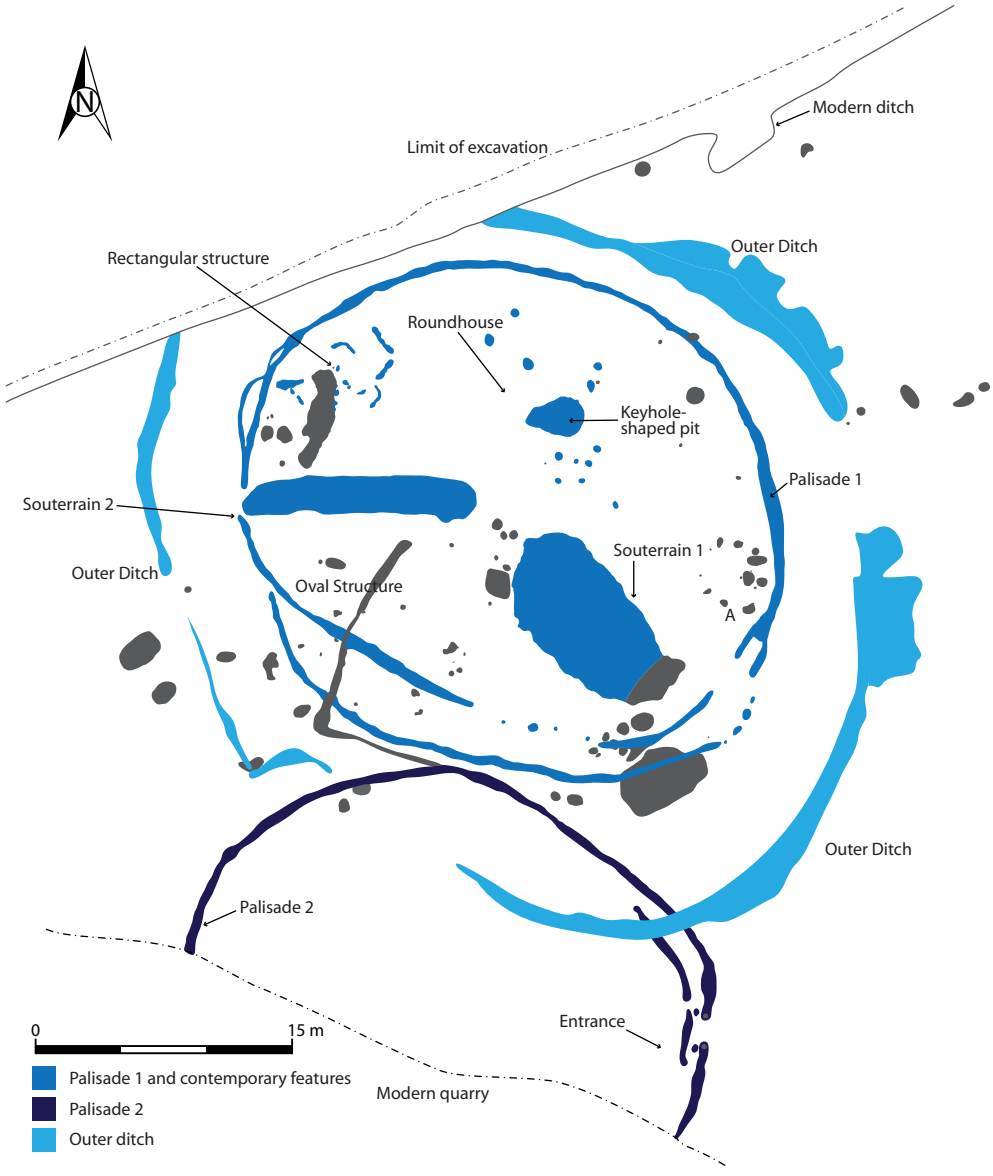

FIG. 3.9—The early medieval palisaded and ditched enclosure complex at Lowpark, Co. Mayo, illustrating the palisade enclosures, ditches and locations of round, rectangular and other structures, as well as souterrains and pits. (Figure reproduced by permission of Mayo County Council and the National Roads Authority; after Gillespie 2011c, fig. 4.35.)

bivallate structure (Monk 1995, 106). In the few excavated examples for which there is evidence that univallate raths were altered to form bivallate raths, this occurred by the addition of an external circuit of bank-and-ditch. At Rathgurreen, Co. Galway, however, a secondary bank-and-ditch was constructed within the earlier enclosure (Comber 2002, 145; 150). Long-term occupants of raths also appear to have built upwards, as well as outwards. At Rathmullan, Co. Down (Lynn 1981–2), Deer Park Farms, Co. Antrim (Lynn 1988e), and Gransha, Co. Down (Lynn 1985), for example, the initial univallate rath developed into a raised rath. At Deer Park Farms there was continuity of occupation: from an initial ring-ditched enclosure in the seventh century, to a small rath phase occupied at about the eighth century, and on through multiple phases of occupation of a raised rath from the late-eighth to the eleventh

century, ending with a flat-topped mound into which souterrains were built (Lynn 1988e, 47; Lynn and McDowell 2011).

The origins, use and abandonment of settlement enclosures

Why did people start to build and occupy settlement enclosures such as raths, cashels and crannógs at the start of the early medieval period? As Chris Lynn (2005, 16) put it, 'why during the seventh and eighth centuries did raths spread like a rash all over the landscape?' Mytum (1992, 46) argued that the arrival and establishment of Christianity in Ireland in the fifth and sixth century brought with it an 'ideological package', which included a new perception of social groups and a changed attitude to land ownership. He further contends that this led to communal ownership giving way to individual land ownership, which in turn gave rise to a 'sense of place and commitment to their property that was different to that held under communal ownership' (Mytum 1992, 46). With the movement to smaller units of ownership, he argues, settlement became more dispersed, with each settlement structure 'being smaller and accommodating individual family units' (1992, 47). Lynn (2005) did not see a connection between the arrival of Christianity, and any associated putative social or economic change, and the proliferation of the rath. Although the early Irish laws indicate that some land was held as *fintiu* 'kin-land' (see Kelly, F. 1988, 100–1), there is no particular evidence that the concept of private land ownership was a consequence of the arrival of Christianity.

Neither is there evidence for population intrusions, or for a different, more violent form of warfare that might provoke the construction of defended settlement enclosures. From an exploration of the annalistic evidence, Lynn (2005, 17) has suggested that what was different was the series of plagues and pestilences that struck at this time; these are generally regarded as having resulted in widespread mortality. He contends that the nobility attempted to quarantine themselves against these afflictions: 'it may be that the construction of crannógs and "duns" of the elite was in part triggered by fears arising from the first plague [Justinian] of the 540s'. He continues:

> the construction of the commoner rath of the landholding, farming class may have been delayed while a social reorganisation resulting from the decimation of the population by the first plague took place...or it could be that the main stimulus for rath construction by the free farmers had to await the second major outbreak of plague in 664 (Lynn 2005, 17).

Lynn felt that plague provided the catalyst for constructing defences against unwanted intruders but that at a later stage these defences came to demonstrate and represent status, with their circular form perhaps 'copying the sacred form of ecclesiastical or talismanic purposes and to invoke divine protection' (2005, 17).

The principal evidence for Lynn's hypothesis is the coincidence between the main period of ringfort building activity and the incidence of severe plague in Ireland.

Charles-Edwards (2000, 152–3) noted that while plagues inevitably cause a sudden fall in population, the population can also recover rapidly if the average age at marriage falls. He suggests that it is therefore possible to reconcile 'the general evidence for increased settlement and economic activity…with the outbreaks of plague' (Charles-Edwards 2000, 152–3). Keys (1999) also highlights a connection between plague in Ireland and the genesis of the rath. He argues that political instability caused by the sixth-century plagues in particular led to an escalation of political violence, and indeed he attributes the rise of the Uí Néill hegemony to opportunities for expanding power and influence that emerged at this time. As a response to the decline in security, he believes that 'from the mid-sixth century onwards, even the lowest of farmers began to construct defenses around their relatively humble homesteads…typically they would build small stone ramparts or earthen enclosures around their farms—mainly in order to protect themselves and their livestock in troubled times' (Keys 1999, 135). He further notes that of the fourteen crannógs that had been dated by dendrochronology at the time he was writing, nine 'were built in the period 550–620 (Keys 1999, 321). This once again emphasises the coincidence of the construction of defensive settlements in times of plague.

It remains unclear, however, exactly how important the enclosing features were in terms of defensiveness. Certainly, warfare and political turmoil was a regular facet of early medieval society in Ireland, and the annals list numerous raids, battles and violent deaths every year. Yet, although there are certainly some early medieval raths with defences that are so prominent and impressive that they clearly had some strategic and ideological role (see Plate III.IX), most raths and cashels were not primarily military fortifications. Since the earliest antiquarian investigations, the problem in seeing them as fortresses has been understood. Molyneux (1725, 209) stated that the smallest sites 'are so low and of such strait dimensions they could not possibly receive a number anyways considerable to form a garrison, but rather seem designed for habitations only and the dwellings of single families'. He also suggested that the small raths in Co. Down developed a form of defence in depth since 'they lie so close together that for many miles they stand in fight and call of one another'. A similar argument was made for the disposition of the 'Danish forts' in Co. Londonderry: 'they are all so disposed so as that a fire, kindled in one, may be seen to the next on either side' (Sampson 1802, 499).

More recently, Mallory and McNeill (1991, 196–8) have noted that rath entrances were almost invariably poorly designed for defensive purposes; that the general absence of a strong fence along the crest of the bank greatly compromised their defensive potential; and that the ditch design was poor: 'the front slope of the bank and sides of the ditch were constructed at quite shallow angles, not the steep sides that we expect for defences' (Mallory and McNeill 1991, 198). Furthermore there is little evidence that the ditches were routinely cleaned after inevitable silting of material into them, a process that would be necessary to maintain any defensive purposes that the banks and ditch may have had. Mallory and McNeill further contend that multiple banks-and-ditches are no more effective as defensive structures than is a solitary bank. To be defensively effective, they note that 'the inner [enclosure] should overlook the outer ones so that they do not obstruct the defender's vision

Pl. III.IX—The impressive, defensive enclosing ditch at the early medieval Baronstown ringfort, Co. Meath. (Photograph by Studio Lab; reproduced by permission of Archaeological Consultancy Services Ltd and the National Roads Authority.)

or fire; if they are to be used in succession; it has to be possible to fall back from the outer to the inner' (1991, 198). Finally, they point out that:

> the perimeter of a rath thirty metres in diameter is about 100 metres long; this is a long way for single family, who we think lived in a rath, to guard without help; if the idea was that their neighbours all rallied round to help defend what was in effect a communal fortress, we would expect fewer of them and that they would be in more impressive defensive sitings (Mallory and McNeill 1991, 198).

A reappraisal of the defensive capabilities of early medieval settlements was produced by Lyttleton and Monk (2007). Their argument that raths are 'defensible' if not 'defensive' does not radically diverge from the views expressed by Mallory and McNeill above. McCormick (1995a, 34) and McCormick and Murray (2007, 109–10) have suggested that the primary aim of these enclosures was defensive in one particular way: to protect cattle, which were the basis of wealth at this time. The objective of cattle-raiding was to steal cattle while not unnecessarily endangering those participating in a raid or attacking a population (McCormick and Murray 2007, 110). Thus, bringing the livestock into the rath if there were the danger of a raid may have been an effective preventative measure to guard against their loss.

The chronology of settlement enclosures indicates that there was no gradualist evolution of the monument type—they did in fact appear at a particular time, the sixth to seventh century AD. McCormick (1995a) argues that the genesis of the rath was related to the emergence of advanced dairying techniques at the beginning of the early medieval period. Advances in dairying would have led to greatly significant increases in food production, which would in turn have facilitated population increase. Cows and dairying would have suddenly become central in the agricultural economy. Those who owned cattle 'began to develop an elevated social and economic position' (1995a 35), ultimately leading to livestock becoming the basis of the wealth system of the period. McCormick concludes 'this may be a period [the sixth–seventh century] when the growing stress of population on the demand for land, accompanied by increasing cattle raiding, led to the development of the rath' (1995a 37).

Other factors have also been argued for the emergence of enclosures in Ireland around the sixth century. It has been suggested that they represented 'carefully defined social spaces' (O'Sullivan, A. and Nicholl 2011, 66), designed to reflect the distinctive identity of their occupants and to protect their property and privacy. O'Sullivan and Nicholl (2011) suggest that we should envisage enclosure features as being social or ideological architecture as much as they are defensive elements, in that they separated the domestic space of the household (the *muintir*) from the kin-land (*fintiu*) of the wider community. This seems to have been accepted and enforced in the contemporary legal structure. It has been noted, for example, that the law tracts promoted a sliding-scale of reparations for the violation of the law of hospitality, depending on whether this took place in the house, in the rath enclosure, in the area adjacent to the rath (*faithche*) or in the outfield (*sechtar faithche*) (Ó Carragáin 2010b, 220).

The decline of raths

If the appearance of raths in the Irish landscape remains a subject of debate, there is even less agreement on the timing of the demise of the rath. The radiocarbon dating evidence suggests that there were two major declines in the occupation of univallate and multivallate raths—the first *c.* AD 800, and the second *c.* AD 1000. The start of the ninth century seems to mark the end of the major phase of rath construction and occupation; and by the end of the millennium it would appear that univallate and multivallate raths were in decline, had been abandoned, or at least were not being newly constructed. If the plague origins argument has any validity, it is possible that rath construction went into decline because of a failure to halt the spread of subsequent diseases. It is also possible that the decline in rath construction was connected to a move away from the earlier cattle-based socioeconomic system (Kerr 2007, 114–15). This change in the socioeconomic circumstances may have been a result of increased arable acitivity and an inherent change in the way in which land was perceived and worked (see, for example, Kerr 2009, 74); it may have been a result of the influence of the Viking silver economy, or the increased value of human chattels; or it may have been a result of population expansion, which meant that it was impossible to maintain individual social status based upon the numbers of cattle owned (Lyttleton and Monk 2007, 18).

Despite all the data available to support these theories, however, it is still unclear when early medieval settlement enclosures were actually abandoned as a settlement form. The phenomenon of abandonment may in fact have differed regionally, and even locally. It is likely that while some sites were abandoned because of islandwide social and ideological changes, some raths and cashels—particularly in the west and north-west—remained to be occupied through the late Middle Ages and into the early modern period. In the past, some archaeologists, historical geographers and historians suggested that in Ireland there was a shift *c.* AD 800 onwards from social organisation based around reciprocity and clientship to a system of labour services due to a lord that would be indicative of proto-feudalism (Graham 1993, 44; O'Keeffe 2000, 26; Kerr 2009, 74). This model proposed that raths were abandoned due to actual population relocation within new territorial frameworks under lordship control (O'Keeffe 2000, 26), and that such societal reorganisation may have necessitated the emergence of the central, lordly 'fortress' (Graham 1993, 44). O'Keefe (2000, 26–9) argued for the emergence of nucleated settlements around these 'fortress' sites, which, in the Gaelic Irish historical sources as early as the tenth century are referred to as *longphort, daingen, dúnad* or *dún*, while in the early-twelfth century they are referred to as *caistél* or *caislén.* A number of potential sites have been mooted as potential *caislén* sites, for example *Caistel Duin Leodha* at Ballinasloe, Co. Galway; *Dun Echdach* (Duneight) and the English Mount, Downpatrick, both in Co. Down; pre-Norman fortifications at Dunamase, Co. Laois, and Limerick; and the destroyed fort at Dun Mór, in Galway. There is some similarity in form between these sites, for example both Duneight and Dun Mór are large, flat-topped mounds, and the site at Downpatrick consists of a raised central mound enclosed by a large bank. However, there is no clear evidence for the emergence of nucleated settlements around a lordly fortress, and it is also the case

that some settlement enclosures were being inhabited into the tenth, eleventh and even twelfth century AD.

On the other hand, in the south-east and east of Ireland it is fairly clear that most settlement enclosures had been abandoned by the eleventh or twelfth century. Interestingly, with the establishment of the Anglo-Norman colony in the-late twelfth century, there was still a desire to usurp the location of earlier powerbases, as can be seen by the fact that a number of early medieval raths were converted into Anglo-Norman mottes in the late-twelfth/early-thirteenth century (Ó Drisceoil 2002). The rath at Béal Ború, Co. Clare, identified as a defended settlement that was destroyed by Toirdelbach Ua Conchobhair in AD 1116 (O'Keeffe 2000, 21), was remodelled by the Anglo-Normans in AD 1207 (O'Kelly 1962, 3); and excavations at Dunsilly, Co. Antrim (McNeill 1991–92), show evidence for a pre-rath phase, a rath phase and a phase in which the rath was converted into a motte. Another univallate rath that was converted directly into a motte was excavated at Killybegs Road, Antrim (McSparron 1998:002), while the eighth–ninth-century raised rath at Rathmullan, Co. Down, was further heightened in the twelfth century and turned into a motte (Lynn 1981–82, 148–50). After that, it seems that many raths and cashels in regions under Anglo-Norman control started to be forgotten, whilst in the Gaelic Irish controlled regions of the country they continued to be used as significant places of residence and occupation.

The social and ideological roles of early medieval settlement enclosures

Early medieval settlement enclosures—raths, cashels, crannógs and other enclosure types—were clearly hugely significant places in people's lives. Archaeological excavations have revealed that they were the locations for houses, workshops, stores, pathways, cobbled areas and middens, all situated within the enclosed space defined by earthen banks and ditches, stone walls or wooden palisades (Edwards 1990; O'Sullivan, A. 1998a; Fredengren 2002a, Edwards 2005). Early Irish historical sources, laws, saints' *Lives* and narrative literature also illustrate how they were the places where the household slept, worked on crafts, ate food, gathered for social occasions and extended hospitality to their wider kin and neighbours—and thus were key venues for the enactment and negotiation of social identities of kinship, gender, age and status (O'Sullivan, A. and Nicholl 2011). Traditionally, archaeologists interested in early medieval settlement have tended to focus on site morphology, size, distribution and siting, with less attention being paid to domestic life and practice that can be revealed through excavation. These are issues that more often have been explored by early Irish historians (see, for example, Kelly, F. 1988, 1997; Ó Corráin 2002). This ignores the potential of the archaeological evidence to illuminate such matters as household organisation, community life and the roles of kinship and gender relationships in the household economy, issues that involve:

> the basic tasks of daily life that regulate and stabilize social life. They mainly involve care giving, feeding and food processing, weaving and cloth manufacture, hygiene, public health and healing, socialization of children and the fitting out and organisation of related spaces. (Monton-Subias and Sanchez-Romero 2008).

It is clear, then, that to gain a proper understanding of early Irish society, we need to look at domestic life and practice within early medieval settlements.

Early medieval Irish society was particularly structured around some key principles of kinship, social class and hierarchy (Kelly 1988, 1997; Charles-Edwards 2000). Early Irish laws from the seventh and eighth century describe such social grades as the *rí* 'king'; the *flaith* or *aire* 'lord'; and the *aire coisring*, *fer fothlai*, *mruigfer*, *bóaire febsa*, *aithech arathreba a deich*, *ócaire* and *fer midboth* (all of whom are types of free commoner). The Irish law tracts *Críth Gablach* (Law of Status) and *Cáin Aicillne* (Rules of Base Clientship) describe a formalised society with an extremely structured hierarchy. These early laws record three grades of king (Kelly 1988, 17–18); four (or five) grades of nobility (*flaith, aire déso, aire echtai, aire ard, aire tuisi* and *aire forgaille* (Richey 1879, 321; MacNeill 1923, 296; Kelly 1988, 28)); and five (or six) grades of free, independent farmer (Patterson 1994, 366–7).

The old Irish law tract *Críth Gablach* (dating from *c.* AD 700) describes the three main categories of free commoner as the *bóaire* 'cow freeman', *ócaire* 'young freeman' and *fer midboth* 'man of middle huts'. The *bóaire* grade also included, for example, the *mruigfer* 'landman', who owned his own land and plough. The *ócaire* was a lower grade of freeman who rented his small farm from his lord. The socioeconomic relationships of clientship between lord and client farmer involved the granting of fiefs of land, livestock or farming equipment, in return for a *bés tige* 'annual food rent' of calves, meat, grain, dairy produce, winter hospitality (involving the preparation of a feast by clients for their lord(s) during the winter months), labour services or, occasionally, military services. It is generally thought that social change was to lead, by the eleventh or twelfth century, to the emergence of one general commoner class called *bíatach* 'food providers', though this is not entirely clear. The eighth-century sources also describe semi-free grades, such as the *fuidir* 'tenants at will', *bothach* 'cottiers' and *sencléithe* a type of 'hereditary serf', who worked on their lord's land in return for material goods and legal protection. Finally, there were probably large numbers of fully unfree slaves (*mug* for males, *cumal* for females), who possessed no property and (with the *fuidir* and *bothach*) undertook most of the physical labour on the land or the menial tasks within households.

Kinship and gender relationships were also significant in daily family life within a settlement, governing the ownership of property; the practices associated with livestock management and food preparation; and the practical social and economic ties that bound an extended kin group together (Charles-Edwards 1993; 2000, 84–95; Ó Corráin 1995; 2002). Early medieval settlement enclosures were the dwelling places of the *muintir* 'household', which variously included those people connected by blood descent (grandparents, parents and children); marriage or sexual relationship (for example, husband and wife); fosterage; and economic dependency (such as slaves and servants who lived and worked with prosperous families carrying out the more menial tasks of grinding grain or digging ditches; see Charles-Edwards 2000, 84–95). The *muintir* were also part of the *fine* 'wider kin group'. In the seventh century, and perhaps for some time afterwards, the *derbfine* was an extended kin group whose members were descendants of a common great-grandfather through

the male line (Kelly 1988, 13; Ó Corráin 2005b), 553–4). The *derbfine* held and worked common farm land (*fintiu* or 'kin land', as already noted above) and had many legal and social obligations to one another—including co-operative labour. Bolger, in a significant recent paper (2011), has suggested that we need to reconsider the role of early medieval kinship and the impact of partible inheritance on the long-term occupation of enclosures and settlements.

Recognising that settlement enclosures played a role in both social status and kinship relationships, we can attempt to understand how the enclosures functioned both as places in and of themselves and as sites within wider landscapes. Although there have been some regional distributional studies of early medieval settlement in Ireland (such as Murphy 1992; Bennett 1989; Clinton 2000), there have been few attempts as yet to integrate the study of raths within the local, lived landscapes revealed by the excavation of the physical structures.

There is clearly a strong link between early medieval settlement enclosures and agricultural practice, as established through a number of regional geographic studies undertaken from the 1960s on; see Fahy (1969), Barrett and Graham (1975) and Bennett (1989). These studies established that raths were generally located on good agricultural land, avoiding poorly drained valley bottoms, boglands and upland areas. This pattern was largely confirmed by regional archaeological surveys conducted subsequently, such as in Co. Donegal (Lacey 1983); Ikerrin, Co. Tipperary (Stout, G. 1984); and Iveragh, Co. Kerry (O'Sullivan and Sheehan 1996). Matthew Stout (1997), in his island-wide study, identified that mountainous areas—especially the relatively poor agricultural lands of west Connaught and north-west Ulster—had the lowest densities of raths.

His research also highlighted the seemingly paradoxically relatively low incidence of raths in the rich lands of Leinster; a finding that, superficially at least, seems to throw the association of raths and farmland into doubt. There is, however, an explanation for this particular finding. The counties of Meath, Dublin, Kildare and Wexford constituted the best arable land in Ireland and, situated as they were at the heart of the Anglo-Norman colony, they were subject to centuries of continuous ploughing, which would have resulted in the destruction of sites (Stout 1997, 62). Large-scale excavation in advance of the construction of the M3 roadway, and other roads in Co. Meath, during the 2000s revealed a number of previously unknown raths and enclosures. This supports this idea that there was substantial destruction of sites of archaeological interest in the eastern parts of Ireland (Deevy 2006; Deevy and Murphy 2009; Fitzgerald 2006a; 2006b; Roycroft 2005). McCormick and Murray (2007, 112–13) also note that the widespread adoption of Anglo-Norman townland names in parts of Leinster has irretrievably eradicated the early medieval terminologies of rath, lios, etc. from the region, making it difficult to determine whether and where other early medieval settlement sites might have existed.

The role of early medieval settlements within the landscape has, however, been reconstructed through significant landscape studies by Matthew Stout (1997) and more recently by Kerr (2007), both of whom have focused on the role of such settlements within their contemporary social and economic landscapes and have attempted to trace the early medieval social hierarchy in Ireland through variations in morphology, siting and distribution.

Defining the enclosure: the social and ideological role of the boundary

It is likely that there is some relationship between the character and appearance of settlement enclosures and social status. *Críth Gablach* suggests that the *les* (the enclosed space) of the king was surrounded by a rampart, obviously suggesting a rath. Kelly (1997, 363) states that 'the most significant difference between the house of the lord and that of a commoner is the presence of defensive earthworks, the digging of which is listed among the duties owed by a client to his lord'. Consequently, the ownership of 'defensive earthworks' might be regarded as physical evidence of noble status. The nobility employed *manchuine* 'client-labour' (see Kelly 1997, 33) to construct multiple circuits of banks-and-ditches to act as signals of their power and authority (Mytum 1992, 122; Warner 1988, 59). Matthew Stout (1997, 113–14) argues that the small, univallate raths must be the preserve of the upper rungs of the free non-noble classes, that is, the *bóaire* and *ócaire*. The free farming classes needed to protect their cattle (most of which were in effect the property of the nobility who provided them as part of the institution of clientship) and would have had to build their own raths.

A few attempts have been made to identify the dwellings of the various grades described in the *Críth Gablach* (see, for example, Stout, M. 1991; Kerr and McCormick 2004). Matthew Stout used cluster analysis to divide the raths in the baronies of Clonlisk and Ikerrin in counties Offaly and Tipperary, respectively, into six groups and then attempted to assign each group to a certain early medieval social grade (Stout 1991, 238; 1997, 127). Based on these statistical 'clusters', he attempted to interpret the status of the site occupants, and, in this manner tried to understand how the early medieval landscape was organised socially (see Figure 3.10). Large, multivallate raths seemed to be central to the settlement system, and may be taken to correspond closely to the dwellings of the typical *aire forgaille* or high lord. Well-defended, univallate raths may have been the settlements of the *aire déso*—a lower grade of lord, who seems to have had an inter-territorial military function. These sites may have functioned as places of refuge for the cattle of the local community in times of danger. Similar use of cluster analysis was employed in Co. Fermanagh (Kerr and McCormick 2004) to similar efect. Social models such as these go some way towards explaining the different sizes and types of early medieval settlement enclosure. Perhaps the most fundamental problem with such models, however, is their required assumption of synchronicity of occupation of sites in the same landscape. It seems clear, for example, that multivallate raths were high-status sites, yet the dating of these suggest that they were not occupied through the entire early medieval period, and that in any case, their enclosures were changed, re-dug and re-built across time. The same point may be made about certain high-status crannógs.

Archaeological surveys and excavations confirm that raths and cashels vary considerably in the size and scale of the enclosing elements themselves, in their banks, ditches, fences and walls. While it was rare, multivallation (the use of several concentric enclosing banks and ditches) appears to have been socially significant. It seems, however, that it was the height and size of the *ramparts* of an enclosure, rather than the size of the enclosed space itself, that signified status. Indeed, in early Irish law a king was expected to be able to assemble a sufficient labour force to build

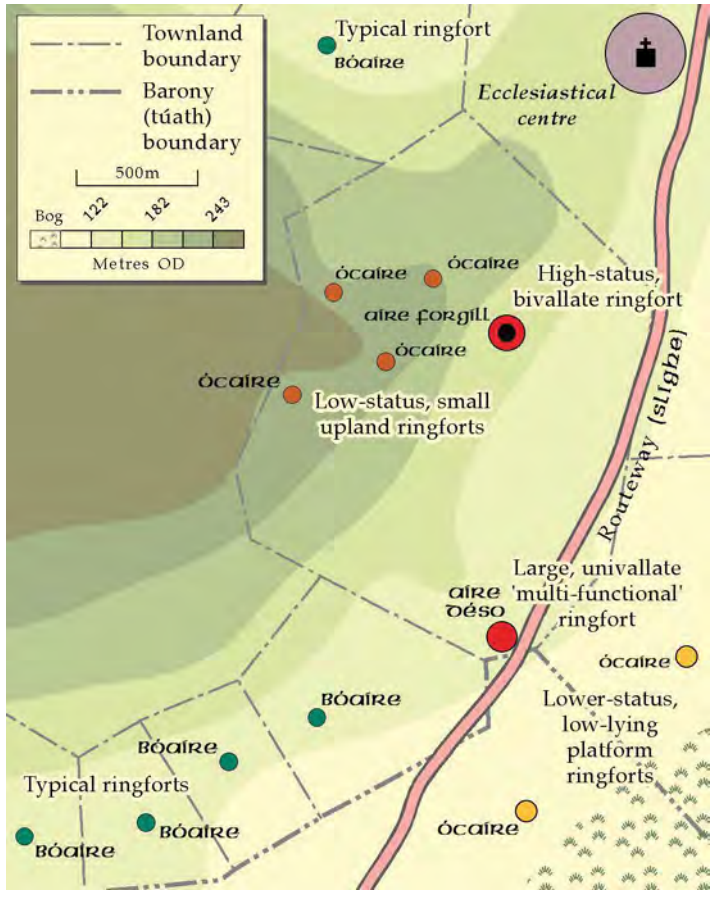

FIG. 3.10—Matthew Stout's normative interpretation of the social organisiation of the early medieval landscape based on 'cluster analysis' of raths in the baronies of Clonlisk and Ikerrin in counties Offaly and Tipperary, respectively. He portrays a scenario whereby a 'high-status' ringfort (occupied by an *aire forgill*) is found in close proximity to a group of smaller upland sites (occupied by his *ócaire*-grade tenants). A large multi-functional ringfort (occupied by an *aire déso*) is located at the edge of the modern townland/barony boundary (potentially also an early medieval territorial boundary), and also provides a strategic fortress for the *túath*. Located away from the larger ringforts, but close to each other, are four typical ringforts (occupied by *bóaire*, farming their own good agricultural land). (Image by, and reproduced courtesy of, Matthew Stout; from Stout and Stout 2011, fig. 47.)

impressive concentric banks and ditches on his *ráth* or *dún*. *Críth Gablach* states that 'it is then that he is a king, when labour-dues of base clients surround him', and the text goes on to define this labour due as a measured portion of the rampart and ditch (MacNeill 1923, 305; Stout 1997, 113; Charles-Edwards 2002, 150). *Críth Gablach* also states that the internal diameter of a royal enclosure should be 'seven score feet' (MacNeill 1923, 305). Kelly (1997, 565) indicates that the early Irish measurement the *traig* is similar to, if marginally shorter than, the imperial foot, but even allowing for this, such a structure would still work out at around 40m. The enclosed living area of (supposedly high-status) multivallate raths, however, tends not to be much larger than that of (supposedly lower-status) univallate raths (Stout 1997, 18).

There can also be considerable variation in the size of the enclosed space within a given region (Stout 1997, 15); for example, in the south-west midlands, the spaced enclosed by raths ranged in diameter from 15.5m to 75m, with 40% of raths in this region having interior diameters of 28m–35m. Cashels, like raths, vary greatly in the size of their internal diameter, and the thickness and height of their walls. Where comparisons have been made, it has been found that the internal diameter of cashels is generally smaller than those of earthen raths; for example, in Co. Donegal, nearly

60% of cashels have diameters of between 15m and 25m (Edwards 1990, 15). The heights of cashel walls, however, vary: there is no suggestion that the surviving walls of the modest-sized cashel at Dromena, Co. Down (Jope 1966, 176), could have ever achieved the height and monumentality of sites such as the large, impressive cashels at Staigue, Co. Kerry (O'Sullivan and Sheehan 1996, 195), or the Grianán of Aileach, Carrowreagh, Co. Donegal (Lacey 1983, 111).

It seems obvious, nonetheless, that multivallate sites were of higher status than the smaller univallate enclosures. The early Irish law tracts do not explicitly outline a correlation between status and the number of enclosures in a rath, but the archaeological evidence often indicates such social stratification on the basis of the artefactual evidence. Fine metalworking, which can be interpreted as evidence of artistic patronage by the higher levels of society, tends to be a feature of excavated multivallate raths such as Garranes, Co. Cork (Ó Ríordáin, S.P. 1942, 134–9), and Ballycatteen, Co. Cork (Ó Ríordáin and Hartnett 1943, 35), but is generally absent from univallate sites (with the exception Garryduff, Co. Cork, where there was extensive evidence for metalworking; see O'Kelly, M.J. 1963, 95–9). The presence of glass vessels (O'Kelly, M.J. 1963, 77) and some quantities of imported E ware pottery (O'Kelly, M.J. 1963, 103–12) provide further evidence that Garryduff was a reasonably high-status site. There is, however, substantial evidence for 'every-day' ironworking on univallate raths, as well as on crannógs and in non-circular enclosures, suggesting that these sites were largely the residences of reasonably prosperous and self-sufficient farmers.

In any case, the range and number of people potentially involved in daily life in an early medieval settlement enclosure, depending on its social status, included various social classes of men and women, children, slaves and labourers, as well as occasional others (herders, fence makers, specialist copper-smiths) who would arrive from time to time. In settlement enclosures, people of different social rank, gender and blood-line were drawn together by ties of kinship, service and communal living. As noted above, in early Irish law and narrative literature, the enclosed space around a house was known as the *les* ('farm-yard or 'courtyard'), which was usually defined by the *ráth* or 'earthen rampart' around it, or by a wooden fence or stone wall (Kelly 1997, 363–4). The enclosure thus provided a distinct domestic space, where houses, outhouses, animal pens and other features could be located. Kelly (1988, 364–7) lists the features that various early Irish legal and literary sources imply might be located within a *les*, including the *airdrochat* 'the paved area at the entrance to the les'; the *tech* 'house'; *airchae* 'outhouse'; *tech ndam* 'ox-house'; *otrach* 'dunghill'; *lías caírech* 'sheep-pen'; *lías lóeg* 'calf-pen'; *muccfoil* 'pig-sty'; *áith* 'drying-kiln'; and *corróc* 'pit' or possibly souterrain. To some extent then, early medieval enclosures were both enclosed homesteads and farm-yards, with domestic houses and outbuildings, dung-heaps, squawking hens, dogs and pigs all located within their boundaries (Ó Corráin 2005b, 549–608; O'Sullivan and Nicholl 2011). Some other features may have been situated *outside* the enclosure—an area known in the texts as the *airlise*. It is only recently that archaeological excavations have explored the areas immediately outside raths, with some interesting results—particularly the identification of extramural houses (at Brokerstown, Co. Antrim; see Kerr *et al*. 2010, 25–6), laneways and fields (at Dowdstown, Co. Meath; see Cagney and O'Hara 2009) and

other agricultural and industrial features in their environs. Recent archaeological excavations in advance of motorway developments have identified features outside enclosures such as corn-drying kilns, ironworking areas and ditched and palisaded structures that probably represent cultivation plots, gardens or small enclosures for livestock. Interestingly, as we shall see in Chapter 5 below on agriculture, excavations have also shown that some early medieval raths did *not* have fields contiguous to them, and instead stood alone in open country.

Gateways, entrances and passages

O'Sullivan and Nicholl (2011, 63–9) have explored how both archaeological evidence for entrances and early Irish documentary sources demonstrate a distinct concern about control of access *into* the settlement enclosure. In *Críth Gablach*, there are various penalties for trespass into an enclosure or a house within. A person may open (the gate of?) the *les* from the outside without penalty—presumably to ensure that they can legally come up and announce their presence. If a person enters into the *les* of a *mruigfer* without permission, however, they will be obliged to pay five *séuit* in restitution for the initial entry (a *sét* being the standard unit of value, equivalent to a three-year-old dry heifer). If they venture in further into the enclosure and open the door of the house, they will incur a fine of another five *séuit*. If they go even further and look into the house, they will be due to pay a fine of one cow (MacNeill 1923; Kelly, F. 1997, 431–3). Thus, we can see that there is a growing sense of 'privacy' as one moves into an enclosure, with the seriousness of a violation of the law of hospitality varying according to whether it took place within the house, in the rath enclosure itself or immediately outside in the area adjacent to the rath (*faithche*), or even further out in the outfield (the *sechtar faithche*; see Ó Carragáin 2010, 220). The enclosure boundary, the gate and the house doors all serve to regulate access and protect presumably the safety, but also the 'privacy'—anachchronistic as the terms seems—and property of enclosure's inhabitants. O'Sullivan and Nicholl (2011, 67) suggest that the enclosing features of raths, cashels and crannógs, their banks, ditches, walls and palisades, were essentially social or ideological in intent, usefully separating the domestic space of the household (the *muintir*) from the kin-land (*fintiu*) of the wider kin-group or *derbfine*.

O'Sullivan and Nicholl (2011, 67) also account for how access to a settlement enclosure could be managed by defined entrances and gateways and they review some of the extensive archaeological evidence for the size, style and construction material of gates and entrance-ways on early medieval settlement enclosures such as the classic settlements at Carraig Aille, Co. Limerick (Ó Ríordáin 1949a, 43, 53); Garranes, Co. Cork (Ó Ríordáin 1942a, 79–85); Leacanabuaile, Co. Kerry (Ó Ríordáin and Foy 1941, 87); Garyduff, Co. Cork (O'Kelly, M.J. 1963, 20–2); Ballyhenry, Co. Antrim (Lynn 1983c, 69); and Deer Park Farms, Co, Antrim (Lynn and McDowell 2011). Such entrances often have post-hole evidence for wooden gates, and occasionally for more than one gate along the entrance passageway, suggesting an enhanced defence against raiders. At Castleskreen, Co. Down, a gate set well within the entrance passage is suggested by two stone-lined sockets for posts (Dickinson and Waterman 1959, 70). At Garranes, Co. Cork, there was a complex system of four gates, which

although potentially contemporaneous, showed differences in both their positioning and design. The gates were set variously at the inner and outer faces of the enclosing banks (Ó Ríordáin 1942a, 79–85). Not all entrances were as complex as this, however. At the much more modest settlement at Carrigillihy, Co. Cork, where an original Bronze Age enclosure was re-inhabited at some point during the early medieval period, the early medieval period enclosure had two entrances, which were poorly kept and suggest that the site inhabitants made little effort to reconsolidate the banks or entrance-ways and walked across the debris from the collapsing enclosure boundary (O'Kelly, M.J. 1951b, 72–3).

O'Sullivan and Nicholl (2011, 68) note that some entrances also had passages through the enclosure that were defined and enhanced on either side with low dry-stone walls or by sections of post-and-wattle fences. Stone revetting was in evidence at Castleskreen, Co. Down (Waterman 1959, 70), and at Killylane, Co. Antrim (Williams and Yates 1984, 63–70); and post-and-wattle fencing was discovered at Ballypalady, Co. Antrim (Waterman 1972, 31), and Oldcourt, Co. Cork (Murphy and Ó Cuileanáin 1961, 81). The width of the entrance passage varies greatly from site to site and presumably depended on either defensive concerns or whether, in practical terms, people or animals were being moved in and out. At Rath II at Ballypalady, Co. Antrim, the entrance passage was only 76cm wide at its outer end, widening along the length of the passage to 1.5m at its inner opening (Waterman 1972, 31). The narrow mouth of the entrance might suggest that it was not intended for the movement of livestock into the enclosure. Entrance passageways at other enclosures are much larger, such as the multiple entrances at Ballycatteen, Co. Cork, which were up to 3.3m in width (Ó Ríordáin, and Hartnett 1943, 5–9). The movement of people during rainy weather would quickly make an entrance muddy, so entrance passages are often paved with cobbles, such as at Seafin Castle, Co. Down (Waterman 1955, 86), and Lissachiggel, Co. Louth (Davies 1939, 214–5). Gates and entrance-ways undoubtedly changed across the life of a settlement as can be seen at Castleskreen (Waterman 1959, 70) and Killyliss, Co. Tyrone (Ivens 1984a 17), where entrances passageways were re-laid or narrowed in their latter phases of use.

In early Irish literary and legal sources, the paved area at the entrance of a *les* was known as the *airdrochat* and it was meant to be kept clean. As Fergus Kelly (1997, 367) notes, in the *Genealogies of the saints*, Diarmait of Lecc na Sinnach cleared his paved entrance path or *airdrochat* with a shovel; while in a description of miserable conditions in the tale *Erchoitmed Ingine Gulidi*, it was stated that the pavements were dirty. It seems likely that the paved entrance-way served a public role and was required by social convention to be maintained by regular removal of rubbish and dung. Laid pathways also served to guide and facilitate movement through a site. In some raths, such as Deer Park Farms, Co. Antrim (Lynn 1989, 1991, 1994; Lynn and McDowell 2011), Leacanabuaile, Co. Kerry (Ó Ríordáin and Foy 1941, 88), and Ballypalady 2, Co. Antrim (Waterman 1972, 33–4), people were seemingly persuaded by the use of cobbled pathways to move, upon their entering an enclosure, directly to the doorway of the principal house. This is particularly well-illustrated at the early medieval rath at Deer Park Farms, where in Phase 6B there was a complex entrance feature consisting of a ramped causeway with high

sidewalls providing a narrow entrance into the *les*. This entrance-way forced people to walk directly to the entrance door of the main, central round house (Lynn and McDowell 2011, 151–2; and see Figure 3.11). At Moynagh Lough Crannóg, Co. Meath, a wooden pathway brought people from the entrance, past a metalworking area and into the central space of the site, where they would have been overlooked by a house located to the right (Bradley 1991). At Sroove, Co. Sligo, in one occupation phase, the site entrance did not lie directly in front of the house door. Upon entering, people had to turn and walk to the right, within the palisade boundary, before turning to the left to reach the doorway of the house (Fredengren 2002a). A similar lay-out can be seen at Garryduff I, Co. Cork, where the gravel spread forming the surface of the entrance-way continued into the enclosure, leading to the doorway of House II (O'Kelly, M.J. 1963, 26–7). Many sites also show evidence for larger spreads of either cobbling, gravel or, occasionally, formal slab paving that seem to have been used as work surfaces for various different craft, subsistence and industrial practices, as can be seen at Altanagh, Co. Tyrone (Williams 1986, 56), and Croft Road, Co. Down (Proudfoot 1959, 103–5).

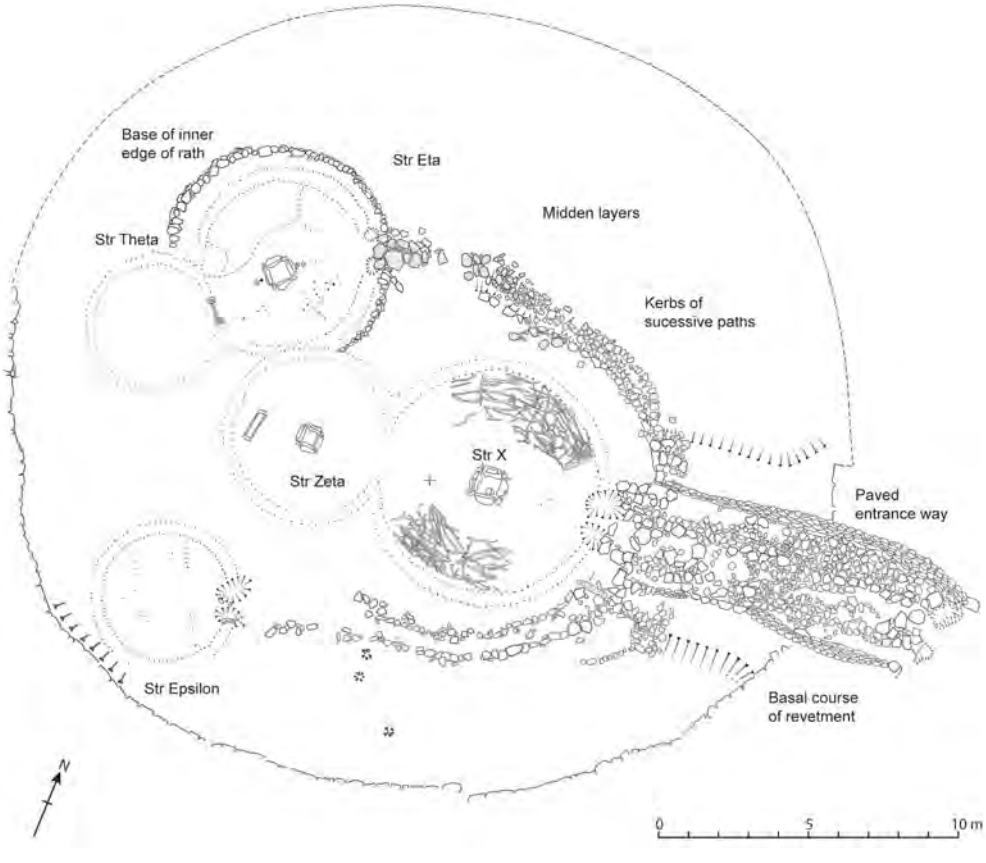

Fig. 3.11— The early medieval rath at Deer Park Farms, Co. Antrim, a site plan showing its Phase 6A features, radiocarbon dated to the late-seventh- to eighth-century AD. A distinctive, paved entrance-way, flanked by low walls, is at the east side. There are two figure-of-eight dwellings—each of two roundhouses—with doorways, stone-lined hearths and beds, and a further roundhouse is located to the south. A rubbish heap or midden is at the northeast, and paved pathways guide movement around the enclosure. (Image © Crown Copyright. Courtesy of the Northern Ireland Environment Agency; from Lynn and McDowell 2011, fig. 7.1.)

Houses and buildings

There is evidence for the existence of houses and buildings from many early medieval raths, cashels, crannógs and other enclosures (Lynn 1994; O'Sullivan, A. 2008; O'Sullivan and Nicholl 2011; Jones 2012; and see Figure 3.12). It was suggested in 1978 that over 160 early medieval rural houses and structures had been recorded in excavations up to that point (Lynn 1978a, 29). Many of these structures were identified by reference to annular gullies, circles of close-set stake-holes, or a scatter of posts and stake-holes with perhaps an associated hearth and occupation area. By 1994, this figure had increased to approximately 250 (Lynn 1994, 81); and, with the boom in archaeology of the late-1990s and 2000s, this figure has now more than doubled, so it

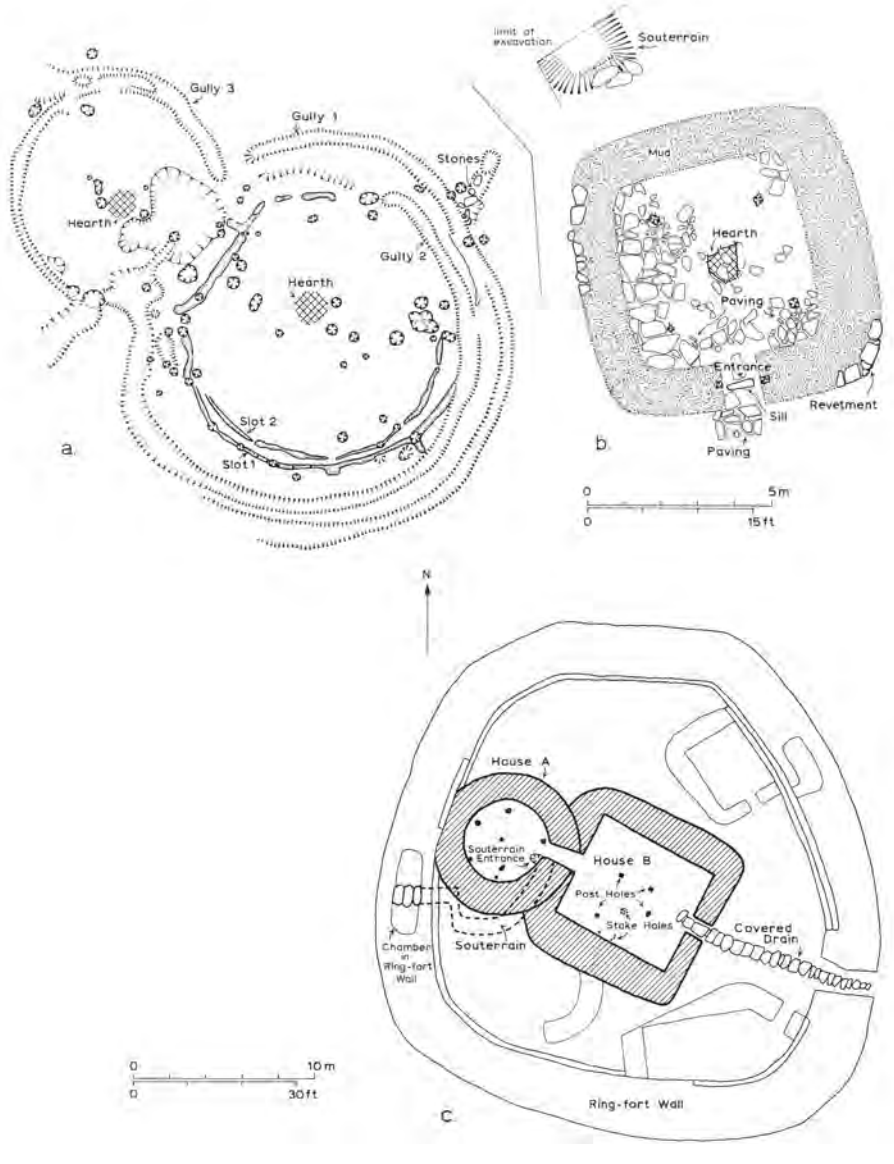

Fig. 3.12—Plans of selected early medieval houses and buildings; a. = figure-of-eight round house, with two phases of construction evident, at Dressogagh, Co. Armagh (after Collins 1966); b. = plan of rectilinear house at White Fort, Co. Down (after Waterman 1956a); c. = location and associations of rectilinear and round house within a stone cashel at Leacanabuaile, Co. Kerry (after Ó Ríordáin, S.P. and Foy 1943). (Figure after Edwards 1990.)

is estimated that there is evidence for approximately 550 houses or buildings at various early medieval sites around Ireland. Many early medieval sites, however, have produced little or no evidence for buildings, which is unsurprising given the flimsy nature of early houses. For instance, although scatters of post-holes and stake-holes were found at Garranes, Co. Cork (Ó Ríordáin 1942a, 86–87), and Ballycatteen, Co Cork (Ó Ríordáin and Hartnett 1943, 12), these did not correspond in any way to a coherent house plan. The poor quality of initial archaeological excavations at early medieval crannógs (such as at Craigywarren, Lagore or Ballinderry crannógs Nos 1 and 2) has tended to obscure the numbers of houses known from crannóg sites, but the excavations at Moynagh Lough, Co. Meath (Bradley 1991; 2011), and Sroove, Co. Sligo (Fredengren 2002a), have shown that houses were in fact constructed on crannógs. Recent archaeological excavations at Drumclay crannóg, Co. Fermanagh, have also revealed abundant evidence for at least 30 houses on that site across time, including both rectangular buildings, measuring up to 6m by 4m, and round houses typically measuring 6m in diameter (Bermingham *et al*. 2013). Occasionally there will have been a single house on early medieval settlements, but many sites show evidence for the contemporary use of two or more buildings, such as at Deer Park Farms rath in Co. Antrim (Lynn and McDowell 2011), the crannóg at Moynagh Lough (Bradley 1991, 2011), and the cashel at Leacanabuaile, Co. Kerry (Ó Ríordáin and Foy 1941), and most recently, at Drumclay crannóg, where two or three, or perhaps more, houses were situated around the site at the same time, with an open space at the centre (Bermingham *et al*. 2013).

In general terms, the architectural development, shape, size, building materials and organisation of internal features of early medieval Irish houses are now well understood. In addition, thanks to both the archaeological evidence (Lynn 1978a, 1986, 1991, 1994; O'Sullivan, A. 2008; O'Sullivan and Nicholl 2011; Jones 2012) and the historical sources, such as early Irish laws, narrative literature and hagiographies (O'Sullivan, A. 2008), we also have a growing sense of their social, symbolic and ideological layout and use. The most useful historical source in this regard is *Críth Gablach*, which emphasises the links between property and social status, and the general organising principles for how people should act within houses. *Críth Gablach* also provides some intriguing detail as to the construction and form of early medieval Irish houses and lists the types of domestic equipment and tools that should be found within them (Kelly, F. 1997, 361–3; O'Sullivan, A. 2008; Jones 2012). Although the descriptions of interior furniture and decorative features presented in the narrative literature are often fantastical or unlikely, they also hint at how houses were inhabited, or at least imagined. Thus, in the voyage tales, there are descriptions of cauldrons of food hanging over fires, or of fine textiles and silver and gold brooches hanging on walls as heroes eat sumptuous feasts. In the ninth-century tale *Tochmerc Becfeola*, for example, a man and woman go out to an island on which there is a mysterious house containing *both* beds and cubicles, where they first eat a magical meal and then lie chastely together until morning (Bhreathnach, M. 1984).

As Lynn (1994) and O'Sullivan (2008) have previously stated, in terms of architecture, it has generally been thought that the earliest (between *c*. AD 500 and AD 800) dwelling structures constructed during the early medieval period in Ireland were usually round houses, built of stone or post-and-wattle walls and roofed with

thatches of reed, turf or straw or possibly wooden shingles. They tend to be located towards the centre of enclosures. The remarkable evidence for multiple post-and-wattle round houses from Deer Park Farms, Co. Antrim, gives us a unique insight into their construction and appearance (see Figure 3.11 above and Plate III.X). These houses were built with widely-spaced, double-skinned walls (an inner and outer post-and-wattle fence). The tight space between these two wattled walls was packed with soft organic materials—straw, moss and heather—and as such would have functioned as an early form of 'cavity walling' (Lynn 1988e, 45). The houses at Deer Park Farms may have had remarkably small doorways (with surviving doorframes suggesting that they were less than 1.2m in height; Lynn and McDowell 2011, fig. 23.3) and a clay lining at the base of the walls to deal with damp; they probably looked much like an upturned basket during their construction. They were thatched with sods, reeds and other organic materials. Internally, they had laid clay and gravel floors, wooden beds and stone-lined hearths (Lynn and McDowell 2011; see Plate III.XI and Figure 3.13). Presumably they would have been dark, smoky and no doubt smelly. *Críth Gablach* implies that the typical farmer's house was 6–8m in diameter, and archaeological studies indicate that most were typically 4–5m in diameter, although some were significantly larger at 6–10m. The internal space of a house 4–5m in diameter could therefore have been 50–78m^2.

Despite the fantastical descriptions in some of the Irish narrative literature for massive, otherworldy houses with multiple doorways, there is no archaeological evidence in Ireland for buildings of the scale found elsewhere in north-west Europe in the early medieval period (Hamerow 2002, fig. 2.6), or even in Anglo-Saxon England (Hamerow 2012, 17–66). It would seem that early Irish law and archaeology agree, in that house size was closely related one's social rank. Thus, both legal regulation and

Pl. III.X—View of early medieval round house Structure X, at Deer Park Farms, Co. Antrim, crossed at this particular stage of the site excavation by the site's main north-south section. The rath's stone-paved entrance-way leads up to the front door of Structure X, and pathways lead around to the right, past layers of midden material. (Photograph © Crown Copyright. Courtesy of the Northern Ireland Environment Agency; from Lynn and McDowell 2011, pl. 7.2.)

Pl. III.XI—View from the west of early medieval round house Structure Eta, in Phase 6B at Deer Park Farms, Co. Antrim. At the end of the house's life, the inner wall had been deliberately collapsed, sealing the interior occupation level. The cavity wall can be seen running off to the north (on the left side of this image), and the bedding is also partly exposed on the north side of the house; the centrally located stone-lined hearth is also visible. The timber doorway jambs leading to another attached round house, Structure Theta, can be seen in the foreground. (Photograph © Crown Copyright. Courtesy of the Northern Ireland Environment Agency; from Lynn and McDowell 2011, pl. 7.15.)

particularly customary practice ensured that people did not build and inhabit buildings larger than what was appropriate to their social status or class. To create more domestic space, if they needed it, people may have built a second house attached to their main residence. Thus, the larger round house with second round house attached created a figure-of-eight shaped structure when viewed in plan—essentially two roughly circular, conjoined rooms. Remains of figure-of-eight buildings can be seen at many settlement enclosures, such as at Dressogagh, Co. Armagh (Collins 1966, 119–22), at Deer Park Farms, Co. Antrim (Lynn and McDowell 2011), as well as at the raths of Corrstown, Co. Londonderry (Conway 2002:0386, 2002:0387), and Lisleagh II, Co. Cork (Monk 1995, 111), amongst others. The archaeological evidence for these figure-of-eight buildings corresponds to the size of the structures described in the *Críth Gablach*, which states, for example, that the *bóaire* grade is to have a house of 27 *traig* (approximately 8m), with a back-house of 15 *traig* (approximately 4.5m; see Lynn and McDowell 2011). In these figure-of-eight buildings, the main house may have been the principal dwelling space, while the back-house or *cúile* (which could seemingly be entered only from the larger round house) may have been used as a larder, kitchen, family sleeping area or some type of domestic space kept distinct or apart from the more 'public' main round-house.

Houses were much the same on raths, cashels, crannógs and other enclosures. For example, the earliest phase at the unusual settlement enclosure at Ninch, Co. Meath, revealed circular wattle-and-daub houses between 4.6m and 10m in diameter (McConway 2002, 17–19); and a round post-and-wattle building was found at the cashel of Kildreenagh, Co. Kerry (O'Flaherty 1985:34). Figure-of-eight buildings have also been found on a number of ecclesiastical enclosures, including at

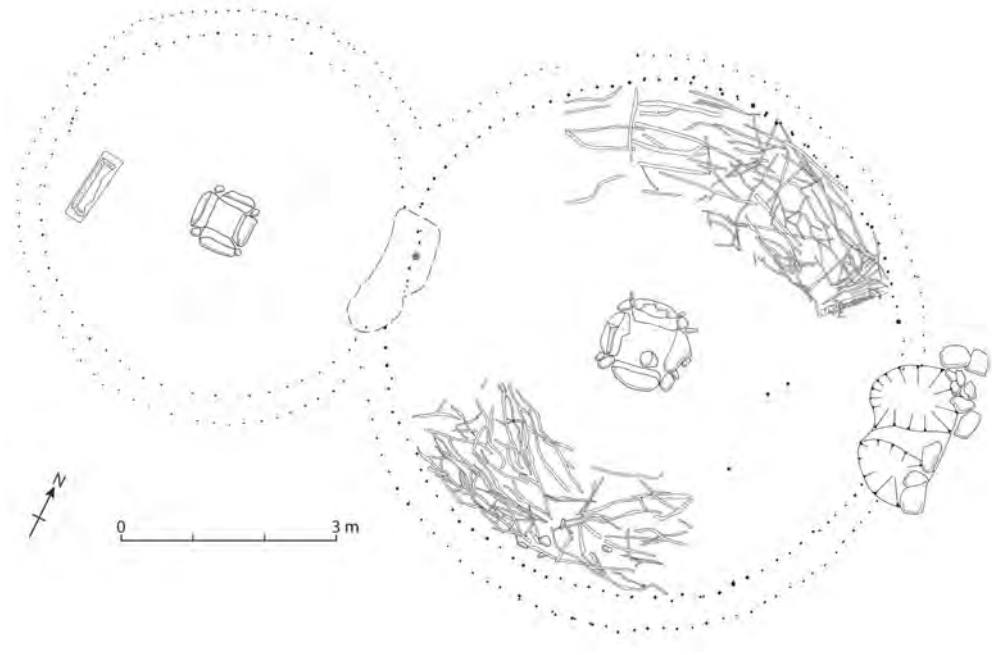

FIG. 3.13— Plan of a single early medieval figure-of-eight dwelling structure, composed of two conjoined round houses, Structures X and Zeta, in the Phase 6A occupation layers at Deer Park Farms, Co. Antrim. The round houses had double-skinned post-and-wattle walls of hazel rods; between the inner and outer walls was a compact and fibrous fill of straw, bracken, heather, leaves and hazel branches to provide insulation and water-proofing. The main house (Structure X, radiocarbon dated to AD 660–770), to the right on the illustration, had two doors, one leading out into the settlement, the other to a smaller back-house (Structure Zeta, radiocarbon dated to AD 670–780). Various internal features in the main house included two beds at the north and south and a stone-lined hearth, while an oak trough was left beside a hearth in Structure Zeta. (Image © Crown Copyright. Courtesy of the Northern Ireland Environment Agency; from Lynn and McDowell 2011, fig. 7.3.)

Illaunloughan, Co. Kerry (Marshall and Walsh 1994, 2005; Marshall 2003), and Caherlihillan, Co. Kerry (Sheehan 2009); and wattle-built figure-of-eight structures have been found on the 'plectrum-shaped' enclosure at Newtown, Co. Limerick (Coyne 2006a, 68; Coyne 2011). Although a possible unenclosed figure-of-eight house was found at Terryhoogan, Co. Antrim (McSparron 2007), simple round houses tend to be the style of the majority of houses on unenclosed sites. In the main, dwelling structures in cashels were stone-built, and stone round houses have been excavated at such sites as Ballyegan, Co. Kerry (Byrne 1991); Lissachiggel Cashel, Co. Louth (Davies 1939, 220–8, although the chronology of this site is not clear); Leacanabuaile, Co. Kerry (Ó Ríordáin and Foy 1941, 88–9); and Coolagh, Co. Galway (Hardy 2011, 217). It is also possible that figure-of-eight houses were stone-built, and a number of 'conjoined' structures were excavated at Lissachiggel Cashel (Davies 1939, 220–8), although these may be late medieval in date.

All of these round houses essentially comprised a single room—or a double if there was a backhouse—that was nonetheless reasonably sized, multi-functional and whose space (including therein hearth, beds and some simple furniture) could have been organised by customary practice. *Críth Gablach* suggests this sense of things having their 'proper' place within the interior of a dwelling, in that it details the fines that are due for damage to personal property within the house, but specifies that the penalty will not be incurred if valuable items are left lying where they can easily be damaged (Lynn 1991, 126–31; Lynn 1994, 81–94; O'Sullivan, A. 2008, 231–56).

After about AD 800, and through the tenth to eleventh century, it has been suggested that there is an architectural shift in Ireland from the use of round houses

to rectilinear houses (Lynn 1978a, 29–45; Lynn 1991, 126–31; Lynn 1994, 81–94). The Drumclay crannóg excavations, however, have produced intriguing evidence that on some sites, rectilinear houses were in use before round houses, and that the model of a transition from round to rectangular dwellings may be less clear than has been thought (Bermingham *et al*. 2013). It does seem though that rectangular houses became standard, and round houses became less common on early medieval Irish settlements. Rectangular houses were typically built in stone, earth or turf, and were on average 6–8m in length. Early medieval rectangular structures (Lynn 1994, 83) tend to be more archaeologically visible, as they generally have 'dry stone and/or turf lower walling' (Lynn 1994, 85), which survives more readily than might flimsier structures. They were simply constructed, of low stone walls with internal wooden poles to support a roof of reed, turf or straw. Rectangular houses are often paved, or had parts of their floors lined with stone slabs, such as Rinnaraw cashel, Co. Donegal (Comber 2006, 82). They also tend to be found closer to entrances and towards the sides of enclosures. There is also evidence for round houses being replaced by rectangular structures in several raths or cashels. The progression from round house to rectilinear house is seen at the cashels of Leacanabuaile, Co. Kerry (Ó Ríordáin and Foy 1941, 88–89), and Drumaroad, Co. Down (Waterman 1956a, 76–83); the ecclesiastical site of Nendrum, Co. Down (Lawlor 1925); the raths of Rathmullan, Co. Down (Lynn 1978a, 32, 1981–82), and Garryduff, Co. Cork (O'Kelly 1963, 22); and the settlement enclosures of Ballynacarriga, Co. Cork (Noonan 2001:115), and Killickaweeney, Co. Kildare (Walsh 2008).

The reasons for the proposed architectural transition from round to rectilinear houses in early medieval Ireland are unknown and are unlikely to be due to foreign (that is, Anglo–Saxon or Norse) influences, as rectangular structures are found in north-west Europe well before the ninth century AD. It is possible that the transition from round to rectangular houses in the eighth and ninth century, if indeed there is such a clear transition, relates to wider social and ideological change in early medieval Ireland, which experienced an increasing centralisation of political power in large dynasties, an increased emphasis on smaller kin groups and more individualistic land ownership practices. Rectangular houses can more easily be subdivided into 'rooms' or compartments that might be used to signal social differentiation, but it should be admitted that there is little clear evidence to support this supposition.

There are a few house structures that do not seem to fit neatly into this round or rectangular scheme. A building constructed using a possible sill beam was excavated at a settlement enclosure at Balriggan, Co. Louth (Delaney and Roycroft 2003, 18; Delaney 2010). A possible Viking, or Viking-influenced, rectangular stone house was excavated at the cashel of Rinnaraw, Co. Donegal (Comber 2006, 107). Furthermore, the dwelling structures found on unenclosed settlements also do not all conform to a simple, uniform pattern, and equally there is no uniformity in the size of houses on such settlements: footprints range from 12.5m^2 at Murgasty, Co. Tipperary (Cummins 1998:626), to 140m^2 at Ballycullen, Oldcourt, Co. Dublin (Larsson 2002:0640). A structure at Ballyvollen, Co. Antrim, was of an 'irregular' shape (Williams 1985b); and a D-shaped, stone-built structure was found in the Barrees Valley, Co. Cork (O'Brien, W. 2003:0174).

Houses—their construction, occupation and abandonment

It is likely that most early medieval houses would have been constructed, occupied and abandoned within a generation. Dendrochronological analyses of round-house timbers from a waterlogged early medieval crannóg at Buiston, Ayrshire, in Scotland, suggest that the houses on that site were used for remarkably short periods of time, such as 15–20 years. The round houses at Drumclay crannóg, Co. Fermanagh, although no doubt impressive structures to behold, were built of post-and-wattle walls that would have suffered badly in the damp, waterlogged conditions of a crannóg. It is easy to imagine that such structures were constantly being repaired, and even entirely rebuilt, a few times a decade. Nicholl's (2005) experimental archaeological study of reconstructed round houses on a 'crannóg' at the National Heritage Park, at Ferrycarrig, Co. Wexford, suggests that round houses built of post-and-wattle will have deteriorated significantly after 20–30 years, with their roofs slumping as their walls rot. With care and maintenance of their walls and thatched roof, however, and with the constant presence of a warming, drying fire inside, an early medieval house could have stood for longer, perhaps 40–50 years—effectively a generation. Indeed, in this scenario, the main events of a person's life—his or her birth; transition from childhood to adulthood; marriage; and ultimate death—could all have potentially occurred within a house that would have come to the end of its life about the same time as he or she did. It is possible then, as is common in anthropological contexts, that some early medieval houses had *cultural biographies* that were related to the life cycles of the household that occupied them (O'Sullivan, A. 2008, 234–8). It is occasionally possible to identify some ways in which the birth and death of houses seem to have been marked by particular actions. In some cases, there is possible evidence for foundation deposits: objects or substances placed in the ground during the construction of the building. At Newtown A, Co. Limerick, for instance, the wall slots of an early medieval house (constructed of two round houses conjoined in a figure-of-eight; see Figure. 3.14) produced a flint scraper, some horse teeth and the top of a human skull of a person aged about 30 years but of indeterminate sex. The central post-hole of this structure, radiocarbon dated to AD 795–1280, produced a stone hone. These items may have been placed as the house was being built; the depositing of a human skull fragment echoes prehistoric practice (Coyne 2011, 109).

We might expect that early medieval houses were changing all the time. There is often evidence for the periodic re-laying of house floors, for example, with the introduction of gravels, clays and brushwood suggesting maintenance activities. Even fire-places or hearths were often rebuilt and changed, again signifying rhythms of continuity and change. Even amidst this dynamic change, however, there is often a sense of persistence and a hearkening back to the past. At Drumclay crannóg, houses with laid clay and gravel floors were built on a timber foundation, directly over the remains of an earlier house. Houses replaced each other on the site in this way over the years (Bermingham *et al*. 2013). At Deer Park Farms, sometimes the door jambs and wattle walls of a previous house were incorporated into the structure of a newly built round house (Lynn and McDowell 2011). Similarly, at Ballyfounder Rath, Co. Down, early medieval round houses were rebuilt on precisely the same spot, creating a circle of clusters of two to three post-holes (Waterman 1958b, 41). Indeed,

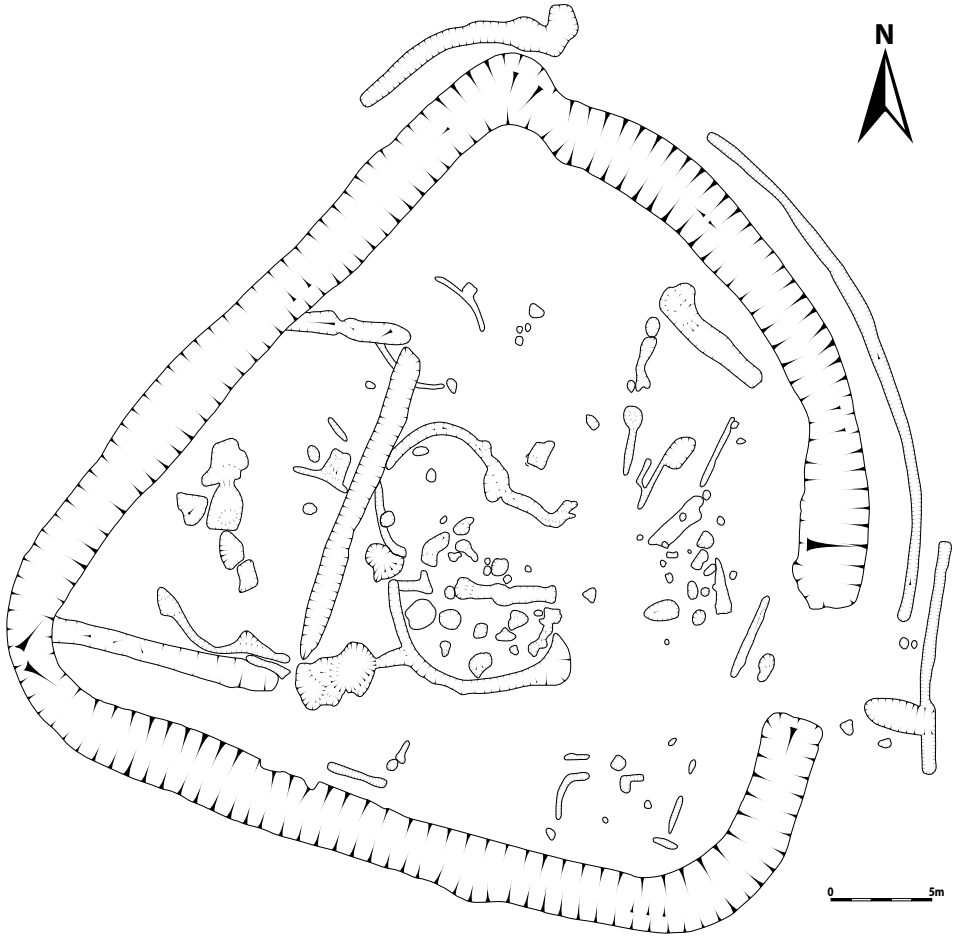

Fig. 3.14—Plan of settlement enclosure at Newtown A, Co. Limerick, showing a 'plectrum-shaped' enclosure, with entrance to east; a centrally located figure-of-eight dwelling or house; a truncated round house to the north; and a range of other potential features, including pits. (Figure by Aegis Archaeology; reproduced by permission of Aegis Archaeology and the National Roads Authority; from Coyne 2006a, illus. 3.)

many early medieval houses show evidence of having been deliberately rebuilt or replaced at precisely the same location—potentially over generations. This can be seen at Moynagh Lough, Co. Meath (Bradley 1991, 13–26); Leacanabuaile, Co. Kerry (Ó Ríordáin and Foy 1941, 87–90); Dressogagh, Co. Armagh (Collins 1966, 119–22), and Deer Park Farms, Co. Antrim (Lynn and McDowell 2011).

Doorways and entrances: orientation and movement

Doorways can be clearly identified on many early medieval houses, defined by kerb-stones, spud-stones, vertical wooden jambs and other features (see O'Sullivan, A. and Nicholl 2011, 76). At Ballyvourney, Co. Cork, an early medieval round house had substantial upright stones on either side of the south-facing door ope, with a horizontal stone as a threshold and vertical posts on either side to hold the swinging door (O'Kelly 1952, 36, fig. 2). Doorways on early medieval houses are often surprisingly small (presumably to reduce heat loss), and were probably closed with timber, wattle or rush-work doors. At Deer Park Farms, the oak timber door-jambs of an internal

door connecting a round house with its back-house were just under 1.2m in height (Lynn and McDowell 1988a, 9; Lynn and McDowell 2011, 145). One imagines that people would have had to crouch down to move into that back-house. An intriguing detail from Deer Park Farms is the presence of human lice external to the structures; floor deposits may have been swept out of the houses, or, possibly, people may have groomed themselves, or cleaned their clothes, when the inhabitants cast 'off their garments on the first warm day in Spring, depositing the winter's load of lice' out of doors (Kenward *et al*. 2011, 517).

In most early medieval round houses in Ireland, doorways are typically oriented towards the south, east or south-east (and only very rarely to north-west). This is typically interpreted as being practical in intent, aimed at providing shelter from any prevailing wet, south-westerly winds. It may also have been a cultural tradition or customary practice, with the doorway symbolically facing the rising sun in the morning. Doorways most often look towards the settlement enclosure entrance, thus enabling people within the house to monitor visitors coming up to, and in through, the gate (Lynn and McDowell 1988a, 2, 9). On some sites, however, such as the crannógs at Moynagh Lough and Sroove, as noted above, the house doors do not face the palisade enclosure entrance, but in some other direction. In these latter sites, some other imperative—such as a view towards a distant place or residence of interest—was clearly more important. It is also possible that the orientation of doorways was a signifier of social status or the seasonality of the use of the house. Sroove is probably a 'poor' person's crannóg, and it has a generally untypical south-west-facing door (Fredengren 2002a). At Ballyutoag, Co. Antrim, an early medieval upland enclosure perhaps associated with summer cattle-herding (with radiocarbon dates indicating use in the seventh to eighth century AD), the doors of the houses do not face to the south-east as might be expected, but again are oriented towards the south-west, perhaps because these were temporary, seasonal habitations (Williams 1984, 40–6).

Floors, benches and beds

Floor surfaces are evident in some excavated early medieval Irish houses (particularly in the waterlogged conditions of some crannógs and in the Hiberno-Norse towns). Early medieval house floors were variously made of brushwood, wattle, earth, clay and gravel and stone slabs. They were often built up over time in sequence, being gradually raised both by the natural detritus of daily living and as part of the deliberate renewal of house spaces. As might be expected, floor surfaces are not always continuous (one part of a house might be paved with stone, another part of the same floor might be of beaten clay), and they vary in depth across a house (from the centre to the edges). Floors were also subject to constant footfall, and they reveal much about the use of house spaces, particularly when waterlogged deposits can be analysed in detail (O'Sullivan, A. 2004, 2008; O'Sullivan, A. and Nichol 2011, 77).

At Deer Park Farms, the rath's house floors were, as revealed by palaeoecological studies, covered 'in a spongy, fibrous organic material, similar to well-decayed leaf mould, with litter consisting of heather, bracken, brushwood and even fallen leaves', all of which are attractive to insects. It seems likely that this floor covering was an introduced deposit, serving as a kind of organic carpet (Kenward *et al*. 2011, 512;

see also Kenward and Allison 1994, 89–107; Allison, Hall and Kenward 1999, 62; Lynn and McDowell 2011). At Sroove crannóg, Co. Sligo, the house floor of the Phase-2 occupation was composed of a layer (20cm thick) of brushwood, intermixed with clay (Fredengren 2002a, 226–32). There were few animal bones on this floor, but the presence of grain, blackberries and raspberries suggest food preparation and consumption within the house, probably during the summer and autumn. At Sroove, the floor of the next phase of occupation, Phase 3, was entirely different, consisting of flagstones laid over a base of smaller stones, 2–3 layers thick.

There is rarely evidence for portable furniture in early medieval Irish houses, either in the archaeological or literary sources; there certainly is, however, strong evidence that there were wooden cubicles and compartments located around the edges of walls. These features usually survive in archaeology as stake lines or post-and-wattle boxes, and they are almost certainly evidence of the beds or benches termed *imdae* or *immdai* in the documentary sources (Murray, H. 1979, 87–8). The texts also imply that some beds could be made more private by using textile curtains hung on wooden rods; bronze furnishings and other decorative features are also mentioned (Murray 1979, 88). At Deer Park Farms, the central round house (Structure X) had beds made of wooden posts and post-and-wattle screens, with a 'bedding' foundation of brushwood, meadow grass and grassland sods. Kenward *et al*. (2011, 515) state that the beetles present in the beds suggest an environment much like that associated with 'moister and more decayed hay, such as would typically be visibly mouldy and smell of ammonia'. Palaeoenvironmental analyses indicate that various insects lived with the people who slept in these presumably mouldy and slightly smelly deposits. In one sample from the bedding material in the sleeping area on the south side of the house at Deer Park Farms, there were human lice (*Pediculus humanus*), human fleas (*Pulex irritans*), some cattle lice and a small amount of human intestinal parasites (*Trichuris trichiura*), as might be accidentally deposited if a child had a brief bout of diarrhoea in the bed (Kenward *et al*. 2011, 515; see also Allison, Hall and Kenward 1999, 62; Lynn and McDowell 2011). In the main round-house bed, a small bronze brooch-pin was found in the bedding. In the round house beside it (Structure Eta), eleven glass beads and an iron ringed-pin were found in the bedding (Lynn and McDowell 1988a, 9), either because they were accidentally lost or had hung upon the walls and fallen onto the bed.

Hearths and fire-places

Hearths can be identified clearly within many early medieval houses, and these were undoubtedly features of both social and symbolic importance. Some are barely defined, being merely roughly circular areas of ash, burnt clay and charcoal, often located at the centre of the house, building up over time. Occasionally, undefined hearths such as these are placed across a single, level stone. At Deer Park Farms, stone-built rectangular hearths were common, placed at the centre of the wattle round houses (Lynn and McDowell 2011). At Sroove crannóg, in Phase 2 the central hearth within the house was on a single, fire-reddened stone. The same place in the house was re-used as a hearth in Phase 3 of its occupation (Fredengren 2002a, 226–30). In other houses, hearths are more formally defined, being rectangular boxes edged and

lined with stones. These hearths also show evidence of frequently having been rebuilt on top of each other, perhaps over significant periods. At Moynagh Lough crannóg, in the two round houses in Phase Y of occupation, the hearths were built of stones set on edge to create a rectangle or square. The same hearths were clearly re-used, but shifted slightly in location within the house and exhibited minor changes in shape across time (Bradley 1991, 13–26). In Moynagh Lough's large, eighth-century round house, the first fire-place was an open hearth into which a second, rectangular, stone-lined pit was placed. Subsequently, a third fire-place was added to the east of the earlier structure. There was also evidence of periodic rake-outs from this main hearth, with at least twenty discrete spreads of ash taken from the fire and spread across the house floor. Hearths and fire-places would have been of some symbolic and social importance to the early medieval household, being literally the centre of the dwelling and thus the hub for and the focus of most domestic activity and social interaction within it. The massive eighth-century round house 2 in Phase 5 at Moynagh Lough, measuring 11.2m in diameter, would have been a location for feasting, assembly and entertainment (Bradley 1991, 2011; and see Figure 3.15 for a plan and reconstruction). Hearths provided the warmth vital for human survival during cold winters and for food preparation, and perhaps even light for craft activities (Nicholl 2005, 29).

Household ritual deposits, superstition and magic

People's lives in early medieval houses would have been bound around by customary practice, but would also have been influenced by superstitions and even a belief in the magical properties of objects. Occasionally, the abandonment of houses seems to be marked by the deposition of domestic objects, such as rotary quernstones, wooden troughs and plough implements, in pits or wall slots (O'Sullivan, A. and Kenny 2008, 9). These types of objects, used in the production and preparation of food, may have been practically and metaphorically associated with the household itself. At Deer Park Farms, an oak trough (with a wooden shoe last inside it) seems to have been deliberately left behind on the floor of the smaller section (Structure Zeta) of a figure-of-eight house. This wooden trough—which early Irish literary sources would imply was a woman's property and used for kneading dough or presenting food—was apparently more than 150 years older than the house and must have been one of the household's cherished implements, so its deposition could hardly be accidental (Lynn and McDowell 1988a, 3–16; Earwood 1993, 100; Lynn and McDowell 2011, 130). One could envisage that perhaps upon the death of a grandmother, the trough was finally abandoned within a house that had also come to the end of its life.

Quernstones were used for preparing bread and cereals (an important aspect of the early medieval diet). According to early Irish literary sources, food preparation was a woman's task, so it is possible that these objects were associated with a grandmother or mother. At Leacanabuaile, Co. Kerry, broken rotary querns were placed in the walls of the Phase I round house that was then subsequently replaced by a Phase II rectangular house. At Dressogagh, Co. Armagh, two figure-of-eight round houses were placed on top of two earlier figure-of-eight round houses, the walls of which were pulled down and rebuilt. The broken portions of a rotary quernstone were placed within the wall slots of House 1, before its replacement by House II.

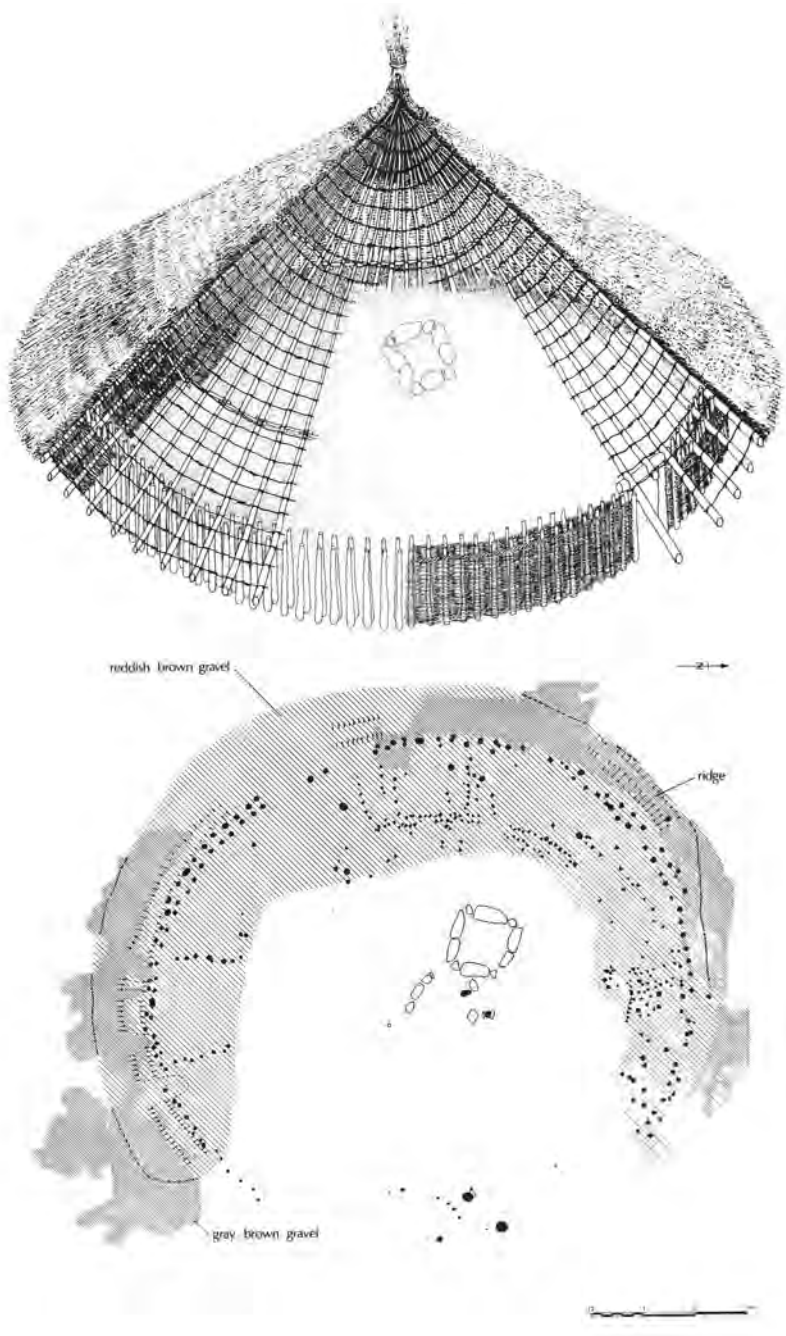

Fig. 3.15—Plan and reconstruction of large round house, in Phase 5, and probably dated to the late-eighth century AD, at Moynagh Lough crannóg, Co. Meath. The round house measured 11.2m externally (10m internally), was built on a pennanular ridge or foundation of gravel, and had a double skinned wall with an entrance to the east. Internally, there was post-hole evidence for beds and/or benches, an occupation floor up to 12cm in thickness and 20 ash spreads that had been raked out from the stone-lined hearth, itself re-built on several occasions. (Reconstruction drawing by Una Lee; both figures reproduced courtesy of John Bradley; from Bradley 1991, fig. 6.)

At the early medieval unenclosed settlement at 'The Spectacles', Co. Limerick, a broken quernstone was deposited on top of the paving, directly in front of the door of a round house (Ó Ríordáin 1949a, 106). At Rinnaraw, Co. Donegal, broken quernstones were left on the floor beside the door, while one fragment was also placed in the doorway threshold (Comber 2006, fig. 24). At Drumaroad, Co. Down, two broken

querns were deposited just south of the house doorway, alongside the paving (Waterman 1956a, 86). At Ballyvourney, Co. Cork, a broken quernstone fragment was deposited in a pit within the floor of a round house used by a metalworker, while other broken quernstones and an iron spear-head were left at the base of a drain outside its doorway (O'Kelly 1952, 25, 31–2). Broken and smashed quernstones are also known from Lisnagun ring fort, Co. Cork; Lagore crannóg, Co. Meath; Carraig Aille I and II, Co. Limerick; and recent excavations at Derrinsallagh 3, Co. Laois, among numerous other settlement sites (O'Sullivan and Kenny 2008, 10). In anthropological terms, deliberate or structured deposits often mark key events in the life of a house—or the people within it (such as the abandonment of the house or the death of a key household figure). In early medieval Ireland, we might imagine that when a house itself was being abandoned or rebuilt at the end of its life, it may have been a cultural practice to deliberately 'kill' the household's quern and leave it behind in the ruins.

Neolithic stone axes, flint arrow-heads, scrapers and general flint debitage are also common finds from early medieval settlements and houses. In many cases, this could simply represent residual evidence, or the use of flint as strike-a-lights, and we should be wary about ascribing significance to the presence of one flint object, while ignoring the large amount of flint debitage. In other cases, distinctive objects have been found, and often in discrete occupation horizons suggesting actual use in the early Middle Ages. A flint scraper and a chert arrow-head were recovered from a house floor on Sroove crannóg, Co. Sligo (Fredengren 2002a, 231, fig. 60); end-scrapers and a leaf-shaped arrowhead were found in occupation layers from Lough Faughan crannóg, Co. Down (Collins 1955, 69–70); at Leacanabuaile, Co. Kerry, a prehistoric stone axe was found inside a house (Ó Ríordáin and Foy 1941, 95); while a Neolithic miniature polished stone axe was found in a stone-lined pit within an early medieval round house at Lowpark, Co. Mayo (Gillespie 2011c, 262–3). At Deer Park Farms, Co. Antrim, as many as eighteen stone axes, a stone adze and a chisel were recovered from the early medieval settlement layers, mostly associated with house occupation deposits. One axe came from collapsed roofing material (McDowell 2011, 253–5), suggesting that the object was suspended in some way from the roof timbers or perhaps was wedged into the thatch itself. It is likely that many of these objects were discovered accidentally during ploughing in the early medieval period and brought into houses as charms or 'magical' items to protect the house from fire or disaster. It is most unlikely that stone axes and arrow-heads were seen as 'antiquities', or objects associated with the past (a category recognition that only comes with the development of eighteenth-century antiquarianism). Instead, they were probably regarded as 'thunderbolts' or 'fairy darts' that were often felt to have talismanic or protective powers (Carelli 1997). Flint arrow-heads were seen in Irish folklore of the early twentieth century as 'witch-stones', having magical properties that could protect cattle, milk and butter. Estyn Evans (1957, 300–3), noted that cattle that were not thriving were reckoned to have been 'elf-shot': a cow-doctor called to a stable would surreptitiously carry a few flint arrow-heads to whip out of the animal's body at the strategic moment so as to 'cure' them. Calves could also be cured of various ailments by boiling a flint arrowhead in milk and getting them to drink the milk. Kelly (1997, 174–5) notes that later medieval Irish manuscripts refer to the bewitching of cattle (*mille ba*), which may have been caused by elf-shot

(*urchar millte*), so it seems likely that prehistoric flint arrow-heads found in early medieval dwellings represent evidence for superstition and belief in magic.

Daily life within settlement enclosures: economy and craft activities

The organisation and lay out of settlement enclosures

O'Sullivan and Nicholl (2011, 79–89) and O'Sullivan (2004; 2011) have previously explored how early medieval settlement enclosures can be viewed as theatres wherein were played out various social roles, and also practically as the venues for various daily tasks, crafts, industry and farm-associated labour. One might have have seen within them open-air hearths for cooking and industry, pens for small animals and occasionally small shelters or lean-to structures against the enclosure bank, although these can be difficult to distinguish amongst the stake-holes, post-holes and trenches of an excavated site (Waterman 1972, 34; Jope and Ivens 1998, 110). There would also have been within a working farm-yard various fixtures and furniture that would leave little archaeological trace, from such movable objects as ploughs, carts and miscellaneous agricultural equipment, to various wood-piles, dung-heaps, middens and caches of raw materials (MacNeill 1923, 291; O'Sullivan, A. 2008, 250–51, footnote 78; see also Lynn 1986). Although early literary sources imply the existence of barns, sheds and storehouses, there are few such structures definitely identified from archaeological sites, although some structural features may be identified as outbuildings on account of their size, shape, location and use (Jope and Ivens 1998, 110–14; Waterman 1958b, 31–61; Lynn 1978b, 60–1; and see Chapter 5 below). At Ballymacash rath, Co. Antrim, lean-to structures may have been situated against the enclosing bank. The floors within were well-laminated and showed little evidence for the presence of livestock, suggesting that they were not stables or buildings for large animals (see Jope and Ivens 1998, 101–23). Other features at this settlement included a grain-drying kiln, an oven with an associated hearth and a storage pit, illustrating that the processing and storage of cereal grain occurred at this site. In general, however, although raths may occasionally have been used to protect cattle, it does not seem that they were kept at these sites all the time (see Chapter 5 below).

Agriculture, food production and gendered labour

Domestic life in early medieval settlements would have been partly organised on the basis of gender relations, with men and women working together on some tasks, while some crafts were gender or age specific (Bitel 1996, 111–37). The early Irish law text *Cáin Lánamna* strongly suggests that most daily domestic or agricultural activities were performed by *both* men and women, including ploughing; reaping; caring for cattle, pigs, sheep and goats within enclosures; and general work on the land (Kelly 1997, 448–9). Similarly, children were probably involved in a whole range of tasks around the household (Kelly 1997, 451–2). On the other hand, women were depicted as being responsible for child-rearing, food preparation and the production of textiles. *Cáin Lánamna* also indicates that women were in charge of feeding (*bíathad*)

the household (Kelly 1997, 451); the grinding of grain in rotary querns and the preparation of milk, cheeses, whey, curds and so on are seen as women's work in the literature (Kelly 1997, 449–50; Bitel 1996, 123–5). The wooden buckets and churns used in milking and cheese- and butter-making that have occasionally been found in rath and crannóg excavations were probably used by women in these essential tasks, as there is a strong association between women, milking and dairying (Kelly 1997, 450; O'Sullivan 2004).

Early Irish law claimed that women should own such equipment as a sieve (for sieving flour) and a kneading trough (for making dough). Some law texts describe a woman's other necessary equipment as including a griddle, beetle, scale, bucket, dishes, cups, hides, pillows and cook-pots. Quernstones were used domestically for grinding cereal grain, and almost certainly this was work that was done by women (although noblewomen were, of course, meant to avoid such menial work). The archaeological excavation of quernstones in homes and dwellings confirms the role of cereal crops in the secular domestic economy of early medieval Ireland (Kelly 1997, 450; O'Sullivan, A. and Kenny 2008, 8–11; O'Sullivan, A. and Nicholl 2011). Both the early Irish historical sources and anthropological studies indicate that textile production, involving the spinning of yarn, cloth dyeing, weaving and the manufacture of clothing, were all tasks carried out by women in the home (Kelly 1997, 448–51). In fact, women were expected to bring to a marriage the equipment for such tasks, such as spindles, distaffs and carding combs—and artefacts such as these, as well as weaving tablets, needles and possible loom weights, have been recovered from early medieval houses and settlements. In an ordinary farming household, clothing manufacture was probably carried out by mothers and daughters; on lordly or more prosperous settlements, it was more likely to have been the work of slave-women (although the early Irish sources claim that elaborate embroidery was carried out by noblewomen).

Men (if they were not lordly and meant to avoid physical work) were responsible for the initial work of agricultural labour, while women were responsible for dealing with its produce; men ploughed, sowed cereals, harvested, threshed and dried grain in a kiln, and they slaughtered livestock. Occasionally, the tools and equipment associated with these activities can be found within houses and dwellings, suggesting that men brought such implements in from the fields for safe-keeping. Ploughshares and coulters were often carefully secured and stored within settlements (see Chapter 5 below). Presumably because these were valuable items that a prosperous freeman was expected to contribute to co-operative ploughing, they were cherished and preserved safely inside the home. Ploughshares and coulters have often been found on early medieval raths and crannógs. At the early medieval cashel of Leacanabuaile, Co. Kerry, amongst the iron objects found were three knives, a possible barb from a fishing spear, a sickle, a quantity of slag and, most notably, a plough sock which was recovered from the habitation layer in House A (see Ó Ríordáin and Foy 1941, 92–5; MacNeill 1923; Kelly 1997, 49). Other crafts, in particular metalworking, stoneworking, house-building and carpentry, are also portrayed in the literature mainly as men's activities. Blacksmiths, for example, personages of extraordinary symbolic resonance, are virtually always portrayed as men in the descriptions of the saints' *Lives* and in narrative literature.

Crafts and manufacturing within settlement enclosures

Early medieval settlements have produced a range of evidence for various craft activities (O'Sullivan, A. 1998a, 141–5; Edwards 1990, 68–98; Mytum 1992, 210–52; Comber 2008; O'Sullivan and Nicholl 2011), as will be discussed in detail in Chapter 6 below, dealing with crafts and industry. Early medieval settlements also produce evidence for crafts of different levels of skill and knowledge, as might be expected of a society that understood craft production in social terms—so that skilled carpenters, copper-workers and blacksmiths were all high-status individuals, occasionally having a similar honour price to that of lower-grade nobility, while combmakers were clearly seen as being of low social status (Kelly 1988, 63; O'Sullivan 2004).

It is possible that some of the industrial debris found on settlements represents the work of intinerant craftworkers who were not primarily resident there. Some crafts, such as non-ferrous metalworking (including the working of copper alloys, silver, tin and gold) as well as sophisticated coopering and lathe-turning, may have been specialist activities carried out by skilled craftsmen who travelled across the *túath* working for patrons who supplied them with raw materials, food and protection in return for the goods that they produced (Bradley 1993, fig. 8.4; Youngs 1989b, 178–84; Ryan 1988, 38–9). There is also clear evidence in the archaeological record and early Irish literature for specialist blacksmiths, as the forging of swords, spear-heads and axes would have required a higher level of knowledge and skill than required of an ordinary blacksmith. On the other hand, small-scale ironworking on settlements must have been relatively common, as farmers would have repaired their own equipment and tools. There is also evidence for bone- and antlerworking on sites, with associated raw materials, semi-worked pieces and completed plain and decorated bone pins, toilet implements, combs and other objects all being found on both high-status and low-status settlement sites. Leatherworking may have been practised on some sites; discarded shoes, worked scraps of leather and a wooden shoe-last were found at Lagore, while iron leather-scoring tools are known from Lagore and from Ballinderry 1, Co. Westmeath (O'Sullivan 1998a, 141–5; 2004).

It is occasionally possible to trace the social and spatial organisation of such crafts and industry within the enclosed spaces of raths and crannógs (O'Sullivan and Nicholl 2011, 82–6). This is particularly true in the case of metalworking, where the use of furnaces, pits, fires and dumps of material leave the most significant archaeological traces across settlements. Fireplaces situated in the enclosure, away from houses, are known. These vary from amorphous, unenclosed burnt spreads used for short periods of time; to formally stone-lined hearths with deep accumulations of ash and other burnt material. The latter have been found at Boho, Co. Fermanagh (Proudfoot 1953, 46–8), and Dunsilly, Co. Antrim (McNeill 1991–92, 81, 85). Some, as with the two stone-lined hearths within the enclosure at Ballypalady II, Co. Antrim, are thought to have been used for cooking (Waterman 1972, 34). Others are associated with metalworking, both ferrous and non-ferrous, and can be seen as active working areas, augmented with additions such as wind-breaks, furnaces and spreads of broken crucibles, slag and other waste products. Occasionally, metalworking can be seen to become the dominant practice at a settlement, as at the raised rath at Altanagh, Co. Tyrone: during Phase II at the site, the entire occupation surface was laid with cobbles

and a sandstone pavement was inserted around a metalworking hearth (Williams 1986, 56–8). Interestingly, the site revealed no definite evidence for houses or other structures but ample evidence for metalworking in the form of furnace bottoms, a bowl furnace, quantities of slag, a hammer-scale and flint (Williams 1986, 51–8).

At Moynagh Lough, Phase X (dated to the early eighth century), there was evidence for several episodes of copper-alloy object production, including both smelting and casting (Bradley 1991, 13–26; Bradley 1993, 74–81; Ryan 1988, 38–9; Comber 1997, 101–14). This occurred episodically, in places that may have been deliberately located for safety reasons towards the edge of the site. Metalworking Area 1 (dated, possibly to about AD 720) appears to have been located between a house and the entrance to the site. A spread of charcoal, earth and ash, and the presence of pieces of baked clay, crucible shards, mould fragments, an iron stake used for sheet metalworking and motif pieces indicate that the full manufacture of objects probably took place there. Metalworking Area 2 at Moynagh was also located outdoors, at the back of the round house. Several features were identified, including a wind-break, a cobbled area, a furnace, a stone-edged area of burnt clay and a compacted spread of pebbles. These were used for on-site manufacturing and production on at least eight occasions. In a dump of metalworking debris were fragments of clay nozzles, crucibles, heating trays and up to 600 pieces of moulds used to cast brooches, pins, mounts and studs (Bradley 1993, 78–80).

Pits have also occasionally, but not often, been found on early medieval settlements, and would have been used for a variety of domestic, craft and industrial purposes. No doubt some had multiple functions over their lifetime. At Lowpark, Co. Mayo, a keyhole-shaped pit, radiocarbon dated *c*. AD 670–880, was constructed to form a secure stone chamber set into the subsoil, possibly within a round house. The excavator interpreted it as a storage pit, or *corróc* as such structures were known in the early Irish sources (Gillespie 2011c, 260–4; Kelly, F. 2000, 367). Intriguingly, at the base of the pit was a stone box, within which where, amongst other things, animal bone from pig, sheep and cattle; an iron knife; a burnt bone pin fragment; and a Neolithic miniature polished stone axehead (Gillespie 2011c, 262–3). One is tempted to interpret this as a magical item, like those described above, deposited in the pit to protect dairy products from spoiling. At Glenkeen South, Co. Londonderry, two large, rectangular pits were found side by side in the centre of the enclosure. Both were filled with masses of charcoal, which was identified as being from the burning of small branches of alder (Waterman 1967a, 49–50). These pits could have been charcoal-production kilns (Kenny 2010, 99–116).

Contents from other pits on other sites have shown that they were used for the disposal of domestic refuse, and some shed light on the diets of early medieval people. Excavation of an enclosure at Betaghstown, Co. Meath, for example, revealed three large, oval-shaped pits that contained charred plant remains, identified as hulled barley and oats; and charred fruits, such as apple, cherry/plum. The contents from one of the pits were radiocarbon dated to AD 430–620 (Deirdre Murphy 2005:1158). At Erin Gibbons's (1997:228) excavations of a large early medieval stone cashel with houses at Cathair Fionnúrach, Ballynavenooragh, Co. Kerry, a souterrain produced a large waterlogged pit (2m wide by 1.9m depth) with three separate horizons of organic material. The uppermost horizon consisted of a layer of oaten straw, which appeared

to have been interwoven with a series of wooden rods, possibly hazel. This overlay a layer of gravel containing straw. The bottom horizon consisted primarily of grass but with some straw. Finds from the pit included a wooden lid containing a mirror inset; two fragments of a wooden platter; hazelnut shells and part of a winkle shell.

Dirt, middens and cess-pits on early medieval settlements

O'Sullivan, A. and Nicholl (2011, 86–9) have also offered reflections on the rubbish, human waste and animal dung that would have been common underfoot in early medieval settlement enclosures, as might be expected in a working farm-yard. Nevertheless, there was clearly a perception that some areas of the settlement should be kept clean (such as the house floors and the *airdrochat*) and that rubbish was to be collected and dumped in a midden, mound or dung-heap. The rubbish dump was often located at the edge of the site, close to the entrance or sometimes outside houses. The placing of rubbish at the site boundary—the palisade or bank—supports the idea that early medieval communities placed a particular importance on their enclosure boundaries, and understood them as significant edges. In many societies, particular types of dirt, debris and waste products are perceived as polluting and dangerous, so they are often placed at the edge of the settlement because that is a spatially and mentally liminal location (Hingley 1990, 100; Parker-Pearson 1996, 117–32; Brück 1997, 159). Middens/dung-heaps provide a range of information on early medieval diet, animal management and economy, but they also give an insight into the cultural perception of dirt in early Irish society. The early medieval tale *Fled Bricrend* describes how Bricriu and his queen fell from their *grianán* ('sunny terrace') when Cú Chulainn tore their *dún* ('fortress') apart, 'and wound up in the dunghill in the middle of the *les* among the dogs' (Ó Corráin 2005b, 551). On some early medieval crannógs, it is clear that rubbish was cast up against the wooden palisade, or tossed across it out into the lake-water. This was the case at both Moynagh Lough crannóg (Bradley 1991) and Ballinderry crannóg No. 2, where bones were clearly gathered up after feasts, carried to the palisade and flung across it (Hencken 1942, 31). At Ballinderry crannóg No. 1, the largest accumulation of bone was at the palisade on the north side of the crannóg, which was 'furthest from the house'. Hencken (1936, 118) reckoned that this was the 'rubbish heap of the crannóg'. At Deer Park Farms rath, a midden was mounded up against the inner side of the enclosure bank at the northern side of the enclosure (Lynn and McDowell 2011).

Indeed, one of the first things that a visitor to a lordly or aristocratic rath or crannóg would have seen (and smelled) would have been a midden or dunghill at the boundary, with the visible discarded remains of prime cuts of beef, pork or mutton. On low-status sites, bones were similarly available to view outside the door of the house. At Moynagh Lough, the middens from the crannóg lay outside the palisade, and were particularly thick across the north, east and west side of the island (McCormick 1983, 253–67; McCormick 1985–86, 86–90). John Bradley (1982, 117–22) suggested that these unphased layers of habitation debris were the 'rubbish tip' of the island. They were rich in animal bones and also produced large amounts of small finds, such as wooden objects (including a separate bladed shovel that might have been used to cast material over the palisade), leather and even gold

(a small piece of filigree). Finbar McCormick (2002, 25–31) has observed that one of the interesting aspects of the cattle bone assemblage from Moynagh Lough is that the bones from all types of cuts of beef are present: from the tenderloin and fillet (which literary sources suggest were high-status meats for kings, lords and other significant personages) down to the ankles (given to lower-status craftsmen). He suggests that the presence in the middens of virtually all of the cattle carcass indicates that feasts were being held on the crannóg at certain times of the year, when a larger than normal social group would gather. Camilla Lofqvist's faunal studies on the small early medieval crannóg occupation levels at Sroove indicate a similar pattern in the bones present there, suggesting that the assemblage was generally typical of other early medieval sites—a preponderance of dairy cattle, some pig, sheep and lesser amounts of horse (Lofqvist 2002, 142–84). It is worth noting also that in many small-scale societies, the bones from different animals—and the skulls and jaw bones in particular—were deliberately deposited and prominently displayed to protect a site; so, the location of horse stallion skulls beside the 'house' at Craigywarren crannóg, Co. Antrim (see Coffey 1906, pl. x), and on Lagore may not have been entirely accidental.

There is also some evidence that pits were occasionally used as latrines or cesspits. At the early medieval rath at Killyliss, Co. Tyrone, the excavator identified a wattle-lined pit that was surrounded by two sleeper trenches and interpreted these as screens to provide a modicum of privacy in a privy (Ivens 1984a, 22). At some early medieval crannógs (such as Ballinderry No. 1, Co. Westmeath; Moynagh Lough, Co. Meath; Lough Faughan, Co. Down), there are also pits and depressions that appear to have been used as cesspits—places where people might have put their own bodily wastes (as well as other rubbish). An event involving somebody defecating on a crannóg in the seventh century is described in a story entitled 'The death of the three sons of Diarmait son of Cerball', purporting to have taken place in AD 651 (Meyer 1894, 70). A cesspit was investigated at Moynagh Lough Phase X (dated to the early eighth century). This was a sub-rectangular dug feature (1.7m × 1.3m), filled with lenses of dung, alternating with narrow fibrous lenses composed of straw and leaves (presumably the wiping material used in the toilet). It had been recut on two occasions and could have been cleaned out many more times without leaving any further archaeological trace. This cesspit was located just inside the entrance to the crannóg, off to the right at the end of a timber pathway that led into the site, and in full view between a round-house and the palisade (Bradley 1993, 76). Similar dug pits have been noted on other crannóg sites. At Ballinderry No. 1, a double pit was located to the east of House III, between its walls and the palisade, towards the end of the eleventh-century use of the site. Similarly, at Ballinderry No. 2, a pit was located at the north edge of the site, just inside the pile palisade of the ninth-century crannóg. This was probably also a cesspit, again visible from the site entrance (Hencken 1942, 31; Newman 2002, 123; O'Sullivan, A. 2004; O'Sullivan and Nichol 2011).

Souterrains and early medieval settlements

A distinctive aspect of many early medieval settlement enclosures are souterrains—artificial underground or semi-subterranean passages and chambers built of stone and/or wood, often with entrances from within houses, from the farmyard or from

the ditch surrounding the enclosure. The most comprehensive overview of the subject suggests that there are approximately 3,500 souterrains in Ireland (Clinton 2001, 33), with increasing numbers having been found on recent excavations. Although they can be earth-cut, rock-cut and wood-lined, dry-stone built souterrains constitute the most commonly found type (over 95% of the total), and these occur in clusters in areas across the island of Ireland (Clinton 2001, 36).

The distribution of souterrains is very uneven; large areas of the island are devoid of them, but there are distinct concentrations in north-east Ulster, north Leinster, east Connaught and south Munster (Clinton 2001, 34; for a distribution map of souterrains, see Figure 3.16). B.V. Buckley (1986, 110), using Ulster as a case study, argued that these concentrations represented distinctive political groups; Warner (1986, 112) and Clinton (2001, 39) disagree with this theory. There are also variations within the regional pattern of souterrain occurrence; for example, souterrains in the east of Ireland tend to be located in unenclosed settlements, while the majority in the west are located within raths or cashels (Clinton 2001, 45). Clinton contends that the distribution of souterrains 'would not appear to have been simply determined by either topographical or technological considerations alone' (2001, 44). No convincing explanation for the distribution of souterrains in Ireland has as yet emerged.

Warner (1986, 111) and Clinton (2001, 89–95) agree that 'the overwhelming weight of Irish archaeological and historical evidence would place the datable souterrains within the ninth to twelfth century bracket'. There are some earlier examples. Charcoal from the construction trench of a souterrain in a rath at Liscahane, Co. Cork, was radiocarbon dated to AD 428–660 (2Σ) (Ó Donnabháin 1983, 217), although this could be from residual material. Oak charcoal from structural posts within souterrain 1 at Lowpark, Co. Mayo, produced a radiocarbon date of AD 540–650 (Gillespie and Kerrigan 2010, 249), although this was an unusual stone-built subterranean chamber, approximately 7.5m long and 3m wide, with no indication of souterrain passageways. Charcoal from an oak post at the more typical souterrain 2 at Lowpark, Co. Mayo, however, also produced an early date of AD 550–660 (Gillespie and Kerrigan 2010, 260), although here again the 'old-wood' effect of oak must be considered. The best evidence for an early souterrain comes from Raystown, Co. Meath. The passageways of the unusual earth-cut souterrain at this site appear to have been roofed, and the dated material comes from a circular chamber with an associated ring of post-holes, cereal grains from one of which produced a date of AD 530–650 (Seaver 2010, 266). Clinton (2001, 58) argues that, on the basis of structural association, souterrains in the south-west of Ireland are earlier than those found elsewhere. Souterrains in that area of the country are found in association with round houses (for example, Bray Head, Valentia, Co Kerry; see Hayden 1998:267; Hayden 1999:324) or figure-of-eight buildings (for example, Cathair Fionnúrach, Co. Kerry; see Gibbons 1997:228); whereas, in the more northern counties, with the possible exception of Downpatrick, Co. Down (Brannon 1988c, 6), they are almost exclusively found in association with rectangular houses (Clinton 2001, 53–8).

Souterrains are frequently found within early medieval enclosures (Plate III. XII). They occasionally may have been secondary additions (Clinton 2001, 203), as is the case at Kiltale, Co. Meath (Rynne 1974, 267). At the rath of Faughart Lower,

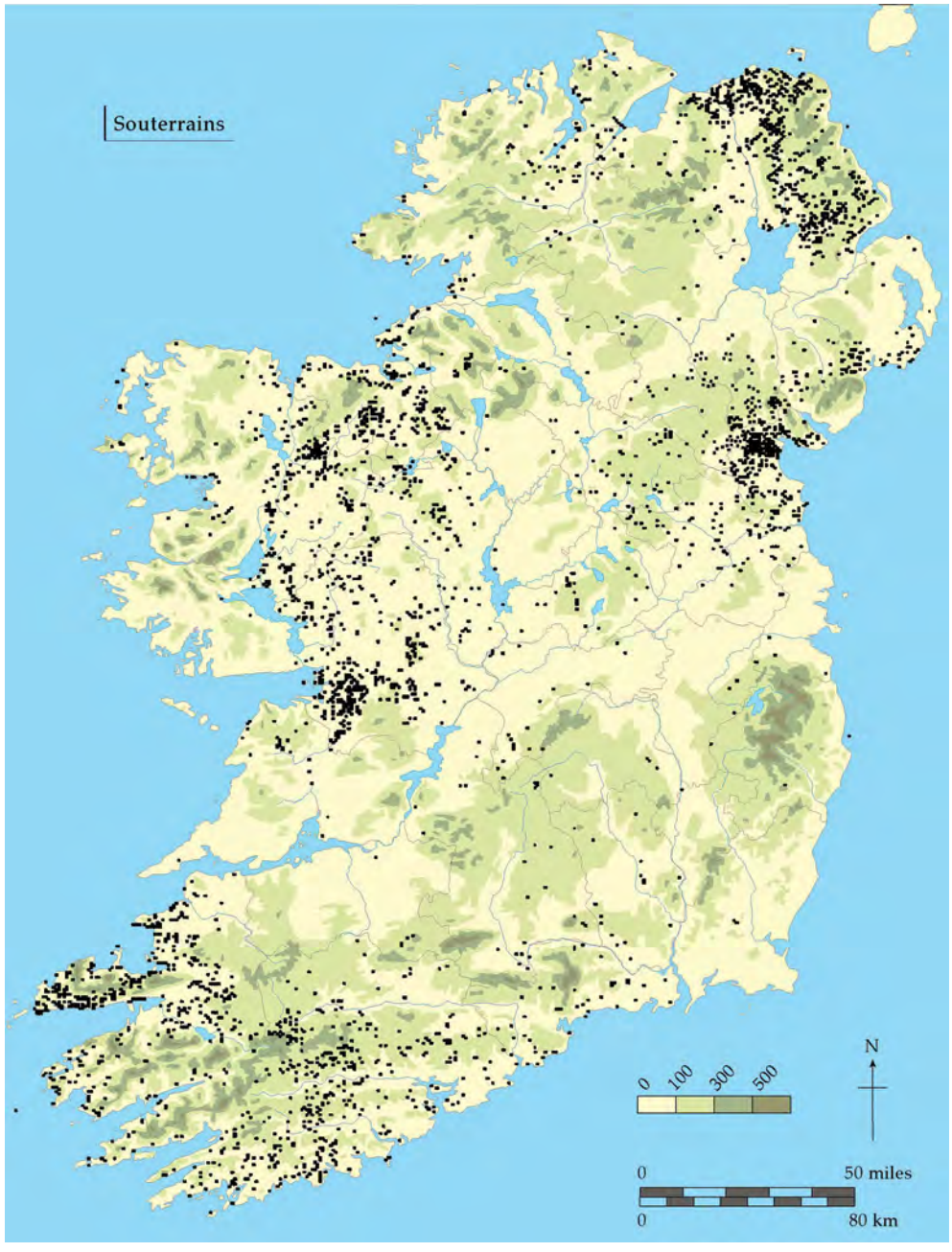

FIG. 3.16—Distribution map showing the location of the 3,500 souterrains known in Ireland, most being regionally distributed in the north-east, north-west and south-west of the island. (Map by, and reproduced by permission of, Matthew Stout; from Stout and Stout 2011, fig. 49.)

Co. Louth, one souterrain was built through an in-filled ditch while another was built across the in-filled ditches (Buckley and McConway 2010, 51). At Treanbaun, Co. Galway, a drystone walled souterrain was built into the in-filled enclosure ditch, which was radiocarbon dated to AD 600–90 (Lehane *et al*. 2010, 145–6). Many of the souterrains at the later unenclosed phase at Knowth, Co. Meath, were built across the in-filled ditches of the earlier enclosure (Eogan 2007, 3–4; see also Eogan 2012, chapter IV); and similarly at Rosepark, Co. Dublin, four of the seven souterrains

Pl. III.XII—Archaeologists excavating the rath enclosure ditch and the internal souterrain at Carn More 1, Co. Louth. (Photograph by Studio Lab; reproduced by permission of Irish Archaeological Consultancy (IAC) Ltd and the National Roads Authority.)

were cut into the ditch-fill of the earlier enclosures (Carroll 2008, 72). Excavations at Letterkeen, Co. Mayo (Ó Ríordáin and McDermott 1952, 100); Millockstown, Co. Louth (Manning 1986, 165); Ninch, Co. Meath (McConway 2001:1007, 2002:1489); and Raystown, Co. Meath (Seaver 2006, 80; 2010), all suggest that the souterrains post-dated the initial settlement phase on these sites. Souterrains have also been excavated on early medieval burial grounds, for example at Boolies Little, Co. Meath, where a souterrain was constructed after the cemetery fell out of use (Sweetman 1983a, 44); dry-stone-walled souterrains have also been found on ecclesiastical sites, including at Templebryan North, Co. Cork (Killanin and Duignan 1967, 167); Meelick, Co. Mayo (Killanin and Duignan 1967, 433); and Kiltiernan East, Co. Galway (Westropp 1919, 178); and a possible timber souterrain was identified at Cathedral Hill, Downpatrick, Co. Down (Brannon 1986b, 1987, 1988b, 1988c). Souterrains have also been excavated away from settlement enclosures, in which case they may represent evidence for unenclosed dwellings.

The function and use of souterrains continues to be discussed; some examples are spectacular structures, leading some distance away from the settlement enclosure (see, for example, Plate III.XIII). In the past, the presence of souterrain ware and charcoal deposits within souterrains led to the belief that these were subterranean, troglodytic dwellings (Clinton 2001, 16). As is the case with the re-interpretion of Anglo-Saxon sunken floored buildings in England, however, it is now understood that such deposits may well represent dumped rubbish and could in fact reflect a later re-use of souterrains. Souterrain B on Site 3 at Marshes Upper, Co. Louth (Gowen 1992a), has been interpreted as a 'farrowing pen', because of the high number of neo-natal pig bones it was found to contain (McCormick 1992a, 118). Sows that are ready to give birth prefer an isolated, dry place with little air circulation

Pl. III.XIII—Excavating the souterrain associated with the settlement enclosure at Newtownbalregan, Co. Louth. The image shows a view of the souterrain facing east with Passage No. 3 and Chamber No. 1 in the mid-ground of the photograph. (Photograph by Studio Lab; reproduced by permission of Irish Archaeological Consultancy (IAC) Ltd and the National Roads Authority.)

(McCormick 1992a, 118). The most frequent explanation for the existence of souterrains, however, is that they were used either for food storage or for human refuge (Mallory and McNeill 1991, 196). Since a low, constant temperature would be maintained underground, it is possible that they acted as a larder for perishables—milk or butter—that would quickly spoil above ground in the heat. Use for storage would also require relative ease of access, such as was evident in the souterrains at Graigue, Co. Galway, which had a ramped entrance; and Fortwilliam, Co. Longford, which had a stepped entrance (Clinton 2001, 60). Wooden vessels were found in the souterrain at Ballyaghagan, Co. Antrim (Evans 1950, 13), suggesting it was used for storage; it has also been suggested that such vessels may have contained emergency food supplies for times of trouble (Warner 1982, 92; Clinton 2001, 63).

Souterrains may indeed have functioned as day-to-day stores, but it seems likely that they would have been used in times of danger to keep people and personal possessions safe. The few high-status objects recovered from excavations at souterrains include a *c.* ninth-century glass beaker from Mullaghroe, Co. Sligo (Harden 1956, 154), and a silver penannular brooch from Cahercommaun, Co. Clare (Hencken 1938, 23). It also appears that souterrains were used to hide ecclesiastical goods, such as the bronze-coated iron bell found under the flagstone floor of the souterrain in Oldcourt, Co. Cork (Murphy and Ó Cuileanáin 1961, 88), and the bell-shrine recovered from the infill of the souterrain at Drumadoon, Co. Antrim (Bourke, C. 2009, 145–63). An iron coulter and ploughshare found in the souterrain at Faughart Lower, Co. Louth (Buckley and McConway 2010, 52), may have been hidden there (presumably sometime after the start of the second millennium), but it also has the appearance of a formal 'closing deposit' for the souterrain. There are references to raiders going into souterrains for loot, such as the description of a Viking raid in Co. Meath, in the *Annals of Ulster*, which tells how:

> the caves [i.e. souterrains] of Achad Aldai, and of Cnodba [Knowth], and of Boadán's Mound above Dubad [Dowth], and of Óengoba's wife, were searched by the foreigners (AU 863).

The creeps (constricted areas), hidden chambers and 'sally-ports' found in souterrains have been interpreted as defensive features, put in place to protect the inhabitants who fled to the souterrains to avoid an enemy (Edwards 1990, 30; Clinton 2001, 201). The presence of a 'murder-hole' at Newrath Big 2, Co. Meath (Clinton 2001, 159), may suggest that, in addition to serving defensive purposes, souterrains could also be used offensively, by luring in and ambushing the enemy.

Each site should probably be interpreted on a case by case basis. Those with obvious restricting features, such as a souterrain excavated at Tateetra, Co. Louth, may well have been primarily intended as refuges (Collins *et al*. 2011). It has been argued that souterrains could only have functioned as such in the short-term: they could be broken into from above, and anyone hiding in them could be forced out or smoked out, or suffocated by blocking the ventilation shafts (Edwards 1990, 30). It must be acknowledged that souterrains only became dangerous places when the exits were barred or when determined attackers ventured into the dark. In such cases, however, they would become deadly traps for their users: the king of the Fir Lí and

his wife and brother are recorded as having been 'smothered in a cave' [that is, a souterrain] by the Uí-Tuirtre (LC 1135).

Early medieval unenclosed settlements

Dwellings of the poor and unfree?

If enclosed settlements were the defining hallmark of early medieval Irish freemen—the *nemed* (the noble and royal grades) and/or the *sóer* (small farmers upward; see Kelly 1988, 9; Edwards 1990; Mallory and McNeil 1991; Mytum 1992; Graham 1993; Stout 1997; Charles-Edwards 2000)—then it would seem to be reasonable to assume that unenclosed settlements were occupied by un-free, dependent labourers or the socially marginalised (Kinsella 2005). A large proportion of the population must have been composed of *fuidir* 'tenants-at-will' and *dóer* 'semi-free', and there must also have been large numbers of slaves (Kelly 1988, 9–11). These peoples tend to be overlooked in most settlement models (Boyle 2004). It used to be thought that such people lived in small, nucleated settlements somewhat similar to the *clachans* that survived in many parts of western Ireland until the twentieth century (Evans 1973, 58–65). It now appears, however, that most of these structures are a later medieval, or even a post-medieval, settlement type. Excavations at Murphystown, Co. Down, for example, found no evidence that the *clachan* there was of great antiquity, and although several pits, which contained souterrain ware, were found, these 'merely suggest that the site was occupied in early Christian or mediaeval times' (Buchanan *et al*. 1958 122).

There is some evidence for early medieval people living outside of, or away from, enclosures, but it still is unclear what this might mean in social or ideological terms. Some unenclosed settlements may represent the dwelling places of the low-status social groups such as the poor, unfree or dependent labourers (Boyle 2004; Kinsella 2005). Some people—potentially labourers or slaves—may have inhabited buildings immediately outside the raths and cashels of their masters, and indeed some examples of early medieval stone houses outside cashel enclosures are known, such as at Carraig Aille, Co. Limerick (Ó Ríordáin 1949a), and Mooghaun, Co. Clare (Grogan 2005, 161). Other people may have lived in houses situated amidst the fields, or even out in open country—one example being the houses in small fields at 'The Spectacles', at Lough Gur, Co. Limerick (Ó Ríordáin 1949a). A more recently discovered example would be the round houses located in rectangular fields or enclosures at Ballynacarriga, Co. Cork (Noonan 2001:115). There is also evidence for people carrying out farming and industrial activities in proximity to enclosures: at Ballyburn Upper, Co. Kildare, evidence was found for a range of early medieval agricultural and craft activities (including livestock rearing, leatherworking and weaving and charcoal production) outside of, and well away from, some probable settlement enclosures (O'Neill, N. 2010). There are also many early medieval houses or huts situated in upland landscapes that may have been associated with seasonal or transient economic activity such as transhumance cattle herding, examples being Site E and Site F in the Barrees Valley, Co. Cork (O'Brien,W, 2009, 257–71). Six isolated early medieval houses on the slopes of Knocknarea, Co. Sligo, were excavated in the late 1970s (Burenhult 1984, 71–109). Many of these sites—in the townlands of Ballybeg, Grange West, Luffertan and Seafield—are up to 0.5km from each other

and, thus, could at best be interpreted as a community living together across a hillslope. Unfortunately, the information available on these sites is rather limited as the excavator was focused on Mesolithic material. Finally, we should also be aware that not everybody actually lived in houses; there certainly were some early medieval people who lived in caves, or wattle shelters or other simple structures in sand-dunes and coastal locations.

Our problem in interpreting all such unenclosed habitation sites is that we do not know whether they might have been associated with people of varying grades of social status, with a person's role in the community (sheep herder, etc.), with seasonal activity (only used in summertime) or with very specific economic activities—or, indeed, with all of these things at the same time. For these reasons, the role and function of early medieval unenclosed settlements is poorly understood, and therefore they are generally not included in early medieval settlement landscape models, which tend to be dominated by analyses of enclosures (see Stout 1997; Kerr 2007). Another problem is that the opportunity for investigation of such sites often arises only due to chance discovery; as a result, they may not benefit from the detailed excavations that more prominent sites receive. Indeed, the surviving physical evidence for such dwelling structures may be so slight (huts built of narrow post-and-wattle stakes that barely penetrated into the subsoil, thus leaving no real trace), that often the discovery of an isolated industrial feature or an underground souterrain provides the only link to early medieval unenclosed settlement (Edwards 1990, 46).

Unenclosed settlements within field-systems

Occasionally, unenclosed houses have been found within early medieval field-systems, but these tend to survive in upland areas, stony areas, or areas of poor soil quality. Two large, conjoined enclosures, with a series of adjacent fields and a third smaller enclosure to the north, were surveyed at Ballyutoag, Co. Antrim (Williams 1984). A group of 23 sub-circular hut platforms were found around the perimeter, and it has been estimated that the site could have housed upwards of 100 people (Williams 1984, 47). This was arguably a settlement enclosure, but it appears to have been very different from those discussed above. Similar, though smaller, early medieval upland sites have been discovered elsewhere in Co. Antrim, at Browndod, Killylane and Tildarg (Williams 1983, 239–45), but have not been excavated. The existence of these sites raises a question—were these the dwellings of the poor or merely of people staying as transhumants with their cattle on the hillside for the months of summer?

Unenclosed stone-built structures of early medieval date survive in various counties in southwest Ireland. At 'The Spectacles' in Co. Limerick (Ó Ríordáin 1949, 59), two early medieval round houses—one relatively substantial and built of stone walls with a paved doorway and porch feature—and a rectangular house were located within four small rectangular fields that may have been used as vegetable gardens. A series of larger fields and a semi-circular enclosure were located further up the hillside and may have been where livestock were grazed (Ó Ríordáin 1949, 59). Clusters of stone-built houses, some conjoined and associated with souterrains, were discovered within an elaborate pattern of fields at Ballynavenooragh, Co. Kerry

(Coyne 2006b); and a field complex, with eight houses spanning two phases, was excavated at Beginish Island, Co. Kerry (O'Kelly 1956, 169). Another complex pattern of settlement and fields was discovered at Carrigoran, Co. Clare (Reilly 1999:047; 2000:0055; Quinn 2000:0056). The first early medieval phase at Carrigoran consisted of a series of pits, posts and stake-holes, interpreted as the remains of a hipped-roof building cut into the ground. An oval structure, supported by a central post, was also identified, as was a structure inferred from the presence of a curvilinear gully. The site appears to have been abandoned, and later re-occupied—a 'Class E' bone comb, dating to the ninth/tenth century AD, was found in this phase—during which time small fields were defined by stone-walls and ditches.

Alan Hayden's excavations of an early medieval farmstead at Bray Head, Valentia Island, Co. Kerry (Hayden 1997:231, 1998:267, 1999:324, 2000:0423; see also Walsh 1995:132, 1997:230), have uncovered a very important unenclosed early medieval settlement dating almost continuously from the sixth century to the thirteenth century AD (Plate III.XIV and Figure 3.17) The earlier centuries are marked by the presence of several round houses (one of which had an associated souterrain); while a series of rectangular houses belong to the later centuries of occupation. The site was associated with fields and an early medieval cereal-drying kiln. This was obviously a substantial farming settlement, not enclosed within any substantial bank, wall or palisade.

Are some of these unenclosed huts the dwellings of the poor? On some of these sites, there is certainly a relatively impoverished material culture, yet they could not be argued to be markedly 'poorer' than many enclosed settlements. Souterrain Ware sherds were found at Ballyvollen, Co. Antrim (Williams 1985b);

Pl. III.XIV—Early medieval unenclosed farmstead at Bray Head, Valentia Island, Co. Kerry, where a wide range of houses and souterrains were constructed and used over centuries of occupation. (Photograph by Con Brogan; reproduced by permission of Alan Hayden.)

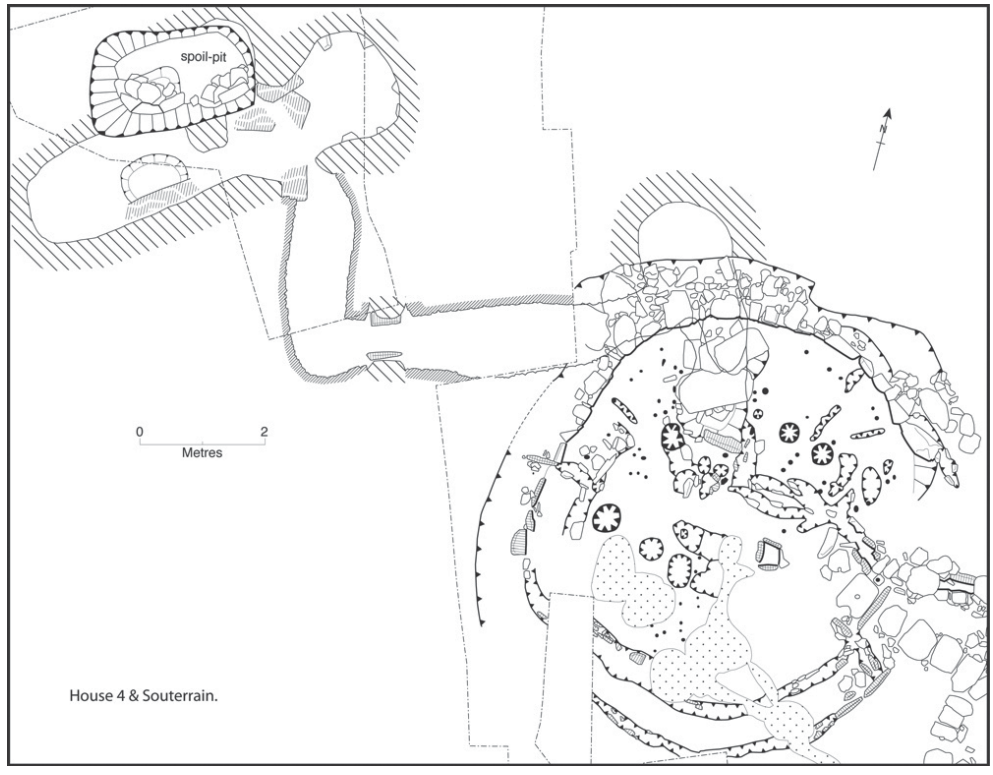

FIG. 3.17—Plan of early medieval House 4 and souterrain from the unenclosed early medieval farmstead, Site 1, Bray Head, Valentia Island, Co. Kerry. (Figure prepared by Conor McHale/Alan Hayden; reproduced by permission of Alan Hayden.)

Drumadonnell, Co. Antrim (McSparron 2001); and Terryhoogan, Co. Antrim (McSparron 2007). Glass beads were recovered from Coarhabeg, Valentia Island, Co. Kerry (Hayden 1994:119); Platin, Co. Meath (Lynch, R. 2000:0774, 2001:1022); and Barrees Valley, Co. Cork (O'Brien, W. 2003:0174). A glass bead, two bone pins, a lignite bracelet fragment, a bone bead, lithics and metal artefacts were uncovered from an unenclosed souterrain complex at Kilcarn, Athlumney, Co. Meath (Sullivan 1997:424); and souterrain ware pottery has been recovered at a number of sites that consist solely of an isolated souterrain, such as Ballyboley, Co. Antrim (Lynn 1977–79:0001), and Magheramenagh, Co. Londonderry (Reilly 1999:130). So, whereas the artefactual remains from unenclosed settlements are not abundant, they still bear comparison with those from univallate raths and cashels. It is therefore possible that the occupants of certain univallate raths and certain unenclosed settlements may have been of similar social or economic status.

Unenclosed settlements in various forms are found throughout the whole of the early medieval period, yet their lack of uniformity and their resistence to categorisation mean that they tend to be overlooked when discussing the wider chronology of this period. In tems of chronology, a range of dates has been obtained from unenclosed stone-built *clochán*s (bee-hive-shaped structures) in south-west Ireland. Organic deposits under the wall of a structure in the Barrees Valley, Co. Cork (O'Brien, W. 2003:0174) were radiocarbon dated to AD 582–765 (2Σ); and a conjoined *clochán* at Coarhabeg, Valentia Island, Co. Kerry (Hayden 1994:119), was radiocarbon dated to AD 562–758 (2Σ). The excavated huts at the early medieval 'transhumance village'

of Ballyutoag, Co. Antrim, appear to be slightly later, and largely date to the eighth century AD (Williams 1984, 47–8). Radiocarbon dates from the gully of an isolated roundhouse at Blackhills Lower, Co. Cavan (McConway, L. 1992:007), stretch from the end of the ninth century to the end of the thirteenth century. A slab inscribed with *futhork* runes, dated stylistically *c*. AD 1050, was re-used as a roofing lintel at Beginish, Co. Kerry, which suggests that the structure was built sometime after that date (Sheehan *et al*. 2001).

Unenclosed settlement at coastal shell midden sites

Evidence for early medieval settlement and industrial activity has also occasionally been found in association with coastal shell middens (O'Sullivan, A. and Breen 2007; Murray 2007). The majority of excavated middens are undated, and occasionally there can be dating problems. It was suggested that the radiocarbon dates given for the piles of shells associated with the tenth-century house structure at Rinnaraw, Co. Donegal, indicated that these shell middens were contemporary with the site's occupation (Comber 2006, 106). When the marine reservoir effect correction (which is necessary because the radiocarbon content of terrestrial organisms is not the same as marine organisms) is applied to the raw radiocarbon age, however, it is likely that these shells were harvested significantly later than the occupation phase (Kerr *et al*. 2009). Excavations in recent years have examined a number of shell middens and have found that many contain early medieval settlement evidence, often in the form of surfaces, hearths, middens and, occasionally, structures (Murray 2007, 128–31). Interpreting the character and role of these coastal habitations presents the same problems encountered in trying to interpret the unenclosed field settlements discussed above—who were these people; were they inhabiting these coastal locations for only some seasons of the year; and were they there to pursue some specialist activity? (O'Sullivan, A. and Breen 2007, 116).

Excavations on the shell midden at Dog's Bay, Roundstone, Co. Galway, revealed bones of ox, sheep, pig and grey seal (O'Rourke 1945, 116), but early antiquarian investigations had reported the presence of shells (dog whelk, periwinkle, limpet, oyster and mussel), the remains of a hearth and the stone foundations of a possible hut at the site. The reported discovery of two ringed-pins inside the shell midden suggest an early medieval date for the site (O'Rourke 1945, 117). Two short-lived early medieval sites were examined at Doonloughan, Co. Galway (Murray and McCormick 2012). The first site was dated to AD 723–889 (2Σ) and was marked by an eroding horizon of interwoven charred wood and straw, suggestive of a wickerwork structure. Finds consisted of an unidentified oxidised iron object and a copper penannular brooch (McCormick and Murray 1997:197). The second contemporary site comprised an incomplete circular stone hut, which produced two broken blue glass beads and some bone pins (Plate III.XV, Figure 3.18). Broken dog whelk shells (*Nucella lapillus*) were also present; these were interpreted as suggesting the earlier production of purple dye at the site (Murray and McCormick 2012). Excavations at Rabbit Valley, Ballybunion, Co. Kerry, revealed extensive shell middens (McCarthy, A. 1986:29), which may have been associated with the nearby early medieval monastery. Early medieval shell middens were also excavated at a house platform adjacent

Pl. III.XV—View of unenclosed early medieval round house at Doonloughan, Co. Galway. Early medieval dwellings such as this located along Ireland's coastline raise interesting questions of social status, function and seasonality. (Photograph by School of Geography, Archaeology and Palaeoecology, Queen's University Belfast; reproduced by permission.)

to the coast in Grange West, Co. Sligo (Burenhult 1984), a site that returned a date of AD 790–900 (2Σ; see Håkansson 1981).

Some shell middens, though of early medieval date, show little or no physical evidence for habitation structures. A shell midden at Oughtymore, Co. Londonderry (Mallory and Woodman 1984), revealed a huge quantity of shells, mammal bones, fish and bird bones, as well as souterrain ware sherds, two fragments of a decorated bone comb, a portion of an antler ring, an antler spindle whorl, one fragment of a blue glass bracelet and one fragment of a lignite bracelet. Material from the midden was radiocarbon dated to AD 630–880 (2Σ; see Mallory and Woodman 1984, 56), and there are a number of other potentially early medieval middens recorded nearby throughout Magilligan Point. The limited nature of the excavation on an exposed section of the midden at Oughtymore, however, meant that there was little chance of discovering wider settlement evidence, if it existed.

Some shell middens with early medieval activity also show evidence that they were in intermittent use back into prehistory. Although there were a small number of early medieval finds at Minnis North, Co. Antrim (Simpson, D.D.A. *et al*. 1993)—two sherds of souterrain ware; one sherd of later everted-rim ware; and a bone pin similar to ones found on Lagore crannóg—the midden appears to have been in use generally from the Neolithic right through to the early medieval period. The pelvis and legs of a female, which produced a calibrated radiocarbon date of AD 681–826 (2Σ), were also found in this midden. Erosion in the sandhills at Ballymacrea Lower, Co. Antrim, revealed two patches of compacted sand associated with occupation debris—charcoal, bone, iron slag and a number of sherds of souterrain ware (Flanagan 1966). A cluster of basalt boulders was tentatively identified as the possible wall-footings for a house structure (Flanagan 1966, 116).

FIG. 3.18—Plan of unenclosed early medieval round house excavated in sand dunes at Doonloughan, Co. Galway. (Figure after Murray and McCormick 2012; fig. 4.)

Excavations in the townlands of Truska, Manninmore and Manninbeg at False Bay, Co. Galway, revealed shell middens that predominantly dated to the Bronze Age, although some did date to later (potential early medieval) periods (McCormick, F. *et al*. 1996).

The sandhill site at Dooey, Co. Donegal (Ó Ríordáin, B. and Rynne 1961; Edwards 1990, 46; O'Sullivan, A. and Breen 2007, 119), had multiple phases of early medieval occupation and produced evidence for industry on a significant scale. There are three main phases of occupation, with a final phase marked by the development of a burial ground. As Ó Floinn (1999, 74) notes in his discussion of the chronology of some early medieval artefacts from Cahercommaun, Co. Clare, the Phase I activity at Dooey can be dated to the fifth/sixth century AD. Skeletons from the Phase IV burial phase at Dooey have been dated by Catryn Power to AD 552–773 (2Σ; see Ó Floinn 1999, 74), implying that Phase II and Phase III must date to before the eighth century (*pace* Ó Ríordáin and Rynne 1961, 60, who interpreted the burial phase as eleventh century). Occupation appears to coincide with varied industrial activities (see Chapter 7 below), and the site may have functioned as a settlement with a burial ground.

Along with evidence for purple-dye extraction, bone- and antlerworking material, iron objects, cast bronze brooches and pins were found, suggesting that metalworking was also undertaken on this site (Ó Ríordáin and Rynne 1961, 61).

Early medieval coastal shell midden sites appear to be predominantly domestic in nature and are mainly found in areas with low rath density. It is possible that rising population during the sixth/seventh century encouraged some communities to live in lands situated along the coast. Some sites, however, such as Doonloughan and Dooey, may have played a specific industrial role that meant that they could only be located on the coast. The number of dog whelk shells discovered at both these locations supports the idea that they were associated with the production of purple dye (Murray 2007, 130–1; O'Sullivan, A. and Breen 2007, 119). Proximity to trade routes may also have influenced coastal settlement locations; Dooey, for example, is integrated into the North Atlantic seaways. Far from being marginal to long distance trade and communications, such sites could be interpreted as the habitations of high-status smiths (O'Sullivan, A. and Breen 2007, 119), or maritime traders. Whereas there can be a temptation to interpret these sites as the homes of the poor and landless, the evidence would appear to indicate that these settlements were more complex (Kinsella 2005; O'Sullivan, A. and Breen 2007, 118).

Early medieval occupation in caves

Early medieval occupations, and occasionally burials, are also known from caves (see Dowd, forthcoming, for a complete review). Early excavations at a cave at Park North, Middleton, Co. Cork, uncovered a 'well-marked Early Christian habitation site under surface earth and stones' (Coleman 1942, 73). The finds were largely typical of a domestic assemblage, for example a bone needle, two bone pins, a decorated bone comb handle, a spindle whorl, two whetstones, a hammer stone and a small tanged knife (Coleman 1942, 74–5). There were also some less common finds, such as three right-angled fragments of silvered-bronze and some corroded bronze fragments (Coleman 1942, 74–5). A decorated bronze bar, possibly belonging to part of a mounting for an early medieval shrine, was also recovered and was used to infer an eighth-/ninth-century date for the site (Coleman 1942, 76).

A survey of the artefactual evidence from caves revealed early medieval finds from a number of other sites, including Kilgreany, Co. Waterford; Edenvale, Co. Clare; Keshcorran, Co. Sligo; Cushendall, Co. Antrim; and, potentially, Carrigagour, Co. Cork (Coleman 1947). Subsequent excavations at a cave site in Carrigmurrish, Co. Waterford, which was located beneath a limestone knoll that was crowned by what was termed a 'Bronze Age fort' (a possible rath/cashel), uncovered combs, spindle whorls, whetstones, jet and iron fragments, all of which may possibly be ascribed to the early medieval period (Coleman 1947, 70).

The material remains from the excavations at Kilgreany Cave, Co. Waterford, undertaken between 1928 and 1934 (Stelfox 1930–1; Movius 1935), have recently been re-examined (Dowd 2002; Dowd and Corlett 2002; Dowd forthcoming). A sequence of activity from the Neolithic to post-medieval period was revealed, with the early medieval period represented by hearths, whetstones, spindle whorls, a tanged iron knife, bone points, worked bone, a rotary quern and a bone needle (Dowd

and Corlett 2002, 8). The cave is located 10km from the coast, yet a large collection of periwinkle, cockle, mussel, oyster and scallop shells was found inside it. These shellfish appear to have been collected from the seashore and consumed or somehow used inside the cave. The presence of three hearths indicates that people were occupying the cave in the early medieval period—whether permanently, occasionally, or seasonally—and the artefactual evidence suggests that a range of activities was undertaken at the site, including textile manufacture and food preparation. A number of personal items were found, including a bronze, baluster-headed ringed-pin, a bone pin with a decorated bead, a ringed-pin, a lignite bracelet and an eleventh-/twelfth-century gaming piece. The double-edged bone comb found at Kilgreany Cave is similar to bone combs found in caves at Carrigmurrish and Ballynameelagh, Co. Waterford (Dowd 2002, 87), which have been dated from the fifth to the tenth century AD. As at Park North Cave, Co. Cork, a fragment of a possible eighth-century bell-shrine was also recovered (Dowd 2002).

The artefact evidence from Kilgreany Cave is not indicative of low-status peoples (Dowd 2002, 90), but it is possible that the finds (and possibly those from Park North Cave) represent caches of looted (or curated) materials, rather than occupation debris. There is, for example, clear evidence for the deposition of early medieval 'hoards' in caves at Dunmore, Co. Kilkenny. Nine silver Viking coins, *c.* AD 928, were found during excavations at Dunmore in 1973 (Drew and Huddart 1980, 17–18); and a possible late-tenth-century hoard, including fourteen Anglo-Saxon silver pennies, a silver penannular arm-ring, hack silver, strap tags and sixteen conical-shaped objects woven from silver wire, was discovered there in 1999 (Wallace and Ó Floinn 2002, 223). Excavations undertaken in 2004 uncovered evidence for a shale/lignite bracelet fragment, two bronze ringed-pins, a blue glass bead and human skeletal remains (Dowd 2004:0914). It is argued that the Dunmore Caves may be equated with *Derc Ferna*, the site of a slaughter of the locals by the Dublin Vikings (AFM 928; see Dowd 2004:0914).

Viking and Hiberno-Norse settlement

Traditionally seen as a distinctive ethnic, political and cultural group within early medieval Ireland, the impact of the Vikings, or Norse, on the Irish settlement landscape has inevitably tended to be treated separately. (In this book, we use the term 'Viking' to refer generally to peoples of Scandinavian origin, whatever their activity or the chronology of their presence in Ireland; this seems to conform with growing usage of that term.) There is increasing evidence for ninth-century Viking raiding bases in Ireland—the *longphuirt* of the contemporary sources—and hints of wider rural activity in the ninth and tenth century AD. There is, however, significantly richer archaeological evidence for the tenth, eleventh and twelfth century Viking/Hiberno-Norse port towns of the Irish coast, particularly for Dublin and Waterford, but also for Cork, Wexford and to some extent Limerick. More recently, there has been a growing recognition that there were undoubted connections between Viking and native Irish rural settlements in the ninth and tenth century AD, and that Viking urban settlement itself has a distinctively Irish or Insular character. Moreover, the concept of 'creolisation' could be invoked to discuss the character of Irish material culture generally in the Irish Sea region for the Viking Age.

In AD 795, the *Annals of Ulster* reported the burning of *Rechru* (probably Rathlin Island, Co. Antrim, or possibly Lambay Island, off the coast of Dublin) *o genntibh* 'by the gentiles'; while in the same year there are references to raids, possibly by Vikings, on the west coast at Inishmurray and Inishbofin (Griffiths 2010, 25). From the early-ninth century until the late-twelfth century the Vikings played a significant role in shaping the ethnic, political, economic, social and military development of Ireland. Although referred to in homogenous terms today—thus blending the Vikings of Norwegian, Danish, Irish, Orkney and Hebridean birth into one group—the peoples of Scandinavian origin who lived in Ireland in the ninth and tenth century were distinguished by the annalists in various ways. From the mid-820s, the *Annals of Ulster* refer to them as the *gaill* 'foreigners' (see Griffiths 2010, 26). By 852, the *Annals of Ulster* could distinguish between the *Dubh gennti* 'dark foreigners' and the *Finn gail* 'fair foreigners'—possibly referring to a newly arrived group—in a description of the destruction by the former of the latter's *longphort* at Áth Cliath (Etchingham 2010; Griffiths 2010, 37). By the late-ninth century, the Annals were referring to a shadowy group known as the *Gallgoídill* 'foreigner-gaels', indicating the increasing complexity of ethnic identities and diverse loyalties after a couple of generations of raids. In any case, by the time of the establishment of the Viking port towns of Dublin, Wexford, Waterford, Cork and Limerick in the tenth, eleventh and twelfth century, the Scandinavian immigrants had created a hybridised Hiberno-Norse identity and material culture, had converted to Christianity and had become fully integrated within the Irish political landscape.

Viking raiding bases or *longphuirt* in the ninth century

The early medieval historical sources suggest a pattern in Viking raiding activity in Ireland in the ninth century, beginning with hit-and-run raids by single ships or small fleets, largely during a summer sailing season, with the raiders returning thereafter to their homelands. By the 830s a fateful change had come about, as Viking fleets and their men overwintered in raiding bases, to resume their activities the following spring. There are frequent historical references to the existence of these temporary fortified camps using the terms *longphort* 'ship-camp' or 'ship-landing', *dúnad* or *dun* (Ó Floinn 1998a, 1998c; Maas 2008, 229–31); by implication, therefore, there is evidence of a sustained Viking presence in Ireland at that point. Thus, in 841, the *Annals of Ulster* noted 'the heathens were still on Loch nEchach', having plundered from there the previous year and having led away 'captive bishops and priests and scholars, and put others to death'; this suggests that they had a defended base where they had over-wintered. The Old Irish term *longphort* (pl. *longphuirt*) was itself first used in AD 841 in relation to a site at *Linn Duachaill* (Annagassan, Co. Louth), 'from which the peoples and churches of Tethba were plundered', and also in relation to *Duiblinn* (Dublin) 'from which the Laigin and the Uí Néill were plundered'. In 842, the *Annals of Ulster* note again, presumably with some concern, *Geinnti for Duiblinn beos* 'the heathens still at Dublin', implying once more that they had a defended place out of which they were operating.

So, tactics had changed and the Vikings were staying. But where? It was from *longphuirt* that the Vikings carried out raids into the neighbouring territories

from the mid-ninth century onwards, and there are sufficient annalistic references to them to suggest that there were at least twenty such sites (Ó Floinn 1998a, 161; Simpson 2012, 94). Many historically recorded ninth-century Viking raiding bases were situated on the borders of political kingdoms; for example, the *longphort* at *Linn Duachaill* lay between the territories of the Conaille and Ciannachta, and *Duiblinn* itself was situated between the early medieval kingdoms of Southern Brega and of the Laigin (Ó Floinn 1998a, 162). A number of raiding bases, including those on Ireland's Eye, Scattery Island, Clondalkin and Dublin, also appear to have been established on or adjacent to Irish early medieval monastic sites (1998a, 163). In addition, Viking burials have been discovered adjacent to a number of ecclesiastical sites (Harrison 2001, 74), throwing up interesting ideas about the interaction and relationship between pagan ninth- or tenth-century Vikings and the local church authorities. What a Viking *longphort* looked like, however, like is still unclear, and indeed some have questioned whether the archaeological term *longphort* is a useful morphological classification, given that a historical *longphort* could have been a settlement as varied as a lightly defended camp-site, a re-used monastic or secular enclosure occupied for a few weeks, or a major purpose-built fortification that was established and occupied for decades.

Thus, the archaeological identification of these Viking raiding and settlement sites has become a matter of considerable debate and discussion in recent years (see, for example, Gibbons 2005, 2009; Kelly, F. 1998; Kelly, E.P. and Maas 1995; Maas 2008; Valente 2008, 37–56; Wallace 2008). Recent discoveres at Woodstown, Co. Waterford; Annagassan, Co. Louth, and possibly at Dublin would seem to have resolved the issue. The typical Viking *longphort* was probably a fortified base located in a prominent, defensible place, situated close to navigable water, preferably at the confluence of a river and its tributary. This would create a headland, which could be defended by a ditch, bank or palisade, with a moorage close by where ships could be anchored in shallow water (Simpson 2012, 94). Identifying *longphort* sites in the modern landscape probably has to begin with the historical record. A number of *longphuirt* are historically recorded in the annals in the ninth and tenth century. In addition to those mentioned above, Viking raiding bases were located at *Inber Dea* (Arklow?, Co. Wicklow) as early as 836, and at Narrow Water and Strangford Lough, Co. Down; at Lough Ree on the River Shannon; and at Cork and Limerick (Ó Floinn 1998a, 162). A *longphort* known as *Longphort Rothlaib* was destroyed by the Irish in 862, according to the *Annals of the Four Masters.* A 'D-shaped' enclosure at Dunrally, Co. Laois, on the banks of the River Barrow, has been identified as *Longphort Rothlaib*—'the camp of Rodolf' (Kelly, E.P. and Maas 1995, 30–2). The search for the Lough Ree *longphort* led to archaeological excavations at Ballaghkeeran (or Ballykieran) Little, Co. Westmeath (Fanning 1983; Youngs *et al*. 1983, 221), where the earth had been considerably disturbed by subsequent ridge and furrow cultivation, but a substantial eastern bank was found upon excavation. Some iron slag and fired clay fragments were also found in a cutting made directly south of the promontory in a large banked-up hollow beside the mouth of the River Breensford, but nothing inherently 'Viking' was found (Youngs *et al*. 1983, 221; O'Sullivan, A. 1998a, 150). Eamonn P. Kelly's recent research may have identified a larger enclosure nearby (E.P. Kelly, pers. comm.). Kelly and O'Donovan (1998, 13)

also identified a possible *longphort* on the western bank of the River Shannon, at Athlunkard, Co. Clare, immediately upstream of Limerick. The discovery of a silver weight, spear-head and spear-butt from this 'D-shaped' enclosure at Athlunkard led them to interpret this as a potential historically unreferenced *longphor*t (Kelly and O'Donovan 1998, 13), although the identification was challenged on the basis that neither the place-name nor the archaeological evidence is strong enough to warrant it being called such (Gibbons 2005, 24; Gibbons and Gibbons 2009, 10).

All of the tenth-century Viking towns of Dublin, Cork, Limerick, Waterford and Wexford probably began with a ninth-century *longphuirt* close by, but difficulties in relation to the visibility of archaeological features within a modern city makes the identification of the latter difficult—or so it was thought. Recently, however, convincing archaeological evidence for a Viking *longphort* associated with Waterford has been discovered at Woodstown (O'Brien and Russell 2005; Russell and Harrison 2011). The presence of a Viking fleet on the River Suir, close to its confluence with the River Barrow, is known from the annalistic reference to *loinges Puirt Láirge* 'the fleet of Waterford' being defeated by the king of Osraige in 860. Archaeological excavations in Waterford itself have not yet identified evidence for the Scandinavian settlement before the mid-eleventh century. In 2003–05, however, archaeological trial trenching at a site known as Woodstown 6, in advance of work on a major proposed motorway, indicated the existence of an early medieval settlement on the banks of the River Suir some 8km upstream from Waterford. Geophysical survey, selected excavation and metal-detecting revealed that there was extensive evidence for occupation and industry over a stretch of land to the south of the River Suir. Aerial photography and excavation suggest that a series of ditches existed, forming a D-shaped enclosure some 460m in length, along the banks of the river (see Plate III.XVI).

Excavation produced evidence of ditches, an entrance and a palisade defence, as well as some evidence for buildings or other structures. An ironworking furnace located in one of the ditch terminals produced a calibrated date of AD 420–620 (2Σ; see O'Sullivan, J. and Stanley 2005, 152; O'Brien and Russell 2005, 124), suggesting that Woodstown might originally have been a native Irish monastic site. There was no convincing evidence for this, however, and the early radiocarbon dates may be due to the old-wood affect. More recent reviews of the evidence make it clear that this is a Viking *longphort*, possibly having two phases of occupation in the ninth century (Russell and Harrison 2011). The artefactual record from the soil at Woodstown includes over 6,000 objects, many of unequivocal early-ninth-century Viking origin, or dating to between AD 850 and 920, including Viking weaponry in a furnished burial (the human remains did not survive) just outside the northeastern entrance to the enclosure (O'Brien and Russell 2005, 121; Russell and Harrison 2011).

Domestic finds included hones, pins, a gaming piece, amber beads, knives, decorated bone and spindle whorls. Extensive ironworking was also clearly carried on at the site, including the manufacture of iron nails and clench rivets for ship-building. Widespread amounts of iron slag as well as fragments associated with working in stone, bone, antler and amber indicated the presence of industrial activities, as might be expected of a site where ships would be maintained and repaired and objects manufactured for local trade. In addition, at least 200 lead weights were recovered, as were silver ingots, hack silver, melted silver and a Kufic

Pl. III.XVI—Aerial view of the Viking *longphort* site on the banks of the River Suir at Woodstown 6, Co. Waterford, with the location of archaeological test trenches showing as darker green grass. (Photograph by Studio Lab; reproduced by permission of the National Roads Authority.)

coin; all of which indicate silverworking for trade or tribute payments (McNamara 2005). The presence of a loom weight and a spindle whorl might suggest the production of yarn or cloth, and perhaps the presence of women on site. A combination of deep ploughing and the existence of a railway line along the river bank mean that relatively little is known about the internal layout or structures of the site at Woodstown. After a vigorous local and international campaign of opposition to the motorway scheme, the road development was moved away from Woodstown. Apart from some final resolutions, no further archaeological excavations were carried out and it seems unlikely that there will be further archaeological excavations at the site in the near future.

The location of the Dublin *longphort* has long been sought. This site was seemingly occupied between 841 and 902, when the Vikings were reputedly expelled from Dublin. It should therefore be a fairly long-lived site, or group of sites (occupied for at least two to three generations), and should be associated with ninth-century structures, finds and human burials. For these reasons, the Dublin *longphort* has variously been identified as having existed around Kilmainham-Islandbridge (the location of the main ninth-century Viking warrior burials/cemeteries); at Ussher's Island; along the south bank of the Poddle pool at the Black Pool (*Duiblinn*) itself; or somewhere under the tenth century Viking town that subsequently developed after AD 917 (when the Vikings reputedly returned and established a town) on the prominent headland between the River Liffey and the River Poddle (in the vicinity of the modern Fishamble Street, Parliament Street and Temple Bar). Recently, Linzi Simpson has reviewed the evidence from archaeological excavations in Dublin's historic core, and her analyses have led her to suggest that there is indeed mid- and late-ninth-century evidence from this headland and its surrounds. The earliest evidence at Temple Bar West and Parliament Street suggests that there was ninth-century occupation activity along the west bank of the Poddle, almost where it meets with the Liffey. Across the tidal pool of the River Poddle and to the south, there are also earlier, ninth-century Viking warrior graves at South Great Georges Street, situated on the south bank of the river. Other discoveries in the area include possible ninth-century sunken structures, some early enclosure ditches and evidence for industrial activity, including hearths, ironworking and other features, indicating manufacturing. The implications of this evidence could be that the Dublin *longphort* was quite extensive, some 500m across, and that it was situated on both banks of the Poddle with settlement, industry and burial activity all the way around the Black Pool or *Duiblinn* that gives the city its name today (Simpson 2012, 98, fig. 2.4).

Although the archaeological evidence for *longphuirt* is still limited to what has been discovered from small-scale excavations, there is a growing recognition of the character, use and form of these settlements in the ninth and very early tenth century AD, and also of their sheer scale. The large sites at Annagassan, Dublin and Woodstown could each have accommodated massive Viking fleets of 60 to 100 ships. They would have been occupied for several decades, and they probably also changed in character over time. They were effectively permanent or semi-permanent settlements devoted to looting, manufacturing, slaving and trade (Simpson 2012, 109–10).

Viking and Hiberno-Norse towns

The major impact of the Vikings in Ireland, however, was the introduction of town settlements and town life from the tenth century onwards. The establishment of port towns at Dublin, Wexford, Waterford, Limerick and Cork would bring about a long-term transformation of Ireland, its society and economy (Wallace 1985, 1992b, 2001, 2005, 2008; Simpson 2000; Hurley *et al*. 1997; Hurley 2010). These towns were large, defended, urban settlements, situated at the confluence of rivers and estuaries. Enclosed within banked defences, dwellings and other buildings were tightly packed together, with an irregular arrangement of streets, lanes and pathways providing the means of movement around the settlement and to the nearby rivers and the roads leading outwards. These were effectively the location of Ireland's first urban populations. They initially provided a home for the most substantial group of immigrant settlers into this island since early prehistory, and gradually, through acculturation and contacts between Vikings and Irish, became distinctive, creolised communities of their own, inhabited by peoples of mixed ethnic ancestries, language and culture (Wallace 2008). Their populations were responsible for an important slave trade (Holm 1986); a range of productive crafts and industries; and the creation and sustaining of a new urban market economy with the populations in the surrounding landscapes (Bradley 1988a, 1988b; Geraghty 1996). Situated on Atlantic maritime trade networks, that extended ultimately from the Arctic to the eastern Mediterranean—and beyond, these Viking towns also placed Ireland within a wider world of cultural connections and economic exchange routes (Wallace 1987a). Archaeological excavations of Ireland's Viking towns have been most extensive in Dublin (Wallace 2005, 2008) and Waterford (Hurley 2010). The latter was founded in 914, and the archaeological evidence for Viking Waterford mostly dates from the eleventh and twelfth century onwards. Less is known about the Viking towns of Wexford, Limerick and Cork.

After the expulsion of the Viking rulers in AD 902, Dublin was re-established as a town or *dún* about AD 917. It was quickly established as the pre-eminent town in Ireland, probably due to a range of factors: its location on the Irish Sea, connections with Britain and to the north Atlantic seaways, as well as its location on the political boundary between two powerful Irish kingdoms. The earlier ninth century *longphort* may itself have been an important manufacturing and trading centre, but by the early-tenth century, it seems that the Viking settlement at *Dyflin* was developing into an urban settlement, possibly as a deliberate strategy by its rulers. Archaeological excavations at Parliament Street and Temple Bar West suggest, as noted above, that the earliest part of the town was probably located on the original headland between the banks of the River Poddle and River Liffey. Archaeologists have located Viking-type houses there, dated to the mid- to late-ninth century (Gowen and Scally 1996; Scally 2002; Simpson 1999; 2010). The town probably expanded westwards and southwards from there (and northwards into reclaimed portions of the River Liffey), until it likely occupied most of the headland between the rivers (Halpin 2005). By the eleventh century it may have stretched as far along as modern-day High Street, and was surrounded by a series of earthen banks topped with wooden fences and latterly stone walls. Within, it was probably—at least in places—a densely occupied urban

space, with closely-packed together houses, garden plots, streets and perhaps some areas for open-air markets or public assemblies.

Viking Dublin can be reconstructed from a range of sources: historical, cartographic, but above all from the results of archaeological excavations carried out in the city by the National Museum of Ireland in the late 1970s and 1980s and by archaeologists working for commercial archaeological companies since the 1990s (Murray, H. 1983; Simpson 2000; Wallace 1992a, 1992b, 2001, 2005). The National Museum of Ireland's archaeological excavations at Fishamble Street, Dublin, directed by Pat Wallace in the late 1970s and early 1980s, were extensive enough to uncover part of a streetscape and its house plots (Wallace 1984, 1985, 1992a, 1992b). At Fishamble Street, twelve tenement plots can be traced more or less continuously across time, indicating the occupation of at least 150 different houses over 150 years (Wallace 1992a, 7). These houses were entered directly from the street, and each house had vegetable plots, gardens and midden spaces out the back, as well as possible animal pens, workshops and storehouses. The Fishamble Street excavations confirmed that the town was a major centre for craft production, with raw materials from the hinterland such as wood, leather, bone, antler, amber and metals used for making domestic tools and equipment as well as high-status exchange goods (Wallace 1987a, 1998, 2008). Finds of imported goods at the site indicate that trade contacts existed with much of north-west Europe, while the presence of silk indicates trade contacts beyond Europe's borders (Wallace 1987a). Earlier and also more recent archaeological excavations at several locations around Dublin, such as High Street, Temple Bar West, Werburgh Street and Exchange Street/Parliament Street, have also been revealing about the character of the town; see Gowen and Scally 1996; Halpin 2005; Hayden 2002; Murray, H. 1983; Scally 2002; Simpson 1999, 2000, 2005a; 2008; Walsh 2001; Wallace 1992a, 1992b, 2001, 2005. It is thus possible to reconstruct Viking Dublin's location, defences, streets, property boundaries, houses and buildings, fences, and an array of evidence for daily life, craft and industry.

The town's defences

The Viking town's defences evolved over time, being principally earthen banks topped with wooden fences. At Dublin in the tenth and eleventh century two successive palisaded earthen banks encircled the town (Wallace 2008, 434). The earliest Dublin banks were low—approximately 1m high—and probably functioned largely as flood banks protecting against hide tides (Wallace 1992b, 44). Evidence for early banks is known from Exchange Street Upper/Parliament Street in the north-eastern area of the settlement (Gowen 1996, 11), at Essex Street West (Simpson 1999, 14) and other locations, and these could well relate to the *longphort* phase of settlement. In the tenth century, Bank 2 was built at Fishamble Street along the high-water line, bonded in mud with a cobbled pathway inside and parallel to it (Wallace 1992b, 44–5). Tenth century banks, also low features, are known from Parliament Street, Essex Gate and the Exchange Street Upper areas—in the north-eastern section of the town (Scally 2002, 16). A number of banks were identified at Ross Road in the southern part of the town, dating between the tenth and twelfth century (Walsh 2001). Bank 1, which has been dated to the early-tenth

century, was 2.5m wide and 0.45m high and may have had a pathway along its top. It possibly functioned as a town boundary (Walsh 2001, 97–8). By the middle of the tenth century, the first bank at Ross Road had been replaced with Bank 2 (Walsh 2001, 98). A third bank was built of deposits of clay, silt, small stones and sods. A fence was erected on the northern part of the site along the crest of the previous Bank 2, and a mid- to late-tenth century date has been suggested for its construction (Walsh 2001, 101–2).

In the eleventh century, more prominent banks were constructed, such as at Fishamble Street, where a considerable bank was built of gravel, stone and earth, reinforced with post-and-wattle screens and crowned with a palisade fence (Wallace 1992b, 45). At Exchange Street Upper/Parliament Street, a substantial Bank 3 is also known from the riverfront site. This bank was 1.2m high on the settlement side but at least 2.3m in height on the eastern side. Radiocarbon dates of AD 900–1150 and AD 960–1020 were obtained from the material of the bank, and a date between the late-tenth and early-eleventh century seems likely (Gowen and Scully 1996, 17; Scally 2002, 21–5). A similarly substantial bank at Ross Road—Bank 4—was approximately 6m wide and over 4m high; it was probably mounted by a palisade trench, and its form remained the same until the early twelfth century (Walsh 2001, 106). This bank formed the southern defence of the town. By the beginning of the twelfth century, a stone wall 1.5m wide and potentially up to 3.5m high was built along the earlier earthen embankment at Fishamble Street. It had a rubble fill with mortared stone facings, and it was not completely free-standing (Wallace 1992b, 45). At Essex Gate and Parliament Street, in the north-eastern part of Hiberno-Scandinavian Dublin, there was another substantial stretch of the defensive wall (Scally 2002, 25–7). This section of wall, 1.48m high and 1.4m wide, was constructed with square and rectangular blocks, which were secured with mortar and had a rubble stone core. It was similar in form to the early-twelfth century wall at Fishamble Street and Ross Road, and this has led to its suggested date based on morphological similarities (Scally 2002, 27). Evidence for two stone walls, dating to the early twelfth century, was also found at Ross Road. The earlier wall measured 0.8m in height and was over 1.2m wide. The second wall replaced this; it survived to a height of 2.6m and was 1.6m wide at its base. These walls—similarly to those at Fishamble Street and Essex Gate/Parliament Street—were cut into earlier banks and were never completely free-standing (Walsh 2001, 108–11; Simpson 2008, 156–7). Waterford also has good evidence for eleventh century defensive banks, and for a substantial, pre-Norman gateway or defended entrance (Wallace 2005, 822).

Streets and pathways

The development of street lines and the gradual expansion of Dublin occurred along the natural contours of the original site; many of Dublin's early streets probably lie beneath the present streetscape (Wallace 1992b, 39). Streets and pathways in the Viking town were continually upgraded and replaced, with a variety of different materials used for this purpose, from organic matter to sturdier stone. By the middle of the eleventh century, for example, quality carpentry construction was noted on some of the Winetavern Street pathways (Wallace 1992b, 42). Paths were also

used to bring people from the streets directly into property plots, houses and outbuildings. One of the earliest known Viking roads in Dublin—dating between the mid- and late-ninth century—was identified at Essex Street West, leading down to the river (Simpson 1999, 25). Two potentially early-tenth-century roads were identified at Werburgh Street in the southern part of the town. The first was metalled and ran south-eastwards around a mound. This was replaced by a larger road, which contained a heavier layer of metalling (Hayden 2002, 47).

A variety of pathways have been excavated in Hiberno-Scandinavian Dublin. A complex timber surface was recorded at Exchange Street Upper/Parliament Street, consisting of a woven wattle path on the north and brushwood on the south (Gowen and Scully 1996, 16). Numerous pathways were revealed at Werburgh Street in the southern area of the town, and many led to the entrances of houses or were positioned alongside or to the front of the houses (Hayden 2002). The paths were continually mended and replaced. For example, a pathway leading to House E1 was initially floored by a layer of sod, then covered with grass and straw, before finally being laid with wattle screens (Hayden 2002, 47–9). At Fishamble Street, in both the tenth and eleventh century, the pathways led from the street to the houses. The length of the paths indicated that the houses were set back several metres from the streets. The paths were approximately 1.5m wide and usually consisted of elongated woven mats laid on top of each other. In other cases they were formed with round or half-round logs laid on longitudinal runners. In rare cases they were constructed of gravel and paving stones (Wallace 1992b, 42). In Waterford, a 16m length of Hiberno-Scandinavian street, consisting of a metalled surface of small stones and gravel, was uncovered at Peter Street (Wallace 2005, 823).

Property plots and their boundaries

Inside the towns, it is clear that space was managed and regulated by the town population through the use of property boundaries—plots and fences built mostly of post-and-wattle. At Dublin, a fascinating aspect of these property plots is that they remained largely static over the centuries, which indicates either an ordered and centrally regulated town plan, or a sense of the ways in which people could live as neighbours, respecting each other's boundaries. Where plot fences were repaired and rebuilt, they were done so along the lines of the preceding property boundary. Houses, outbuildings and pathways, in contrast, were not static and were built in different parts of the plots from generation to generation (Wallace 2005, 824). At Temple Bar West, property boundaries remained the same from the late-ninth until the eleventh century and, in one case (Property 2), into the early-twelfth century (Simpson 1999, 25, 30; see Figure 3.19). Plots were present on Fishamble Street in the tenth century, and they remained largely unchanged for over 200 years. Houses, outbuildings and pathways regularly changed as successive building phases utilised different areas within the static plot boundaries (Wallace 1992b, 40). Plots varied in shape from rectangular to trapezoidal, and from narrow to wide. At Werburgh Street, to the south of the town (Hayden 2002), the plots were small and were filled mainly by houses. In some cases, for example Level 3, which has been dated to the mid-tenth century, the plot boundaries remained the same as structures were built and replaced.

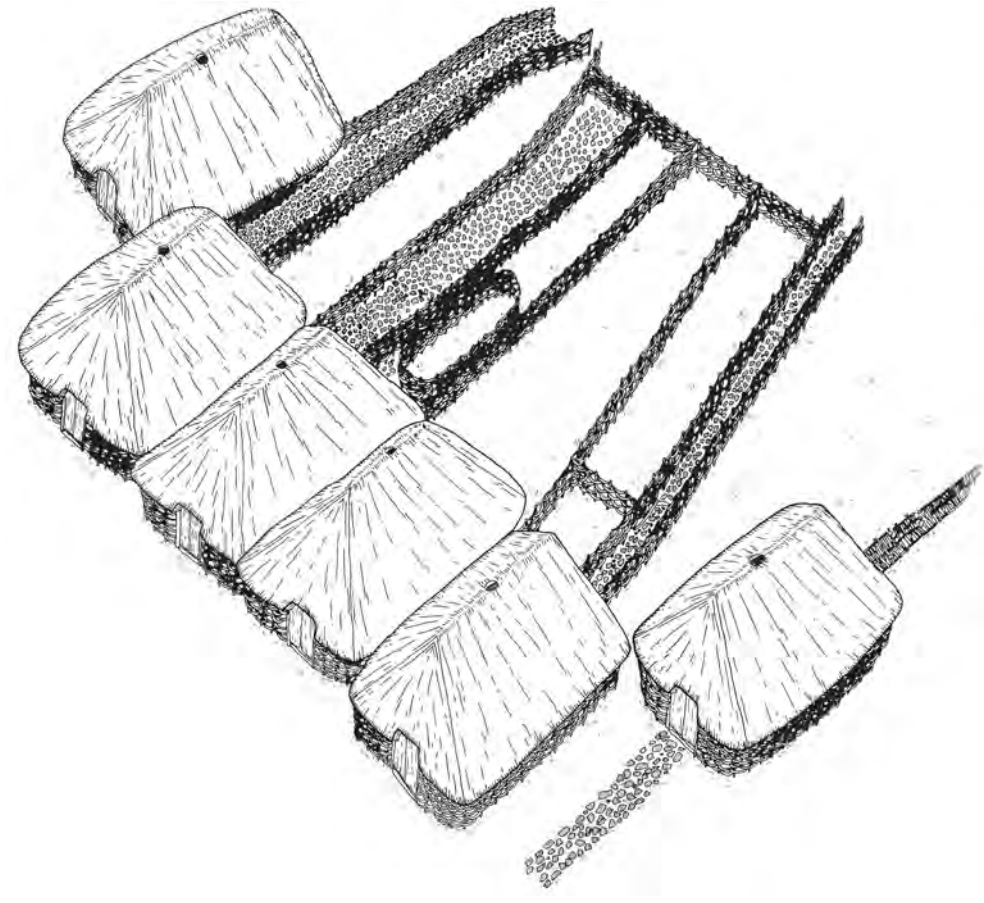

FIG. 3.19—Reconstruction of how houses and properties may have looked in the late-tenth century in one part of the east side of Viking Dublin, based on the excavated evidence from Site A, Temple Bar West, Dublin. (Figure by Simon Dick; reproduced courtesy of Linzi Simpson; from Simpson 1999, fig. 12.)

By the end of the century, however, the Level 6 plots were laid out in different lines and the layout of the area had changed (Hayden 2002, 56).

Houses and other buildings

Ireland's Viking urban houses are amongst the most intensively studied, and fascinating, aspects of these towns (Wallace 1992a, 1992b, 2001). The large corpus of excavated buildings from Dublin dates primarily to the tenth and early-eleventh century (Murray, H. 1983; Wallace 1992a); a smaller group of buildings at Temple Bar West date from the late-ninth century onwards (Gowen and Scally 1996; Scally 2002; Simpson 1999; 2010). The Viking-period houses from Waterford (Hurley and Scully 1997), Wexford (Bourke, E. 1990) and Cork (Hurley 2010) date from the eleventh and twelfth century. Wallace's (1992a and b) typology of the house sites from Viking Irish towns has established their basic characteristics. Wallace (1982a; 1992a, 19) proposed that the building plan should be the principal mechanism used to establish a classification of buildings. He suggested that the Viking buildings from Dublin could be divided into five principal types (1 to 5). To these may be added two other types (6 and 7), which are predominantly found in Waterford (Wallace 2001, 48–9).

Type 1 structures were the most common building that Wallace discovered in his survey of the Dublin evidence. They amounted to 67% of all the buildings he examined (1992a, 17), and he has suggested that they comprise 75% of all known Dublin houses (Wallace 2005, 828); they have been found from the mid-ninth to the twelfth-century levels of the town. Type 1 houses are also known from Peter Street and Arundel Square in Waterford (Wallace 2005, 828) and from Bride Street in Wexford (Wallace 2005, 828). Type 1 structures were long, rectangular buildings with rounded corners. They had low post-and-wattle walls and a roof that was supported by four large internal posts that were set in from the side and end walls. A stone-lined hearth was centrally placed, and doors were usually located at each end of the building. The buildings were divided by aisles, and the long, central floor was flanked on both sides by built-up bedding, which ran parallel to the side walls.

The entrance and exit areas of this house type were differently paved with wattle, timber and stone, and there may also have been compartments in the corners, possibly demarcated by woollen hangings or wattle screens. The average floor area was 40m^2 (Wallace 1992a, 9–14; 2005, 828). These houses were probably hip-roofed, with a steeply-pitched thatch of straw or reeds on a turf base. The walls do not show evidence for daub, but some form of insulation would have been vital, so they may have been sealed with cow dung (Wallace 2005, 831). In general, they appear to be an innovation in Ireland, echoing to some extent in their layout into zones the cellular arrangements of Viking houses in the north Atlantic; they are also distinctively Insular in form (or at least are relatively unique, paralleled in few places elsewhere other than perhaps at Kaupang, in Norway). Wallace (1992a, 94) was of the opinion that the rectangular, aisled house was an Irish development adopted and adapted by the Scandinavians. He cited the rectangular houses at Knowth, Co. Meath, and Whitefort, Drumaroad, Co. Down (1992a, 72; see also 2012, 708–45: 715–21, on the Knowth houses), as evidence for his argument.

The Type 2 buildings were sub-rectangular in plan, with pronounced rounded corners; they were smaller than Type 1 structures, with an average area of 16m^2. They were not aisled and rarely had formal fireplaces, but they were often floored with wattle mats (Wallace 2005, 829). The door was usually in the sidewall, and the walls were generally formed with a double line of post-and-wattle. Only a small percentage of the Dublin buildings were of this type (Wallace 1992a, 14–6). Type 2 buildings constituted a small percentage of Wallace's (1992a) survey results overall, but they comprised 33% of the total number of buildings found during the Waterford excavations undertaken from 1986 to 1992 (Scully 1997a, 37). This does not appear, however, to be an indication of regionalisation, since Type 1 buildings made up a large proportion of the Viking houses excavated in Waterford. Type 3 buildings and Type 5 buildings were found principally in Dublin, Waterford and Cork. The Type 3 building is a shortened and slimmed down version of the Type 1 building, but it does not have evidence of threefold division (Wallace 1992a, 16). Type 3 buildings often contained a doorway at either end, like the Type 1 building. Type 4 buildings are sunken structures, in which the floor is situated below ground level (Wallace 1992a, 17; fig. 130). Such sunken-floored buildings are generally rare in the Irish archaeological record. It has been suggested that some rural sunken houses, such as at Beginish, Co. Kerry (Sheehan *et al.* 2001), and Connemara, Co. Galway (Gibbons,

E. and Kelly, E.P. 2003), are indicative of Viking settlement. Type 5 structures are small huts without roof supports, which probably functioned as animal pens or were utilised for other outdoor activities (Wallace 1992a, 17–8). Type 6 buildings refer to sill-beam structures with load-bearing walls, which appear to have been constructed from the early-twelfth century onwards, particularly in Waterford. Type 7 structures are rectangular stone buildings found within Hiberno-Scandinavian towns. They have only been found at Waterford and date to the mid-twelfth century.

Palaeoenvironmental studies of floor deposits of dung, hair, mosses, food remains, ash and brushwood have revealed much about the living conditions and practices of Viking Dublin (Geraghty 1996; Reilly, E. 2003). Social and cultural interpretations of the urban Viking buildings can also aid in the attempt to trace the organisation of domestic space in terms of household, ethnicity, kinship and gender. It should be remembered that these Viking houses were occupied by people who believed in different gods and mythologies than did the native Irish early medieval people, and who lived in a society structured differently from Irish society. Viking houses in Scandinavia, Iceland and Greenland seem to be organised into 'rooms' that reflect social, cultural, or symbolic spaces (living areas, sleeping rooms, working areas, rooms for animals). In Viking and Hiberno-Norse Dublin, also, there is a sense that the houses have distinct social spaces of some sort. The front porches, often floored differently from the rest of the house (with clay or wattle) and perhaps screened from the rest of the house by post-and-wattle, perhaps enabled some control of how neighbours would encounter the inner, private household (Figure 3.20). The back porches, leading to the plots behind the houses, may have been used to separate the living space from the backyard. These back porches were perhaps used as a space to store food, tools, or raw materials, or even to defecate comfortably inside the house. Amongst the mosses, textile rags and food debris recovered from Dublin's cesspits have been old, turned wooden bowls, which were presumably used as 'chamber pots' before they were finally discarded. At Essex Street West, an early-tenth- to mid-eleventh-century house had a concentration of hazel nuts and large animal bones in one corner, suggesting the storage there of either food or food waste (Simpson 1999, 11, fig. 5). In Hiberno-Norse Dublin (an urban context, unlike the rural setting of other Viking houses in the lands of the north Atlantic), it is to be presumed that a degree of 'social blindness'—an ability to ignore discreetly the noises of the neighbours' family rows through the wattle walls—would be necessary to enable households to live in such close proximity in the densely packed streets of the town.

Crafts and industry

It is evident that Viking towns were important centres for production (see Wallace 2005, 832–40 for a discussion of crafts and industry). Dublin was undoubtedly a trading centre during both the *longphort* phase and also as the town developed and expanded. Some of the earliest evidence for crafts at Dublin includes the contents of a number of circular wattle pens within the property plots excavated at Temple Bar West (Simpson 1999, 25–6). These pens were approximately 7m in diameter, and the organic deposit in one produced large quantities of textile and leather scraps, suggesting that clothes were made and/or mended here. It is uncertain whether specific

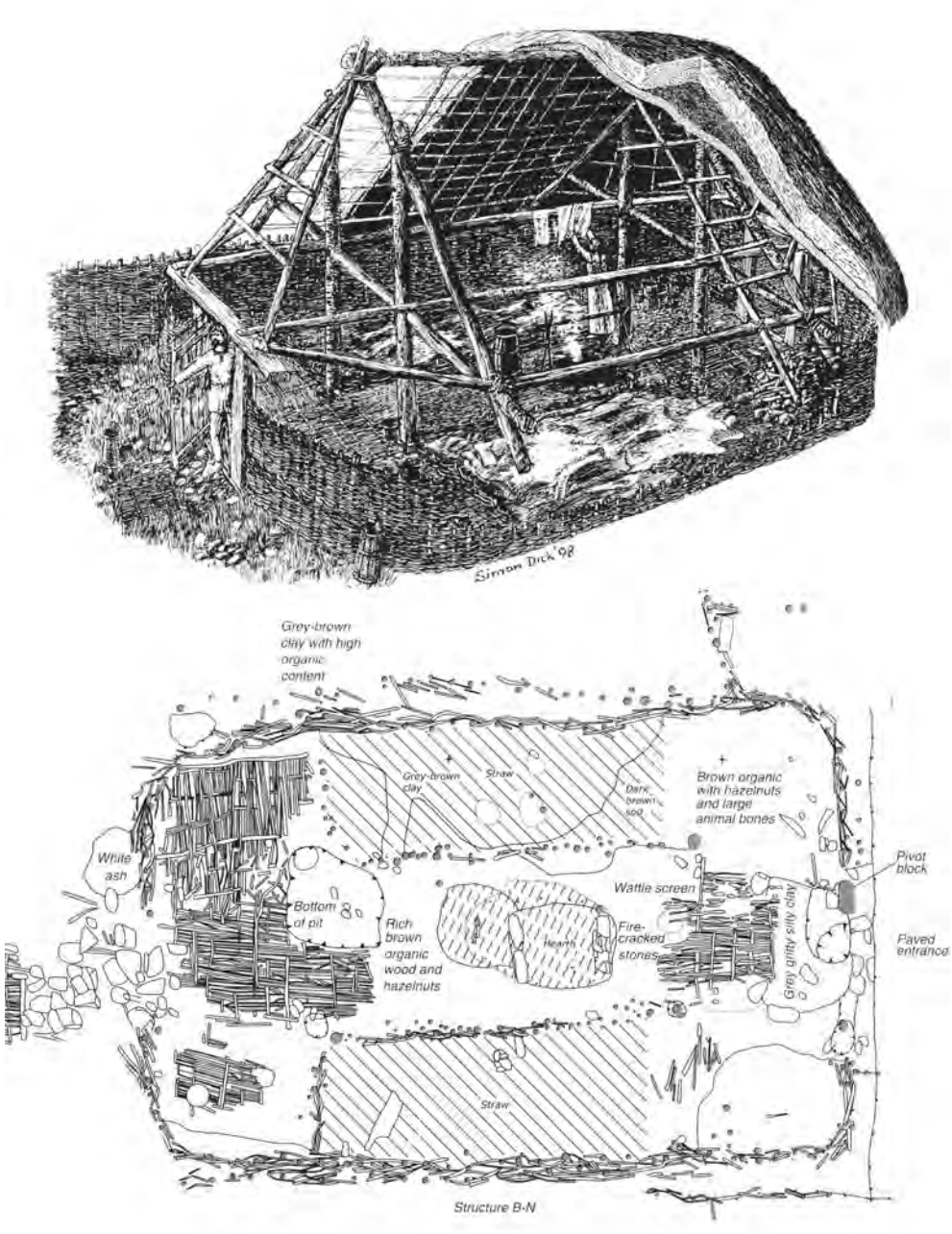

FIG. 3.20—Plan and reconstruction of Viking Type 1 house from Dublin, showing the three-aisled structure and the potential organisation of the domestic space within the house. (Figure by Simon Dick; reproduced courtesy of Linzi Simpson; from Simpson 1999, fig. 5.)

areas were devoted to particular crafts, but the evidence for this is slight. Between the eleventh and thirteenth century, Winetavern Street may have been occupied by wood-turners and coopers, as indicated by the many lathe-turned bowls, platters and staves that were found there (Wallace 1984). An amber and jet workshop was identified on Fishamble Street by the presence of unworked amber, waste chips and unfinished objects (Wallace 1984, 123–4). Leather- and boneworking appears to have been carried out in High Street. Waste from the workshops indicates that the manufacture and repair of shoes was the major activity. Antler workshops were also

located on High Street, as well as at Christchurch Place. Antler combs were made on a large scale, and many motif pieces were found in this area (Murray, H. 1983, 54; Wallace 1984, 123–4).

Evidence was found that large-scale metalwork production occurred at High Street and Christchurch Place. A workshop, which manufactured copper-alloy ringed- and stick-pins, was located on High Street. Clay crucibles, heating trays and a mould for casting Thor's hammer symbols were also found in the area (Wallace 1984, 123–4). Small-scale and isolated industrial activity also occurred in Viking Dublin. At Exchange Street Upper/Parliament Street, there was evidence for possible charcoal production, in the form of two charcoal-rich pits (Gowen and Scally 1996, 15). During the early-tenth century, an industrial area replaced the settlement at Temple Bar West on its eastern side at Exchange Street Upper and Copper Alley (Simpson 1999, 30). The area included many unenclosed hearths with neighbouring paved areas; a large hearth that contained vitrified clay and slag, burnt spreads, charcoal and ash deposits; and a large number of postholes that did form a coherent plan. This industrial area remained active until the early- to mid-twelfth century. Similarly, at Werburgh Street in the tenth century, houses in some plots were demolished and replaced with furnaces and troughs, so that the open spaces could be utilised for ironworking (Hayden 2002, 49, 51).

Viking rural settlement in Ireland, AD 800–1100

The question of Viking rural settlements in Ireland is a perplexing one—did they actually exist, and if so could we identify them? What would a Viking rural settlement look like—would it have distinctive houses, dwelling practices; would its inhabitants use a distinctive material culture? If we accepted that people all over Ireland in the late-ninth, tenth and eleventh century, of whatever ethnic or political background, used a broadly similar material cultural assemblage of dress, food utensils, tools and equipment, could we even hope to distinguish an 'Irish' site from a 'Viking' settlement? For example, the early medieval crannóg at Ballinderry No. 1, Co. Westmeath, produced in its tenth and particularly its eleventh century phases of occupation, a distinctive assemblage of objects that could as easily have been found in Viking Dublin (Hencken 1936). Were Ballinderry crannóg No. 1, which is situated in the heart of the midlands, located much closer to Dublin it would most probably be generally regarded as a Hiberno-Norse rural settlement.

To explore this issue further, we must first consider the questions of whether people of Scandinavian ancestry actually lived in the rural hinterlands of the towns of Dublin, Wexford, Waterford, Cork and Limerick, or whether these areas were inhabited by the native Irish, who provided the towns with various useful raw materials, food stuffs and commodities through networks of political control, dependency and exchange. Evidence for a Viking-controlled hinterland is largely confined to the Dublin area, where there was a region known as *Dyflinarskiri* or 'Dublin-shire' at a later stage. Bradley (1988; 2010) has concluded that it likely extended as far as Lusk in the north and to Dalkey in the south. To the west, it appears to have extended as far as the modern-day Dublin/Kildare border. Its boundary is unlikely to have been static. The term *Dyflinarskiri* is found in a number of sagas, but these were only

committed to writing in the thirteenth century. The region is referred to in Egil's saga, which is set in the tenth and early-eleventh century. Bradley (2010, 43) argues that the term *Dyflinarskiri* can be equated with the Irish terms *Crīth Gall* and *Fine Gall* in the Irish sources. The former appears in the late-tenth century, while the latter first appears in the eleventh century. Bradley also notes that when terms like *Finngaill* and *Findgaill* are used in earlier sources they refer to a people and not a territory. The archaeological record provides rather limited evidence for the existence of *Dyflinarskiri*, a problem that is amplified by the fact that many artefacts of the period are not good indicators of ethnicity (Bradley 2010, 44). To further complicate matters, the Vikings of the ninth century had changed—through political agreements, acculturation, inter-marriage and the passage of time—into a new population group that we might, by the later tenth century (after *c*. AD 980) and eleventh century, term 'Hiberno-Scandinavian'.

Distinctive ninth-/early-tenth-century Viking burials can be found in a radius of about 5km from the centre of Dublin (Harrison 2001, 65–6). These may not all reflect settlement. A Viking woman's burial at Finglas seems to have been located near a monastic site (Sikora 2010, 414), perhaps reflecting the forging of political alliances between Viking and native groups through the institution of marriage. A potential rural Viking settlement was discovered at Cherrywood, Co. Dublin (Ó Neill 1999, 8–10; 2006). The earliest phase on site was represented by a ring-ditched enclosure, containing a sixth-/seventh-century inhumation cemetery. The second phase consisted of a possible Viking longhouse, with bowed sides, two accompanying structures and a number of pits. A rectangular pit associated with the two undefined structures contained a decorated whalebone plaque. This type of artefact—dated to the ninth or tenth century—has been found associated with burials of Viking women in the Orkney Islands (Ritchie 1993, 45). An example of such a plaque recorded as unlocalised by Bøe (1940, 98) is said by Harrison (2001, 68) to have come from Islandbridge, Co. Dublin. The form of the buildings at Cherrywood, along with the artefactual evidence, would suggest that this may have been the location of a rural Viking settlement (Harrison 2001).

Excavations at Ninch, Co. Meath (McConway 2002), revealed a highly complex multi-phase settlement dating from the fourth to the twelfth century AD (see Chapter 5 below). Coarse pottery, a stave-built bucket, a jet bracelet and two ringed-pins were recovered from a series of sub-rectangular enclosures constructed in the southern half of the site during the final phase of its occupation. A ringed-pin, with parallels from Viking Dublin dating to the late-tenth/early-eleventh century AD, was also recovered. It is possible that the final phase of this site may represent a rural Hiberno-Scandinavian settlement. Both Cherrywood and Ninch were located on previously important early medieval cemeteries with associated settlement evidence.

With the exception of the *longphuirt* discussed above, there is limited structural evidence for dispersed rural Viking settlement outside *Dyflinarskiri*. Excavation of a sunken, rectangular, stone-built house overlooking False Bay, Co. Galway, revealed a hearth (with animal and fish bone) and a tenth-century double-sided antler comb that could be interpreted as Hiberno-Scandinavian in style (Gibbons and Kelly 2003, 31; Kelly, E.P. 2010; O'Sullivan, A. and Breen 2007, 121). The large unenclosed site of Beginish, Co. Kerry, may also have had a Viking phase. The lintel of

a stone-lined passageway in one of the sunken round houses at the site was found to have a runic inscription. In addition, what were possibly Viking artefacts—such as a bowl made of steatite (soapstone) and Hiberno-Scandinavian ringed-pins—were also found on site (O'Kelly, M.J. 1956, 177). Sheehan *et al.* (2001, 111) have speculated that this site may have been used as a way-station for mariners sailing from Hiberno-Scandinavian Cork to Limerick in the later part of the early medieval period. The place-name 'Smerwick Bay', in Co. Kerry, has been suggested as meaning 'Butter Bay' in Old Norse, and many attest to further Viking associations with the south-west coast—although, again, there are alternative interpretations (Edwards 1990, 191). The construction and use of sunken-floored houses may, however, merely be a north Atlantic tradition, as much a response to environmental conditions as a Viking cultural trait (see Cotter, C. 2012, 287).

At Bray Head, Valentia Island, Co. Kerry, an unusual, sub-rectangular, bow-sided building, whose walls consisted of regularly-spaced large posts, overlay an early medieval circular house, and was in turn succeeded by a late medieval stone-walled house. The excavator suggested that this building might be of Viking origin (Hayden 2000:0423). A similarly located (that is, coastal) 'cashel' at Rinnaraw, Co. Donegal, produced a house that might also be argued to show Viking influences. The aisled, stone-built house, with internal roof supports dated to *c.* the ninth century, was compared to similar Scandinavian examples with rounded external corners on the Orkney Islands (Fanning 1988:11; Comber 2006, 107).

A couple of potential later-Viking, or Hiberno-Scandinavian, sites have also been excavated in Co. Waterford. A rectangular enclosure located on a coastal promontory at Shandon (Dennehy 2001:1242; Elder 2002:1790), produced a tenth-century Hiberno-Scandinavian bone trial-motif piece during quarrying in the 1930s, as well as an eleventh-century coin from Dublin (Elder 2002:1790), leading to speculation that it was the site of a Viking base. Finds recovered during excavation between 2000 and 2002 included iron pins, several iron knives and a copper ingot, none of which is diagnostically Viking.

Viking hoards and artefacts, particularly weapons, have been found across much of Ireland. Ó Floinn (1998, 151) indicates that the majority of non-hoard material is concentrated in north Leinster, with smaller concentrations in north Munster and around Limerick. The hoard evidence (Sheehan 1998, 174) again emphasises the importance of Leinster as a region of Viking influence, with a more scattered distribution in Munster and eastern Ulster. It is most likely that most of these finds represent trade among the native Irish rather than with Viking settlements.

Finally, there are a number of Viking burials from around Ireland, usually single burials located along the coast. These could represent burial of an individual from a passing ship, but this possibility ignores the likely symbolic role of a furnished Viking grave in attesting to land ownership, status and power. The burials from Cloughmore cave, Co. Kerry, in south-west Ireland, however, cannot be explained as easily. They are clearly from the Viking period, dating to the ninth to eleventh century. The deposits were mostly disarticulated but accompanied by grave goods, some of which could be of Viking origin. Connolly and Coyne (2005, 170) argue that these represent the remains of Vikings or Hiberno-Scandinavians who

were buried in a pagan fashion. Historical sources suggest the presence of possible Viking *dún* on the Maine river, and it may well be that the burials are related to this or a similar site.

It is likely that historical sources greatly under-represent the degree of Viking settlement in the west of Ireland. Sheehan *et al*.'s (2001) consideration of the placename evidence in Kerry, and Eamonn P. Kelly's (2010) analysis of potential Scandinavian settlement in west County Galway both suggest extensive Viking settlement along Ireland's western seaboard. The role of Viking settlers in the rural landscape thus remains a matter of debate, and perhaps future discovery.

Conclusions

The archaeology of early medieval settlement in Ireland is rich, intriguing and revealing about peoples' daily life and work, but also about the role of complex networks of social allegiance and dependency, kinship and community in their lives. Nonetheless, many questions remain. The settlement landscapes of the transitional Iron Age/early medieval period (that is, the fifth to sixth century AD) are still poorly understood, though new data is emerging (Corlett and Potterton 2012). In contrast, the early medieval period between the sixth and the ninth century AD is potentially the most researched and best-understood phase in Irish archaeology. Early medieval settlement enclosures dominate both the evidence and our thinking about the period. Nevertheless, we could usefully develop a better understanding of their chronology, occupation histories and their social, ideological and symbolic organisation as dwelling places. The building and use of these settlement enclosures is something that emerges as a phenomenon in the sixth/seventh century, and it may largely be something resulting from a period of radical social and economic change. Population increase, an economic 'boom' in agriculture and other political, social and ideological changes may have led to an increased need within early Irish society to closely signal and define the extended family (as opposed to the community) social unit through architecture. While the majority of sites may have functioned as farmsteads, the highly stratified nature of contemporary Irish society suggests that raths, cashels and crannógs would also have represented differences in the social hierarchy. The precise chronology of the abandonment of such structures as a settlement form remains a complex issue, but it could have differed across the country.

In contrast, early medieval rural settlement from the tenth, eleventh and twelfth century remains relatively poorly understood, although more evidence is emerging. There is now a corpus of evidence available for unenclosed early medieval rural settlements, but it is not yet vast, and it is not chronologically specific. Usefully though, potentially new types of site—particularly settlements with burials grounds (which will be discussed further in Chapter 8 below)—have emerged in the archaeological record, further highlighting the complicated and diverse nature of settlement across the island during this period. The impact of the Vikings on settlement is also an intriguing subject, and after years of debate it now seems clear that Viking raiding bases can be identified, although their precise role as occupation and trading sites is still largely unknown. In contrast, the archaeology of Viking towns (Wallace 1985a; Hurley 1988; Hurley *et al*. 1997) is very well-known, but their links to and influences

on their contemporary landscapes remains a subject of debate. Thus, it is evident that the settlement landscapes and organisation of both rural and urban communities in Ireland AD 400–1100 is more complex than previously considered, and its richness provides a potential contribution to our understanding of the character of early medieval societies in Europe and beyond.