

Maritime communities in early medieval Wales c. AD 600-1100

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Abstract

Early medieval Wales has received little attention in previous maritime studies of the Irish Sea. Those that do touch on maritime aspects of this era tend to focus on the maritime movement of goods and individuals rather than the communities who made such movement possible. This study takes such maritime communities (c.AD 600-1100) as its focus, exploring evidence for their locations, activities, cultures, status, folklore and belief systems, with a particular focus on the west coasts of Wales. The study is influenced by the interdisciplinary methods of Christer Westerdahl in exploring evidence for maritime communities and their maritime cultural landscapes. An interdisciplinary approach, including archaeological and documentary sources and literature, is particularly important in early medieval Wales where there is a lack of more obvious maritime archaeology such as boats or man-made harbour structures. The findings are then placed within their wider Irish Sea context with particular focus on the east coast of Ireland, the north coast of Cornwall and Mann. Key findings from the Welsh study areas include the significant number of early medieval burial sites overlooking or close to potential landing places, and the evidence for maritime movement of relatively low-status goods and raw materials.

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Abbreviations

AFM	Annals of the Four Masters
ALI	Ancient Laws of Ireland
Ann.Cam.	Annales Cambriae
Ant.J.	Antiquaries Journal
Arch.Cam.	Archaeologia Cambrensis
Arch.J.	Archaeological Journal
AU	Annals of Ulster
AW	Archaeology in Wales
BBCS	Bulletin of the Board of Celtic Studies
BM	British Museum
BNJ	British Numismatic Journal
ByS	Brenhinedd y Saesson
CA	Cornish Archaeology
CELT	Corpus of Electronic Texts
CHERISH	Climate, Heritage and Environments of Reefs, Islands and Headlands
DAT	Dyfed Archaeological Trust
DSPA	<i>Dérivées sigillées paléochrétiennes</i> Atlantic group
EMAP	Early Medieval Archaeology Project
EMC	Corpus of Early Medieval Coin Finds
FA	Fragmentary Annals of Ireland
GAT	Gwynedd Archaeological Trust
HEV	Historic Environment Viewer
IHBW	Inventory of Historic Battlefields in Wales
IJNA	International Journal of Nautical Archaeology
JAS	Journal of Archaeological Science
JIA	Journal of Irish Archaeology
JRSAI	Journal of the Royal Society of Antiquaries of Ireland
LRA	Late Roman Amphorae
MA	Medieval Archaeology
NMW	National Museum Wales
OS	Ordnance Survey
PAS	Portable Antiquities Scheme
Pen.	Brut y Tywysogyon, Peniarth MS. 20 version (unless otherwise stated, quotes from the Brut y Tywysogyon in the text are from this version)
PlöMNHAS	Proceedings of the Isle of Man Natural History and Antiquarian Society
PHCC	Proceedings of the Harvard Celtic Colloquium
PRIA	Proceedings of the Royal Irish Academy
PRN	Primary Reference Number (when this appears in the text without a further attribution, it refers to an Archwilio entry)
RBH	Brut y Tywysogyon, Red Book of Hergest version
RCAHMW	Royal Commission on the Ancient and Historical Monuments of Wales
UJA	Ulster Journal of Archaeology

1.Context and aims of the study

1.1.Introduction

Throughout the long history of human presence on the Welsh fringes of the Irish Sea there have been communities engaged in maritime activities and developing maritime knowledge and beliefs. This study focuses on such communities in the early medieval period, c.AD 600-1100, an era in Wales that has previously received very little attention in terms of its maritime past. The majority of scholarship touching on maritime connections in early medieval Wales relates to the immediate post-Roman period, concerning movement of culture, particularly early saints' cults (e.g. Bowen 1969), and the Mediterranean and Continental imports of the fifth to seventh or early-eighth centuries (e.g. Campbell 2007a; Wooding 1996a), whilst at the other end of the period, Ken Lloyd Gruffydd took AD 1039 as the starting date of his work on medieval maritime Wales, and suggested that 'the Welsh of the early Middle Ages showed little enthusiasm towards maritime activities' (Gruffydd 2016, 260). The c.AD 600-1100 time-span of this study was therefore chosen to cover a period for which there has been less maritime-focussed scholarly interest, exploring maritime connections in Wales after the immediate post-Roman period and up to the end of the Norman incursions of William II of England's reign.

Sea voyages to and from early medieval Wales were frequent enough to pass unremarked by commentators (Davies 1982, 18), and it would appear that maritime communities (a community within which at least some individuals interacted with the sea and/or intertidal zone, see 2.2) were also not considered noteworthy by the writers of this period. Such communities must have existed, however, to see to the

needs of those who travelled, whether they were a high-status ecclesiastic or an opportunistic merchant. It is these maritime communities that this thesis is concerned with, exploring the nature and extent of their maritime activities and the practical and cultural aspects of interacting with the sea in early medieval Wales. The study of these communities must not be seen as an add-on to land-based histories of early medieval Wales, but as central to an understanding of those histories. The sea is a permeable border, an ever-changing space of connection, danger and opportunity that would have been disregarded at the peril of those who wished to develop and maintain power in early medieval Wales. The sea was a means of outward connection with other shores such as Ireland, Mann, Scotland, Cornwall, Brittany and further afield, but it also facilitated internal connections in a land that might otherwise be cut off from itself by its own mountainous topography.

This study comes at a time when interest in maritime Wales is growing, with the publication of *Wales and the Sea: 10,000 Years of Welsh Maritime History* in September 2019 (Redknap *et al.* 2019) and the joint Ireland-Wales maritime heritage and climate change project, CHERISH, securing an extra year of EU funding to carry its project into 2022; it is currently in its fifth year, its team disseminating their findings through reports, newsletters and talks and continuing to undertake surveys when the situation allows. The 2017 *Research Framework for the Archaeology of Wales* (Edwards *et al.* 2017) includes a maritime chapter, and several points of study it flags up are explored in this thesis, such as the relationship between the sea and formation of collective identities, using indirect evidence of object and person origins to explore sea crossings, and exploring the exploitation of marine resources. Prior to the start of the CHERISH project, the CADW-funded Arfordir project undertaken by the Welsh Archaeological Trusts from 2010-15 identified new

archaeological sites and monitored the effects of erosion on the Welsh coast, and the results of a similar CADW-funded project of 1993-8 are summarised in *The Coastal Archaeology of Wales* (Davies 2002). These surveys have collated a wealth of important and fascinating evidence for maritime activity in Wales, although there has been little synthesis of this evidence and the emphasis on the visible archaeology in the surveys favours recent centuries over the more intangible evidence of the early medieval period. This thesis therefore takes an interdisciplinary approach to the study of early medieval maritime Wales, using the archaeological record, documentary sources and literature to develop an understanding of maritime communities and the maritime cultural landscapes that they inhabited.

The main aims of the thesis are stated below (1.3). In brief, they are to identify maritime communities on the west coasts of Wales and in the wider Irish Sea area and explore their context, including the activities of their inhabitants and their position in society, to identify potential early medieval landing places, to explore the potential for multicultural communities in coastal locations, and to explore early medieval maritime folklore and belief.

1.2.Context

In the short early medieval chapter in *Wales and the Sea*, Mark Redknap briefly covers maritime movement of goods and people, types of shipping, Scandinavian coastal names and a twelfth-century shipwreck off the Pembrokeshire coast, Jonathan Wooding touches on documentary sources for early medieval seafaring and Spencer Smith discusses the AD 1098 Battle of the Menai Strait (Redknap *et al.*

2019, 88-99). Excepting this chapter, thoughts on the maritime aspects of early medieval Wales have to be gleaned from studies that take other aspects as their central focus, for example the importation of goods (e.g. Campbell 2007a), the movement of Viking influence (e.g. Redknap 2000) or the origins of individuals (e.g. Hemer *et al.* 2013). Whilst there is no question that some communities in early medieval Wales had maritime connections, these communities do not find themselves the focus of study. This is not surprising considering how little is known of any communities in Wales in the early medieval period, let alone those that could be argued to have had maritime connections, given the disparate evidence for everyday activities and settlement.

The paucity of settlement evidence in early medieval Wales may be related to methods and materials of construction, artefacts that are undiagnostic or invisible in the archaeological record, and later activity destroying earlier evidence (Edwards and Lane 1988, 3). Sites of early medieval activity in Wales are rarely recognisable prior to excavation, and even with excavation early medieval activity might not be recognised without radiocarbon dating (e.g. see Hopewell and Edwards 2017, 236). Sites of early medieval activity discovered unexpectedly in recent corridors of excavation created by the laying of the A55 road in Anglesey and a gas pipeline across Pembrokeshire (Cuttler *et al.* 2012; several unpublished reports of Cotswold Archaeology, including Hart 2014; Barber *et al.* 2014) serve as a reminder that current invisibility need not indicate real absence.

In contrast, Ireland's large number of recognisable and excavated early medieval settlements has enabled the use of such sites to be brought into clear focus, not only in terms of the practical elements of living within them but also in terms of their wider cultural contexts, allowing for exploration into intangible aspects of

living within the dwellings and the ways they helped shape the inhabitants' lives (O'Sullivan and Nicholl 2010, 60). The known early medieval settlement sites in Wales are too few for this sort of analysis to be possible, although local landscape, artefacts and written references can help contextualise individual sites.

Whilst there are few studies specifically relating to Welsh early medieval maritime history and archaeology there has been more interest in these themes in the Republic of Ireland and Northern Ireland, from studies on early maritime literature and belief (e.g. Wooding 2000a; McCaughan 1998) to archaeological approaches - spearheaded by scholars such as Aidan O'Sullivan, Colin Breen, Thomas McErlean, Rosemary McConkey and Wes Forsythe - resulting in early medieval sections in works such as O'Sullivan and Breen's *Maritime Ireland: An Archaeology of Coastal Communities* (2007), O'Sullivan's studies of fishing communities (e.g. O'Sullivan 2003), O'Sullivan's *Foragers, Farmers and Fishers in a Coastal Landscape: An Intertidal Archaeological Survey of the Shannon Estuary* (2001) and McErlean, McConkey and Forsythe's *Strangford Lough: An Archaeological Survey of the Maritime Cultural Landscape* (2002). Many of the themes brought out in these works are discussed in this thesis in relation to the Welsh maritime landscape.

The majority of previous scholarship on maritime connections in Wales and the Irish Sea has been tied up with a twentieth-century scholarly reaction to traditional land-biased histories where the sea was seen as a dividing factor (e.g. Mackinder 1915, especially chapter 13). New theories were put forward in which the sea was a uniting force, an important routeway disseminating culture, people and goods (e.g. Fox 1932; Davies 1946; Bowen 1969; 1972). Thanks to the efforts of such scholars it is now an accepted fact that seas connect rather than isolate, an

important turning point in understanding the Irish Sea region and its maritime connections.

Concepts of an ‘Irish Sea province’ and ‘Irish Sea culture-province’ (e.g. Childe 1940, 6; Fox 1938, 41; Davies 1946, 38; Alcock 1963a; 1970; 1972; Moore 1970) have helped develop an understanding of the Irish Sea as a uniting factor to the lands fringing it, rather than a barrier to contact, but this does not mean that communities connected by that sea were culturally homogeneous (e.g. see Alcock 1970; 1972, 106). Although some sea-connected communities might have held certain elements of culture in common, communities would have retained and developed their own sense of individuality. The differences between maritime communities across the sea or along the same stretch of coast are as important and intriguing as the similarities between them (cf. Henderson 2007, 302).

It has been argued that ‘diffusionist’ theories of culture dissemination such as those of E.G. Bowen (e.g. 1969; 1972) exaggerate maritime contact in the Irish Sea, both in scale and in frequency (Wooding 1996a, 4). Whilst some culture dissemination was certainly taking place in the early medieval Irish Sea, evidenced by, for example, early ogham stones in Wales (Edwards 2007, 5, 34-41; 2017, 76) and churches dedicated to ‘Celtic’ saints on both sides of the Irish Sea (Bowen 1969, 69), such evidence does not necessarily indicate sites of direct maritime contact. As Ann Preston-Jones and Elisabeth Okasha (2013, 33) have argued in relation to Scandinavian influence on names and sculpture in Cornwall, shared traditions may owe more to a general cultural milieu than direct interaction. Maritime contact was necessary to the spread of cultural influences across the sea but the nature, frequency, routes and landing places of such contact are uncertain. Scholars such as Cyril Fox (1932, map B) and E.G. Bowen (1969, 23 fig.4, 24-27) have tried to

identify major routes taken by early navigators, but Jonathan Wooding (1996a, 4) argues that mapping potential routes simply blurs the actual reality of contact at any one time in any one place. A focus on individual artefacts can potentially provide a clearer snapshot of contact, but even these cannot be said to prove direct contact via a particular route – for example, the Dublin-type ringed pin found at Whitesands Bay, Pembrokeshire (3.3.4) almost certainly arrived at this site by sea but it may not have come directly from Dublin.

Although Bowen (1972, 9) considered the Irish Sea to be a place of continuity of tradition, where ‘the past always appears to merge unbroken into the present’, Wooding (1996a, 4) argues that theories such as these ignore the nuances of sea routes in different eras, sailed by different people for different purposes, and he warns against the hunt for ‘natural connections’ in maritime contact, suggesting that maritime activity should always be seen as a response to specific political and economic circumstance. Routes used for generations may drop out of favour, and routes not used for generations may open up again. Reasons for maritime routes going in and out of favour might be as intangible as a personal desire for exploration, or avoidance of an area following a disaster.

It is extremely difficult to pinpoint particular voyages to and from early medieval Wales, and across the wide time-frame of this thesis different routes of sea travel and forms of maritime contact would have been dictated by contemporary, local, political, societal and economic factors. Having said this, maritime routes in the early medieval Irish Sea are unlikely to have changed drastically across the period, constrained as they would have been by environmental factors such as tides, currents, maritime hazards and good landing places. So long as no untoward events such as sand inundation or silting rendered a landing place unreachable, a good

landing place is likely to have been returned to again and again, even if it might occasionally have fallen out of favour. Oral memory of sea routes, landing places and fishing grounds could be preserved across generations, and knowledge of the local maritime land and seascape combined with tangible remains of earlier activity might encourage similar activities in similar areas even if memory was lost, as argued by O’Sullivan (2003, 466) in relation to medieval and post-medieval fishtraps occupying the same sites in the Shannon estuary and Strangford Lough.

The majority of recent scholarship touching on early medieval maritime connections in the Irish Sea is related to trade. There are three known major trading systems in the early medieval Irish Sea: the first brought ceramics from the Mediterranean (with some glass picked up along the way: Campbell 2007a, 56-8), the second brought ceramics and glass from the Continent, and the third was the expansion of trade routes introduced by the Vikings.

The Mediterranean trade is likely to have overlapped with the Continental trade that came after it, and occasionally the import sites are the same. Despite this overlap, these were two separate trading routes and should not be seen as directly related – as Wooding (1996a, 40) has argued, each trade system should be seen within the context of contemporary tastes and demands. Findspots of imports from the Mediterranean trade are included in this study’s data collection despite the fact that the trade ended just before the beginning of the study period, since it is highly probable that maritime activity of some form continued at landing places used during this visible trade.

The fifth- to sixth-century Mediterranean trade is mainly evidenced by imported pottery – Phocaean Red Slipware, African Red Slipware and ‘B-wares’ including Late Roman Amphorae 1, 2 and 3 – and the majority of findspots are in

south-west Britain (Campbell 2007a, 14-24, 16 fig.5, 18 fig.8, 22 fig.13; Doyle 2009, 18-23). The exact nature of the maritime contact that resulted in these imports is unknown: whether trade with the Mediterranean was direct (e.g. Fulford 1989) or indirect (e.g. Bowman 1996; Duggan 2016), and whether it arrived through regular trading trips (e.g. Campbell 2007a, 132), or whether the goods were perhaps the result of only a handful of voyages (e.g. Thomas 1988). Although the exact structure of the trade remains uncertain, it is certain that these imports were coming ashore in Wales where local maritime communities would have met the trading vessels and interacted with their occupants whether those boats were returning to their home landing place or visiting from far afield.

The sixth- to seventh- or early-eighth-century Continental trade that overlapped and followed on from the Mediterranean trade is evidenced in glass and ‘E-ware’ and ‘DSPA-ware’ pottery from western France (Campbell 2007a, 27-52, 64-9, 73; Doyle 2009, 23-5). Wooding (1996b, 73) has posited a ‘tramp-steamer’ model for the Continental trade, suggesting that the boats involved travelled to more than one destination with a variety of goods. Ewan Campbell (2007a, 136-8) has instead suggested that the trade was direct, and that the traders involved were based in the area of France from which the E-ware and other goods found in Britain and Ireland were coming, arguing that traders from Britain and Ireland sailing to France to trade would have returned with a more diverse range of imports. However, Christopher Loveluck and Aidan O’Sullivan (2016, 25-6) have argued convincingly for the E-ware trade to Ireland being instigated by Irish merchants engaged in salt trade with the region between the Charante and Loire estuaries. If ‘British’ sailors at Noirmoutier in the eighth-century *Life* of St Filibert (§40, §41: Krusch and Levison 1910, 603) were Welsh, and if they too were taking part in the salt trade, the

presence of E-ware in Wales may also have been the result of direct maritime contact with the Continent, perhaps instigated by Welsh merchants.

It is difficult to spot the Welsh abroad in this era, since those termed ‘British’ in textual sources could have come from Wales, but they could also have come from other parts of Britain, or from Brittany. Direct and fairly common movement between the Irish Sea and the Continent is hinted at in evidence for pilgrims who are likely to have hitched lifts on boats travelling for other purposes such as trade. For example, in the early-ninth-century *Life* of Alcuin an English visitor to the monastery of St Martin at Tours is assumed by the monks to be British or Irish, suggesting that pilgrims from the Irish Sea area were fairly common (Loveluck and O’Sullivan 2016, 27).

The invisibility of the potential salt trade is a reminder that the end of archaeologically-visible imports from the Mediterranean and Continental trades in the Irish Sea does not necessarily indicate the end of maritime trading contacts (Loveluck and O’Sullivan 2016, 27, 31-2). Internal maritime movement of goods certainly continued throughout the apparent gap between the cessation of E-ware imports and arrival of Scandinavian-influenced goods (6.5.6).

The findspots of the imports from the Mediterranean and Continental trades provide information on where the artefacts ended their lives, but the mechanisms by which they arrived at these findspots are uncertain. It is likely that at least some of the maritime trade in Wales was elite-controlled, with lower-status sites with imports perhaps receiving the goods from high-status centres such as Dinas Powys in Glamorgan (Campbell 2007a, 117). Especially in the earlier part of the period, arguments concerning maritime exchange mechanisms in the Irish Sea are generally built around the idea that trading sites existed under the control of local elites, and

that movement of goods beyond these places was within a system of gift-exchange (e.g. Mytum 1992, 262-7; Campbell 2007a, 114, 117, 124; Doyle 2009, 35; O'Sullivan *et al.* 2013, 269; Charles-Edwards 2013, 222-3; Thomas 1988, 11, 16, 22). Charles Doherty (1980, 67-8, 85) has argued that trade could exist alongside gift exchange, but only under direct elite authority.

Ports-of-trade or emporia comparable to sites such as Hamwic and Lundenwic are not found bordering the Irish Sea until the development of Hiberno-Scandinavian trading settlements such as Dublin. Trade with mariners is instead generally thought to have been carried out at sites that acted as 'gateway communities' to the hinterlands beyond, the two main examples in this argument being the east coast of Ireland islands of Dalkey, Co. Dublin, and Dunnyneill, Co. Down (see Campbell 2007a, 124; Valante 2008, 34; Hodges 1982, 24-5, 50-51; Mytum 1992, 262-3). Although during the period of Mediterranean imports Dalkey may have been a stopping-off point rather than an entry point, perhaps even within a 'British'-orientated trading network outside Irish society (Wooding 1996a, 61-62; Doyle 1998, 100), it is likely that during the period of the later E-ware trade – and perhaps also during the Mediterranean trade – Dalkey was a site of importation and exchange for an as-yet undiscovered high-status centre inland (Doyle 1998, 100, 102). No comparable island importation sites are known in Wales, but the majority of early medieval high-status sites in Wales had good maritime accessibility and may have received maritime traders directly (6.2.1).

Not all maritime trading activity would have been elite-controlled. To the east, the occurrence of imports along the east coast of England in lower-status settlements such as Sandtun (Gardiner *et al.* 2001), or even smaller settlements such as farmsteads (Loveluck 2017, 302), suggests that early medieval mariners were

choosing to engage in opportunistic trade with coastal dwellers, even whilst also trading at larger ports or emporia (Loveluck 2017, 307). Such opportunistic trade would also have been taking place around the Irish Sea throughout the early medieval period, and can be spotted in the occurrence of imports away from elite centres and towns (6.5, 7.4). Even imports that are usually found on high-status sites need not always indicate trade with elites, since mariners may have sometimes parted with such goods to lower-status communities in exchange for supplies or the services of pilots (for example, see discussion of imports on Caldey, Pembrokeshire (3.3.1.1) and Lambay, Co. Dublin (p.301)).

Some cargoes would never have been intended for an elite buyer. Although lower-status maritime trade is likely to have generally been in organic materials now invisible in the archaeological record, some of the stone that has been moved by sea in early medieval Wales might be a result of lower-status maritime trade (6.5.6), and lower-status activity of this type may have taken place at the small, largely undefended, non-elite, seasonal coastal market sites suggested by David Griffiths (2003, 65).

Concentration of modern scholarship on the visible Mediterranean and Continental trades has left gaps in our understanding of early medieval maritime communities in the Irish Sea. There would have been maritime communities at this time who had nothing to do with the trades and cannot be spotted through the presence of imports. There would also have been maritime communities who took part in these visible trades and continued to undertake maritime activities after they had ended (cf. Loveluck and O'Sullivan 2016, 27, 31-2).

Following the end of the visible Continental imports the arrival of the Vikings in the Irish Sea has been a focus for literature touching on maritime activity

around the shores of early medieval Wales (e.g. Redknap 2000; 2004; 2007; 2009; Charles 1934; Loyn 1976; Richards 1975; Etchingham 2001). However, the Viking impact on Wales was not great and neither is the number of publications. In contrast, there is a large body of literature on the documentary and archaeological evidence for the Vikings in Ireland (e.g. Valante 2008; Larsen 2001; Clarke *et al.* 1998; Wallace 2016; Russell and Hurley 2014).

Viking-age maritime connections in early medieval Wales tend to be discussed in relation to the maritime connections of the Vikings themselves, rather than in relation to Welsh mariners. For example, Scandinavian-derived place-names around the Welsh coast are argued to be evidence for the maritime orientation of the Vikings (e.g. Charles 1934, 137-8; Redknap 2004, 143), but similar interest has not been shown in earlier Welsh place-names which could also be indicative of maritime activity (see 6.8). In another example of this focus on Viking maritime activities, Ken Lloyd Gruffydd (2016, 260) suggested that early Welsh kings had to hire vessels from Viking mercenaries in Ireland because they were not involved in maritime activities themselves. However, it must be noted that mercenaries hired from Ireland would necessarily have arrived in Wales by boat, and whether or not Welsh kings used ships for battle in the early medieval period is not reflective of maritime activities in the population as a whole.

Whilst there seems to have been a fair amount of Viking interest and presence in north Wales – suggested, for example, by the presence of hoards and other evidence for commerce (Redknap 2009) and the apparent links between Gwynedd and the ruling Viking powers of Dublin in the earlier eleventh century (Etchingham 2001, 157-8) – in general it would seem that the impact of Viking settlement and activity in Wales was slight, and certainly never as influential as that

found on the east coast of Ireland in sites such as Dublin and Waterford. As in earlier periods, however, Wales was not isolated from events in Ireland, and documentary sources point towards allegiances across the Irish Sea. For example, Rhodri Mawr took refuge in Ireland in AD 877 after killing Orm, a Viking leader (Charles-Edwards 2013, 478); Idwal Foel ab Anarawd, king of Gwynedd, allied himself with Olaf Guthfrithson in the latter's campaign against the West Saxons AD 939-40 (Charles-Edwards 2013, 526); and in Gruffudd ap Cynan's quest for leadership in Gwynedd he called on allies from both sides of the Irish Sea, having himself grown up near Dublin (*Life of Gruffudd ap Cynan*: Russell 2005, 52-91). Frequent maritime contact across the Irish Sea is suggested, instigated not only from the Hiberno-Scandinavian centres of Ireland but also from Wales, with individuals crossing the sea to hide, to raise support and to make political contacts.

Welsh connections with Viking-age Ireland are also demonstrated by the presence of Hiberno-Scandinavian artefacts in Wales (e.g. see 3.3.4, 4.3.4). It must not be assumed that such artefacts necessarily arrived on Hiberno-Scandinavian vessels. The fame of the Vikings as merchants and the evidence in Viking Dublin for participation in far-reaching and wide-ranging trade routes (Wallace 1987, 209 Map 1, 216, 219-20; O'Sullivan *et al.* 2013, 271) need not signify a monopoly on maritime movement. Whilst the Vikings may have been the dominant maritime force in the Irish Sea from the ninth century, their boats were not the only ones on those waters.

Aside from the apparent re-use of probable Viking-age boat clench-nails at Llanbedrgoch, Anglesey (Redknap 2019, 91 fig.6.4), no archaeological remains of boats used in Welsh tidal waters are known between the c.AD 300 Barland's Farm boat from the Gwent Levels on the northern shore of the Severn Estuary (Nayling

and McGrail 2004, 216, 227-8) and the boat planking fragments apparently forming part of a waterside revetment near the mouth of the Usk at Newport in the Severn Estuary, one fragment of which (not related to outer ring growths) was dated cal.AD 880-1220 (2σ:HAR-3203), with the actual date of construction suggested to be the twelfth or thirteenth century (Redknap 1998, 143).

On the east coast of Ireland, an oar dated to the early-seventh century through its re-use in the core of the first of the tide mill dams at Nendrum in Strangford Lough, Co. Down may have belonged to a small logboat or to a hide or wooden boat, as might two fragments of possible boat paddles found in the timber platform landing place of the mill, whilst another wooden fragment would appear to be a rowlock, perhaps of a logboat or worked into the top strake of a wooden boat (Earwood 2007, 228-30). Logboats do seem to have been amongst the boat-types in tidal waters in early medieval Ireland (e.g. a logboat at Inch Abbey on the River Quoile, Co. Down, dated cal.AD 777-892 (UB-3651): Fry 2000, 104). Scandinavian-influenced boat remains are found at Dublin and Waterford (McGrail 1993; 1997; Breen and Forsythe 2004, 61-6), and the longship *Skuldelev II* sank in Denmark but was built near Dublin in the mid-eleventh century (Crumlin-Pedersen 2010, 31-2). On Mann, the boat burials at Knock y Doonee and Balladoole are within a Scandinavian funereal tradition (Kermode 1927-8; Bersu and Wilson 1966), although since the only remains of the vessels are nails, the type of boat and whether they were built within a Scandinavian, Manx, or other tradition is unknown (e.g. see Bersu and Wilson 1966, 92). No early medieval boats are known in Cornwall. In contrast, much more is known about vessel types in Scandinavian areas, and Sean McGrail's discussion of early medieval boat types and seafaring in Atlantic Europe

is based mainly around Scandinavian vessels as well as the handful of boats known from England, especially the south-east (McGrail 2001, 210-30).

There are few written references to boats in early medieval Wales, but there are many more in the literature and documentary sources of early medieval Ireland. Of particular note is the *Voyage of St Brendan*, which may be from as early as the eighth century, although more certainly as early as the tenth (Dumville 2000 (1988), 131-2; Farmer 1998, 11; Webb 1998, 233-267; Breen and Forsythe 2004, 50), and which contains a passage on the making of a hide-covered boat with a wooden framework which has a mast and sail (§4: Webb 1998, 236) and can also be rowed (e.g. §9, §15: Webb 1998, 239-40, 250). The sail was probably used in the Irish Sea from at least the sixth century BC, and there was certainly some early medieval sea voyaging out of sight of land, as indicated by the presence of Irish monks on the Faroe Islands in the eighth century (McGrail 2001, 211, 222; Wooding 2000b, 237-40). Although little can be said for certain about the range of exact techniques of vessel construction and propulsion in the early medieval Irish Sea (although both hide and wooden boats are likely to have been constructed and used), we can be sure that journeys on tidal rivers, in estuaries, along coasts and across the open sea were all possible.

To develop an understanding of maritime communities in early medieval Wales it is essential to place Wales within its wider Irish Sea context, and to explore evidence for maritime communities on neighbouring shores. Key resources for this include Aidan O'Sullivan *et al.*'s *Early Medieval Ireland, AD 400-1100: The Evidence from Archaeological Excavations* (2013), one of the indispensable texts produced as a result of the Early Medieval Archaeology Project (EMAP) which collated and synthesised findings from Irish archaeological excavations, reports of

the Manx Archaeological Survey (1909-1968) and Ann Preston-Jones and Elisabeth Okasha's *Corpus of Anglo-Saxon Stone Sculpture Volume XI: Early Cornish Sculpture* (2013).

Thomas Charles-Edwards's *Wales and the Britons 350-1064* (2013) has been invaluable to this study, a comprehensive exploration of the documentary sources in Wales for a period where these are notoriously thin, building a complex picture of politics, economics, society and power. Key written sources for early medieval Wales include the *Annales Cambriae* (Gough-Cooper 2012; Dumville 2002; the earliest text (A) of which survives in a manuscript from c.AD 1100, but probably belongs to the second half of the tenth century: Dumville 2002, vii; Gough-Cooper 2012, §1), Rhygyfarch's late-eleventh-century *Life* of St David (Sharpe and Davies 2007) and the stories of the Mabinogion (Davies 2007).¹ Only through an interdisciplinary approach can activities, folklore and belief systems of past maritime communities begin to be reconstructed.

An interdisciplinary approach is key to the work of Christer Westerdahl (see especially 1992, 2000 and 2012), whose developing framework for aspects of the maritime cultural landscape incorporates not only material remains but also reconstruction of the cognitive landscape. A variety of interdisciplinary evidence can be used to explore aspects such as the economic landscape, the landscape of transport and communications, the power landscape and the cognitive landscape (Westerdahl 2012, 746). It is in Westerdahl's ideas of the maritime cultural landscape that this thesis finds its main theoretical grounding, adapted to coastal Wales where the lack of obviously maritime elements in the archaeology makes for a

¹ The date the four branches of the Mabinogi were first written down is uncertain, but may have been between c.AD 1060 and 1120 (Davies 2007, xxvi-xxvii). Dates of written versions of other stories in the Mabinogion collection are given when individual stories are discussed.

different approach to one that might be taken in Scandinavia, where the term ‘maritime cultural landscape’ first emerged (Westerdahl 2012, 754).

Of key importance in reconstructing the maritime cultural landscape in early medieval Wales is the landscape itself. In his *A Phenomenology of Landscape: Places, Paths and Monuments* (1994), Christopher Tilley highlights the importance of landscape to the humans inhabiting and frequenting it, including in the way landscapes are viewed, interacted with and named. It is impossible to live next to something as ever-present and changeable as the sea and not form some response to it, whether that response is positive or negative, and whether it is the response of someone who interacts with the sea or does their best to have nothing to do with it. This is not, however, to argue for geographic determinism such as that suggested by processualist archaeologists (e.g. Binford 1962). Although landscape, environment and resources might shape human activity, they do not determine it. As is argued by post-processualists (e.g. Hodder 1985), the importance of individual human agency must be recognised.

It is human agency that would have led some individuals to take to the sea and others to never set foot in a boat, some to welcome maritime travellers and others to shun them, some to look to the sea for their most meaningful stories and others to look to the land. But the sea itself remains a major character in the lives of those who lived nearby: it could provide safe passage or a lethal road, could bring both opportunities and danger in the forms of flotsam and flooding, traders and pirates. The landscape of the shore, too, could influence the ways in which people interacted with the sea, activity encouraged or discouraged by the presence of safe landing places or dangerous headlands.

The focus of modern scholarship on trade activity in the early medieval Irish Sea touches on only one possible aspect of maritime connections. A.J. Parker (2001, 37-8) has suggested that the decision to go to sea should not be seen as simply an economic one and that it can be tied up with social factors such as a desire to seek fortune, adventure and a better social standing. Gabriel Cooney (2003, 323-4) has made the point that the sea was far more than simply a means of contact, highlighting the importance of local knowledge, lived experience and belief systems as well as the practical aspects of maritime activities to reach an understanding of what he terms the 'seascape'. In *Rethinking Wetland Archaeology* (2006, 146), Aidan O'Sullivan and Robert Van de Noort argue that wetland landscapes have too often been studied only in respect of their economic functions, and that social, political and religious aspects should be included in discussions of life in those landscapes. Interdisciplinary approaches to the past are essential because humans themselves are interdisciplinary. Any one individual's approach to the world around them is influenced by a myriad of factors, none of which can be considered in isolation from the others.

Maritime folklore and belief systems can be difficult to reconstruct. Westerdahl (2005, 2) has argued that what might be termed maritime 'superstition' was in fact a 'coherent system of cosmology', and the role of the sea in the human mindset has been explored by scholars such as John Mack in *The Sea: A Cultural History* (2011), Barry Cunliffe in works such as *Facing the Ocean* (2001) and *On the Ocean* (2017) and John R. Gillis in *The Human Shore: Seacoasts in History* (2012), whilst an excellent starting-point for maritime lore in Britain and Ireland is *The Fabled Coast: Legends and Traditions from around the shores of Britain and Ireland* (Kingshill and Westwood 2012). Work on the symbolic aspects of boats (e.g.

Crumlin-Pedersen and Munch Thye 1995; McCaughan 2002) can offer glimpses into maritime belief systems of the early medieval Irish Sea, although generally biased towards Scandinavian-influenced contexts and Christian thought.

The mythological sea voyages of the early medieval Irish *immrama* tales have ensured that the study of maritime elements in early Irish mythology is not uncommon – for example, Jonathan Wooding’s edited volume *The Otherworld Voyage in Early Irish Literature* (2000a) brings together several previously-published articles and new literature on this theme. Although early Welsh literature does preserve some tales with maritime elements (see 6.9) there is no scholarly focus on this, and maritime elements tend to only appear within wider discussions of early literature (e.g. Carey 2000 (1982-3), 118-19 on the potentially watery location of Annwn, the Welsh Otherworld, or MacCulloch 1911, 110 on the Welsh sea-associated character Dylan Eil Ton). Evidence for maritime folklore and belief from the Welsh literature is discussed in chapter 6, section 6.9 and placed within its wider Irish Sea context in chapter 7, section 7.7.

It is not only through literature that maritime folklore and belief systems might be glimpsed. As Tilley (1994, 67) has argued, landscape is closely linked to myth, and this is certainly likely to be true of something as ever-present and both predictable and unpredictable as the sea. Archaeological sites and their locations within the landscape can therefore be included in discussions of early maritime folklore and belief. Once again, it is through an interdisciplinary approach that the activities, folklore, beliefs and maritime cultural landscape of past maritime communities can be best explored.

1.3.Aims

Previous scholarship in the Irish Sea is predominantly focussed on trade and on cultural contact rather than on the maritime communities who facilitated movement by sea. Can maritime communities be identified in early medieval west Wales, and is it possible to explore the practical and spiritual ways in which they interacted with the sea? How do maritime communities and their activities, folklore and belief systems in Wales fit within the wider context of Irish Sea maritime communities, activities and thought? Is it possible to reconstruct the maritime cultural landscape(s) of maritime communities in the early medieval Irish Sea?

The main aims of this thesis are:

- To identify maritime communities on the west coasts of Wales and in the wider Irish Sea area and to explore their context, looking at location, status, activities of the inhabitants and their domestic and international roles.
- To identify potential early medieval landing places on the west coasts of Wales and in the wider Irish Sea area.
- To explore contemporary perceptions of maritime communities in their liminality and their connectedness and to investigate how much jurisdiction rulers held over the comings and goings on the coast.
- To explore the potential for multicultural communities in coastal locations.
- To explore early medieval mythological, folkloric and spiritual associations with the sea, both of communities who interacted practically with it and those who did not.

2.Methodology

2.1.Methodological and theoretical approaches

To pursue the aims laid out in section 1.3 a regional case study approach was taken, focussing on the west coasts of Wales. Three study areas were chosen, in south, north and mid Wales (2.3 and figs.1-4). Multiple sources (including excavated evidence, chance finds, written sources, monuments, place-names) were utilised to collate data on every site with evidence for early medieval activity within the limits of the study areas. The data was recorded in searchable Excel spreadsheets, recording location, nearest tidal waters, dating evidence, features, previous activity nearby and detailed notes on the early medieval evidence at each site, with separate sheets for details on artefacts, burial and environmental remains. Sites with evidence for maritime connections were then drawn from this dataset (see 2.4), and it is these sites that are discussed in this thesis.

The broad regional approach of this study cast the net wide over large areas of the west Wales coast, allowing chance finds and small sites to take their place in the dataset and discussion alongside more productive sites such as Longbury Bank, Pembrokeshire, or Bangor, Gwynedd, on which much previous scholarship has been focussed. To have focussed only on such well-known, productive sites would have done nothing to expand an understanding of maritime connections and communities in early medieval Wales. Every object, site and document can tell a story, especially when discussed in relation to one another. In addition, in a single chance find there is the possibility that an entire productive site or area may one day be revealed. In taking a broad regional approach and recording every site with evidence for early

medieval activity within each study area, this study breaks new ground in the exploration and discussion of evidence for early medieval maritime connections in Wales.

The data used in this study comes from numerous published and unpublished sources and from databases, the approach being to find, read and collate everything recorded on sites with evidence for early medieval activity within the study areas. Published material ranged from antiquarian reports to up-to-date scholarly discussions in books and journals. Visits to Aberystwyth, Ceredigion were made periodically to consult material in the National Library of Wales and the collections of the Royal Commission on the Ancient and Historical Monuments of Wales. Much of the unpublished material, particularly reports and surveys of the Dyfed and Gwynedd archaeological trusts, was available open-access online, but research trips were also made to the archives of those trusts, in Llandeilo, Carmarthenshire (May 2018, May 2019) and Bangor, Gwynedd (September 2018, May 2019). Invaluable online databases include Archwilio, the online historic environment records of the Welsh archaeological trusts, Coflein, the online database of the National Monuments Record of Wales, the Portable Antiquities Scheme (PAS), the Corpus of Early Medieval Coin Finds (EMC) and the Historic Environment Viewer (HEV) of the National Monuments Service of the Republic of Ireland. Written primary sources were consulted from published editions and translations and from digitised copies.

As discussed in the introduction (pp.14-15), within the last thirty years there has been a significant amount of work on the maritime past in Wales through primary data collection for coastal surveys, most recently the current joint Ireland-Wales maritime heritage and climate change project, CHERISH. Although these surveys have collated a wealth of evidence for maritime activity in Wales, this

disparate evidence has seen little synthesis. Similarly, there are a large number of exciting archaeological sites across the study areas that are still in the grey literature stage and as such are little known and therefore less likely to be included in wider discussions. The approach of this study is to collect together this unpublished and unsynthesised data in order to discuss and interpret it within its wider context. In doing so, the study opens the way for a fuller understanding of these datasets, including them in more holistic discussions of the past. The desk-based research approach of this study complements, and brings to the fore, the ongoing primary data collection in Wales, synthesising and interpreting the data in ways that will encourage further investigation and discussion in the future.

I have taken an interdisciplinary approach in this study, influenced by Christer Westerdahl's work on the maritime cultural landscape (1992, 2000 and 2012) and my abiding belief that discipline parameters are constrictive to interpretations of the past. In 2012 (754), Westerdahl stated that 'The study of maritime culture and its landscape ought to mean the exploration of all kinds of human relationships to the sea...' Westerdahl's theories on studying the maritime cultural landscape encourage exploration into cognitive as well as material aspects of the past, exploring the ways in which maritime communities perceived the land and seascape as well as the ways in which they physically interacted with them. Westerdahl has stated that '...almost any kind of unexpected material could be used as a source' (2012, 754), and this is certainly the approach that must be taken in early medieval Welsh maritime studies, where more obvious evidence such as boats and man-made harbour structures are lacking.

2.2.Definitions of key terms

The following key terms are used throughout the thesis and are defined here to ensure that their meaning is clear in the succeeding discussions.

Wales

The area of modern-day Wales. Although Wales was not a unified country in this period, language, culture, politics, society and geography demarcated it from other areas of Britain, for example, England to the east and Cornwall to the south.

Ireland

The island of Ireland, including both the Republic of Ireland and Northern Ireland.

Cornwall

The area of modern-day Cornwall.

Mann

The island of the Isle of Man.

Maritime activities

Any activities related to the sea and/or the intertidal zone – for example, sailing or collecting seaweed.

Maritime connections

Connections to the sea and/or the intertidal zone of any site, object or community.

Tidal rivers are not considered ‘maritime’ in themselves but can provide maritime connections.

Coastal community

A community within half a day’s walk of the sea or tidal waters, here taken as 15km as the crow flies (2.3). These communities have the *potential* for direct maritime connections, whether that potential is realised or not. It is recognised that at the furthest limits of this study such communities are not what might be considered coastal in the general usage of the word, and, indeed, are very unlikely to have thought of themselves as such given their distance from the coast itself. However, this term is chosen in preference to other possibilities, such as ‘coastal hinterland community’ or ‘inland community’, since the aim was to choose a term that encompassed *all* communities within 15km of the sea and therefore with the potential for maritime activity on any one given day, whether those communities were in a highly coastal position or a more inland location, and regardless of whether they have produced evidence for maritime connections.

‘Community’ is used in preference to ‘settlement’ here since ‘settlement’ is a site-type denoting evidence for occupation (see 2.5), whilst ‘community’ is a looser term that might encompass several settlements in an area and individuals and activity outside the main areas of settlement.

Maritime community

A community within which at least some individuals interacted with the sea and/or intertidal zone. This might include as mariners, as receivers of boats from elsewhere, for subsistence and for spiritual reasons. A maritime community need not contain mariners. It is highly unlikely that any community would have been purely maritime-focussed (Westerdahl 2012, 744-5; Parker 2001, 25), but any form of maritime activity by any number of members of a community, whether such activity was regular, occasional, constant or seasonal, merits the term ‘maritime community’ in the definitions of this study.

Maritime cultural landscape

The ‘maritime cultural landscape’ is both material and cognitive. It encompasses the ways in which humans interact with and perceive the sea, and the places on land and at sea associated with these interactions and perceptions (see Westerdahl 1992; 2000; 2012).

Highly coastal

Sites within 500m of the coastline. Sites might also be considered highly coastal if they are further than 500m from the coastline but have a clear relationship to it – for example, overlooking a landing place, or situated within a coastal environment such as sand-dunes.

Landing Place

Sites where early medieval vessels might have put ashore or set off. The terms ‘harbour’ and ‘port’ are generally avoided due to their implications of human-built structures.

High-status and lower-status

‘High-status’ refers to the activity and settlements of ruling elite. ‘Lower-status’ is used for all other sites, covering a wide hierarchy.

Ecclesiastical and secular

‘Ecclesiastical’ is used for sites where there would seem to have been some kind of Christian religious structure, whether chapel, church, hermitage or monastery and for communities who inhabited these sites for Christian religious reasons. ‘Secular’ is used for sites without ecclesiastical presence, and for communities that were not ecclesiastical.

Practical and spiritual

‘Practical’ refers to decisions and actions based on tangible, functional outcomes.

‘Spiritual’ refers to decisions, actions and thoughts based on intangible, conceptual belief.

Hiberno-Scandinavian

Viking-age settlements in Ireland in which Irish and Scandinavian influences met to produce distinctive cultural milieus, and the products of such milieus.

Multicultural

Communities with a range of cultural influences and/or formed of people with a range of cultural backgrounds and/or origins.

Import

An artefact that originated away from the area of its findspot.

External import

An artefact whose origin and findspot are in different geographical areas (as defined above, e.g. an Irish artefact in Wales).

Internal import

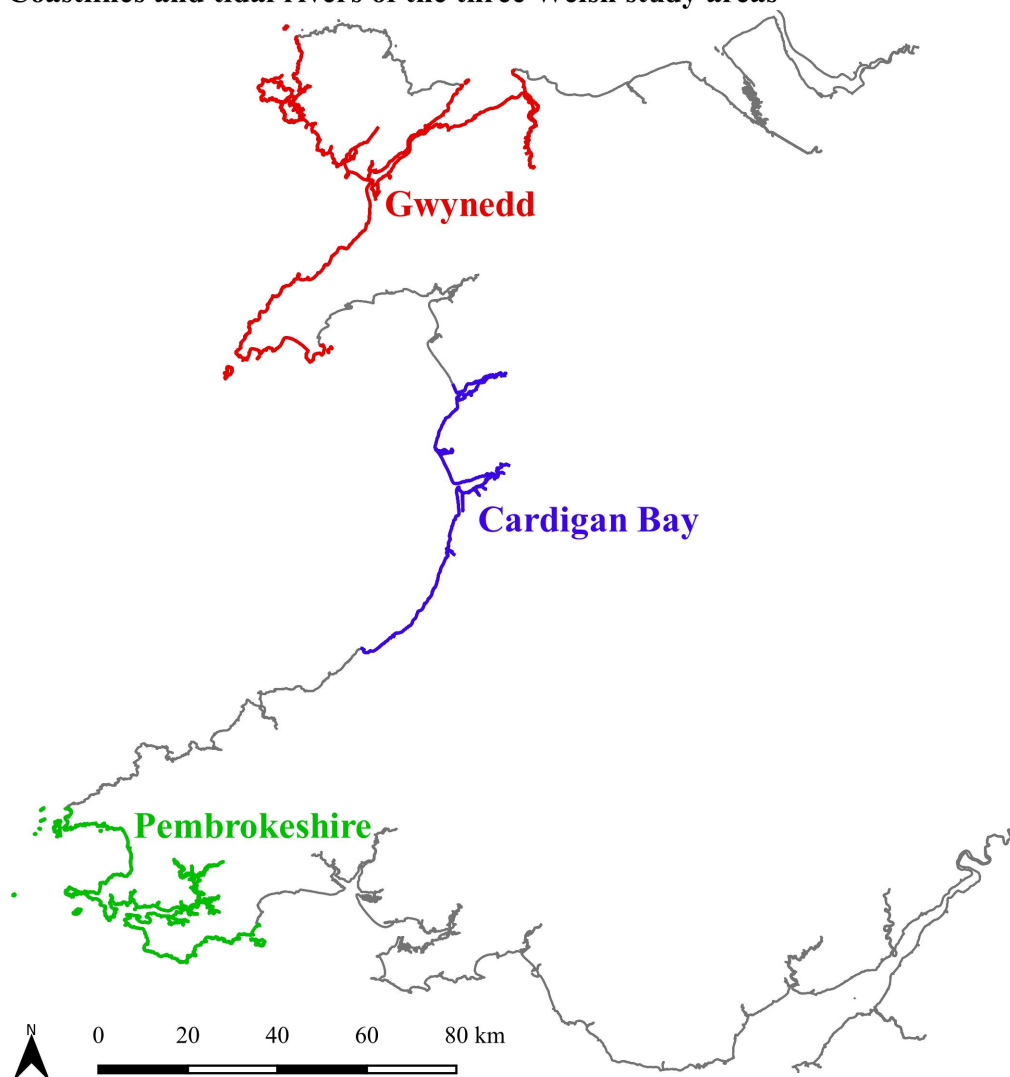
An artefact that both originated and was found within the same geographical area (as defined above, e.g. Wales).

2.3. Welsh study areas

The west coasts of Wales, facing Ireland across the Irish Sea, were chosen as the focus of this study. The aspects of the north and south coasts of Wales are very different to the west, facing north to the coasts of Lancashire, Cumbria and Scotland and south to south-west England across the Bristol Channel, and whilst exploration into early medieval maritime communities in these areas would be a fascinating avenue for future research, this falls outside the scope of this project. Three study areas were chosen on the west coasts of Wales, in south-west Wales

(Pembrokeshire), north-west Wales (Gwynedd) and mid-west Wales (Cardigan Bay) (fig.1), to enable the similarities and differences in maritime connections in these different areas to be explored. The maritime outlooks of the three Welsh study areas are very different. For example, direct travel to Ireland from Cardigan Bay is less likely than from north and south Wales, Gwynedd may have ruled Mann in the earlier Viking age (Steinforth 2018, 81, 90; Charles-Edwards 2013, 472), and Pembrokeshire, particularly south Pembrokeshire, is likely to have had maritime links east up the Severn Estuary and south to Cornwall and Devon.

Figure 1
Coastlines and tidal rivers of the three Welsh study areas



The current Welsh coastline is not the coastline of the past, and there is no blanket change that can be applied to all Welsh coastlines. In some areas, erosion has determinedly worked its way into the edge of the land (such as at Llanfaes, Anglesey, where there is now no trace of burials seen eroding out of a cliff before 1855: p.133), and slowly rising sea levels mean that the early medieval intertidal zone was generally further out than today's (as seen at the potentially early medieval fishtrap in New Quay bay which is never now exposed: 5.2.2.2; for sea level rise see Heyworth and Kidson 1982, 110 fig.5; Shennan and Horton 2002, 521 fig.6; Larcombe and Jago 1994, 178). Sand movement might change the shape of the coast and cover evidence for early activity, such as at Aberffraw, Anglesey, which has been a victim of sand inundation from the medieval period onwards (Bailey *et al.* 2001). Sedimentation can also work gradual changes on the coast, such as in the Mawddach estuary, Cardigan Bay (Larcombe and Jago 1994, 179). Coastline change is discussed in the context of individual sites within the data presentation chapters where such change is thought to notably affect a present understanding of the past environment.

The geography of the Irish Sea varies significantly from place to place, not only in general terms and across large bodies of water – such as the tendency towards a lower coast in eastern Ireland and cliffs on the west coast of Wales – but also within much smaller areas, since geology and topography can vary from cove to cove along the same stretch of coastline, and have a knock-on effect on tidal reaches and currents. The possible effects of differing geography on individual sites is explored in the data presentation chapters.

Within each of the three study areas, all early medieval activity within 15km (as the crow flies) of the coastline of the study area, or the tidal stretch of a river that

met the sea on that coastline, was included in the data collection. 15km was chosen as the inland limits of this study as this is approximately half a day's walk. Exactly how far an individual on foot could travel in a day in the early medieval period was dependent on many variables – the health of the individual, their luggage, the terrain, the weather, the length of the day itself. Marjorie Nice Boyer (1951, 604, 605-6) suggested from documentary records that travellers on foot in fourteenth-century France could walk up to 30-33 miles (48-53km) in a full day's journey, whilst Aidan O'Sullivan and Colin Breen (2007, 24) suggest that an individual walking on 'primitive roads' would manage about 20 miles (32km) in a day. The latter calculation is perhaps closest to what might be expected in early medieval Wales, where the state of potential pathways is uncertain, and the terrain frequently rough or hilly. If about 30km could be walked in a day, a limit of 15km means the occupants of communities at the furthest inland reaches of the study areas had time to walk to and from their nearest sea or tidal waters in one hypothetical day. It is important to note that individuals from the furthest inland communities of this study would not have undertaken the journey lightly and would have had little time for activity at the shore besides perhaps meeting a boat or undertaking trade. It is therefore likely that these communities would have had a generally inland rather than maritime mindset, but they are included in the hunt for maritime communities due to their *potential* for maritime interaction on any one given day.

The 15km inland limit was only consistently reached in the Cardigan Bay study area. Within the Pembrokeshire and Gwynedd study areas peninsula and island coastlines and long stretches of tidal river often led to a stretch of coast outside the study area being closer to a site than a stretch of coast within. For example, on the Llŷn peninsula, any possibly early medieval site closer to the south coast than the

north is not included in the study, despite the fact that a person living in a community on the south coast of Llŷn could easily have walked across the peninsula and got in a boat on the north coast within a couple of hours. The geographical considerations that give this study borders must be seen as predominantly an academic exercise, marking an artificial cut-off to enable limits to be set within the data collection.

Distance measurements in this study are given as the crow flies, unless otherwise stated. Distances to the sea are given according to the current coastline, unless otherwise stated.

The Pembrokeshire study area

The Pembrokeshire study area (fig.2) extends from Tenby in the south-east to St David's Head in the north (the 15km inland limit bringing in parts of Carmarthenshire). Tenby is thought to have been an important early medieval site on the coast, and therefore a potential sailing destination; beyond Tenby the coast curves in towards Carmarthen Bay, and a decision to sail beyond Tenby is a decision to head into south-east Wales. St David's Head in the north is arguably another such decision point, where sailors would make the choice to head south into St Bride's Bay and the heartland of Pembrokeshire or turn north towards the wider, more open stretch of Cardigan Bay. This study area includes the Milford Haven Waterway and the major tidal rivers Cleddau Wen and Cleddau Ddu.

The coastline of the Pembrokeshire study area (Davidson 2002, 14-16; Pembrokeshire Coast National Park Authority 2020; Natural Resources Wales 2014a-b; 2016) is characterised by cliffs broken up by both small coves and longer stretches of sandy beach with fertile hinterlands beyond. The coves and beaches

ensure maritime accessibility even in areas where high cliffs might at first make the coastline seem impenetrable, the cliffs themselves providing look-out points and navigation markers near landing places as well as potential defensive positions. The natural harbour of the Milford Haven Waterway in south Pembrokeshire is a ria (drowned river valley), its tidal rivers and multitude of small inlets linking an agricultural heartland with the coast. South of the Milford Haven Waterway is an extensive dune system in an area that may have been favoured for early medieval landing and exchange (see 3.3.1.3, 3.3.2).

The Gwynedd study area

The Gwynedd study area (fig.3) incorporates parts of Anglesey and Conwy as well as Gwynedd. It focuses on the Ireland-facing Caernarfon Bay, and extends from St Tudwal's Island East off Llŷn to Carmel Head in north-west Anglesey. Beyond St Tudwal's Island East the coastline of Llŷn turns its back on the Irish Sea and heads towards Cardigan Bay, Porthmadog and Harlech. Carmel Head in north-west Anglesey may have been a point where mariners would decide between sailing south and keeping to the west coast of Anglesey, or heading over the north and east coasts of Anglesey towards the Wirral. The north and east coasts of Anglesey are not included in this study area since the focus is on the Ireland-facing west coasts. However, the Menai Strait, out to its northernmost points at Ynys Seiriol off the north-east coast of Anglesey and the Great Orme above Llandudno, is included in the study area, since it was intrinsically linked with activities on the west coast, providing as it does a corridor between the west and the north-east coasts of Gwynedd. This study area includes the major tidal rivers Afon Cefni and Afon Conwy.

The decision to focus on these west-facing and west-linked coasts omits sailing routes along the north and east coasts of Wales towards the Wirral and means that the important, complex and unparalleled site of Llanbedrgoch, Anglesey, is not included in the data collection, although it is included in the discussion. If Llanbedrgoch had been included in the data collection its large number of finds would have skewed the dataset, and it is more helpful to include it in relevant discussions than to view it as an expected site type. Having said this, the approach taken in this project, of recording every site with evidence for early medieval activity in the study areas, could help identify sites for future excavation that may yet be revealed to be comparable to Llanbedrgoch.

In terms of the landscape character of the Gwynedd study area (Davidson 2002, 12-13; Natural Resources Wales 2014c-e; 2015; Fiona Fyfe Associates *et al.* 2013), the north coast of Llŷn is characterised by rocky headlands and narrow beaches, with higher cliffs (and beaches between) at its tip, whilst the west coast of Anglesey is generally characterised by fairly low cliffs and a rocky shoreline punctuated by sandy beaches, with large dune systems at Aberffraw and Newborough. The Afon Cefni provides a navigable river route to the heart of the island and was a water road long prior to its canalisation. The Menai Strait provides an important sea-link between the west and north-east coasts of Gwynedd, its strong currents making pilots with local knowledge essential for safe passage. The coastline on the mainland side of the Menai Strait is generally low-lying, with the rugged cliffs of the Great Orme marking a significant point in the land and seascape. The Afon Conwy penetrates deeply into mainland north Wales, linking the interior with the northern end of the Menai Strait. The coastal hinterlands of the Gwynedd study area are generally fertile and used for agricultural purposes, with Anglesey a

particularly fertile area. The numerous potential landing places across the Gwynedd study area allow for maritime accessibility, the rocky headlands providing stability of land and seascape from both a settlement and navigational perspective.

The Cardigan Bay study area

The Cardigan Bay study area (fig.4) extends from New Quay Head to Barmouth, encompassing the west-facing coast of Cardigan Bay. New Quay Head was chosen as the southernmost point of the study area as it is a prominent maritime landmark and may have sheltered an important early landing place (see 5.2.2.2, 5.5.4); this may have made it a sailing destination, from which sailors could choose to head north for the exposed sweep of Cardigan Bay or south-west for the Pembrokeshire peninsula. Barmouth was chosen as the northernmost point of the study area as beyond it lies the more enclosed seascape of Tremadog Bay. This study area includes the major tidal rivers Afon Mawddach, Afon Dysynni and Afon Dyfi. The stretch of coastline studied in Cardigan Bay is shorter than those in Gwynedd and Pembrokeshire, but the reach inland is generally greater since there is no other nearby coast causing sites to be excluded from the data collection.

The exposed coastline of the Cardigan Bay study area (Davidson 2002, 13-14; Natural Resources Wales 2014f-i) is varied, with a generally softer coastline of sandy beaches, dunes, estuaries, salt marsh and bog in the northern part leading to a harder edge of cliffs and exposed headlands with sheltered bays and beaches between in the southern part. The fertile coastal strip and river valleys are fairly narrow and backed by high ground, encouraging intensive use of coastal hinterlands. The estuaries and bays lend themselves to intertidal activities and the varied coastline allows for good defensive positions and look-out points on cliffs as well as

the maritime accessibility of estuaries, bays and beaches. Direct crossings to Ireland are less likely from this area than from the Pembrokeshire and Gwynedd study areas.

Figure 2

Pembrokeshire study area: coastline and tidal rivers (in green) and key geographical features

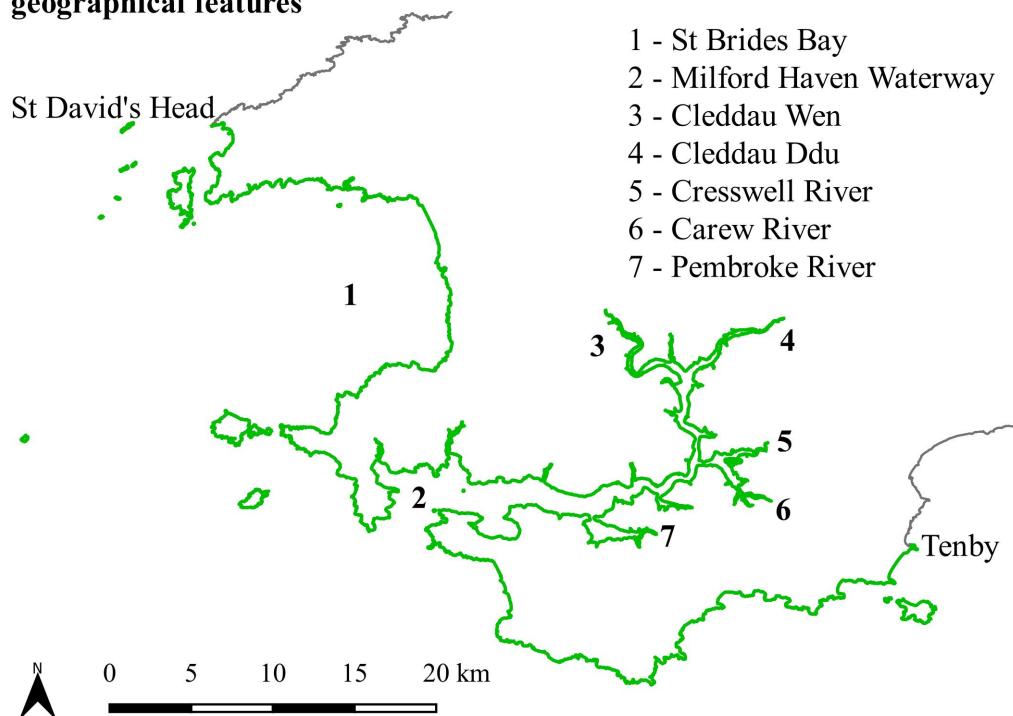


Figure 3

Gwynedd study area: coastline and tidal rivers (in red) and key geographical features

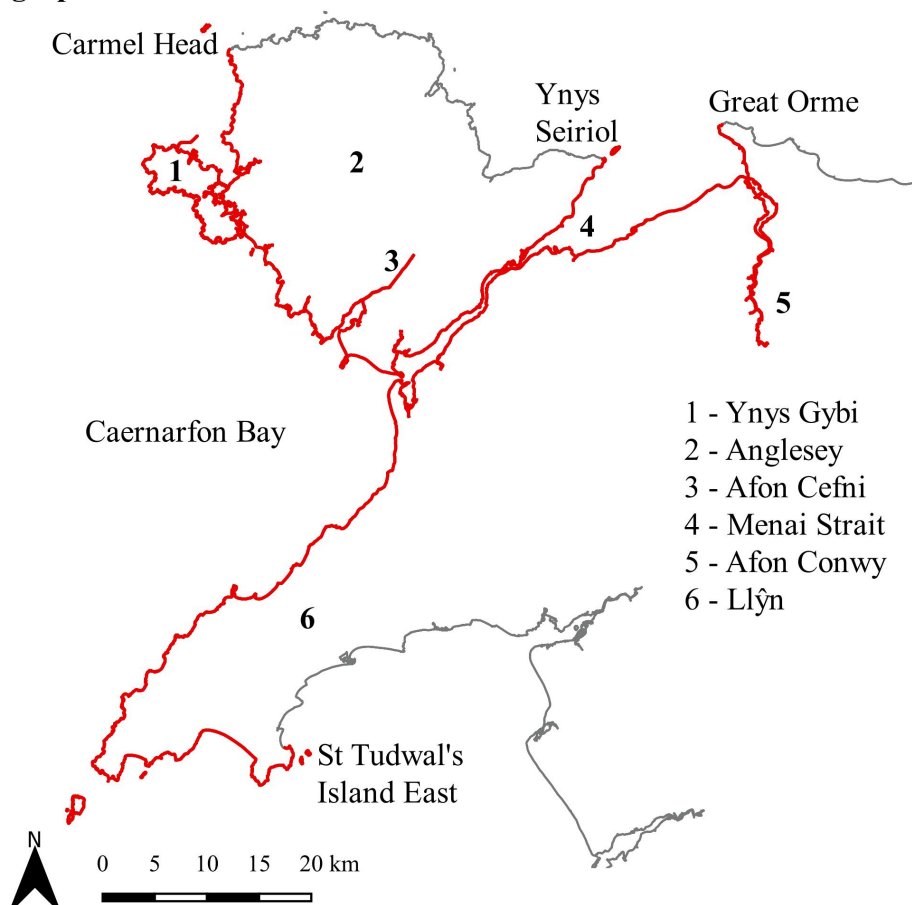
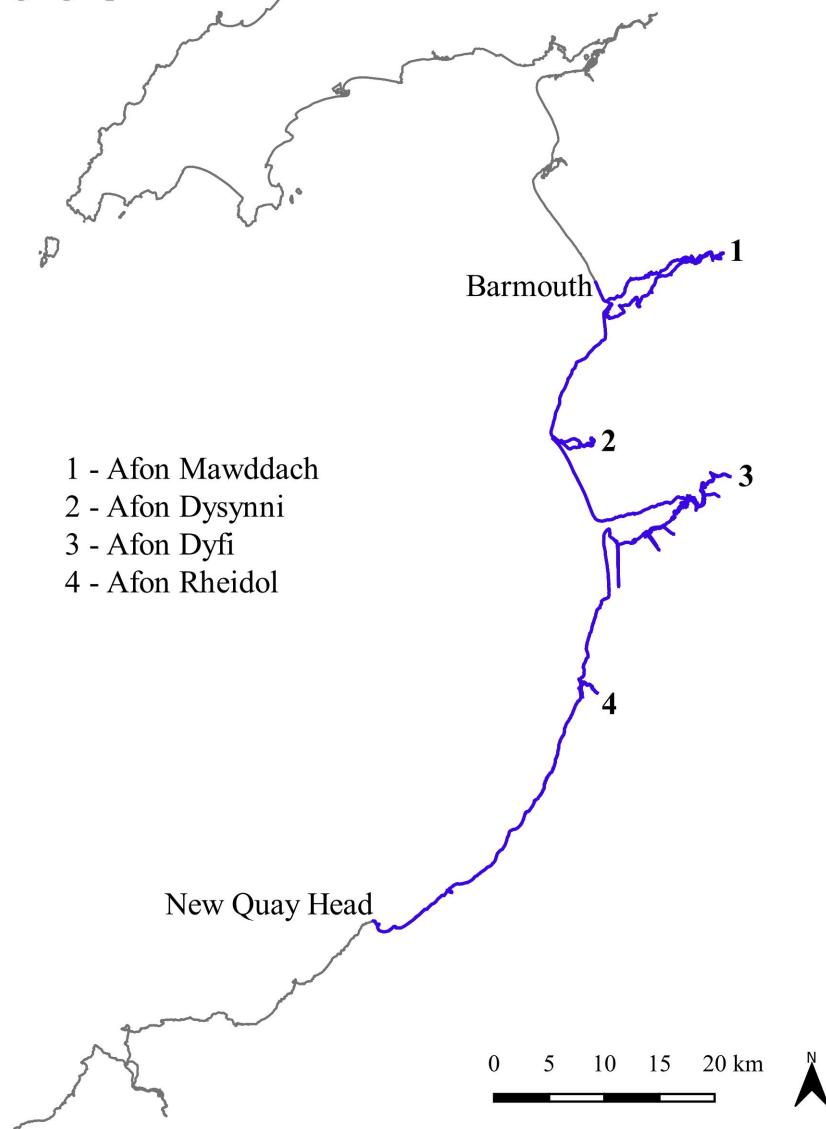


Figure 4
Cardigan Bay study area: coastline and tidal rivers (in blue) and
key geographical features



2.4.Evidence for maritime connections

Evidence for maritime connections at the sites included in the data collection is diverse and rarely direct. There is no archaeological evidence for early medieval boats or landing place structures within the Welsh study areas, and these things rarely appear in written sources. Wrecks of boats made from organic materials such

as wood and hides would not last long amongst the sharp rocks and rough waters of the Irish Sea, and boats brought to land at the end of their working lives may have been left to rot or made into other items, which themselves have not survived. There is very little evidence for anything made from organic materials in early medieval Wales, their naturally perishable nature not helped by acidic soils (Edwards and Lane 1988, 3). Potential wooden landing structures might similarly be invisible in the archaeological record, and stone structures could have been torn down and dispersed by storms. It is possible, however, that human-constructed harbour facilities were not used in early medieval Wales, and that there was a reliance on natural landing places. There is also no certain evidence for early medieval sea fishing in the Welsh study areas (although dated early medieval wooden fishtraps are found in south-east Wales: p.219), perhaps partly due to the use of stone fishtraps which are nearly impossible to date and which might have been re-made into new traps or simply destroyed by centuries of sea movement.

An exploration of maritime connections at the early medieval sites in the Welsh data collection must therefore look to other forms of evidence, most notably to imports, isotope analysis, potential landing places, the location of sites within the landscape and written evidence.

Exact journeys of imports to their findspots cannot be certain. However, items that originated overseas must have seen maritime movement along the way, heavy items such as stones are likely to have been moved by boat when possible, and imports found near landing places may suggest the presence of a local maritime community engaging in activity at those landing places.

Isotope analysis can suggest possible origins for individuals buried in early medieval Welsh cemeteries, and hint at multicultural communities.

Although proximity to the sea does not prove maritime connections, sites of early medieval activity close to potential landing places may hint at maritime activity and interests. The location of sites within the landscape can also be explored in relation to early maritime folklore and belief systems.

Written evidence that might be used to explore maritime connections in early medieval Wales includes poetry in which the sea plays a part, references to landing places, and records of raids that probably arrived by sea (with sites located in raiding-by-sea distance presumably braving these dangerous positions for the benefits that friendlier maritime connections could bring). As well as occasional indications of practical maritime activities, written references can also hint at early maritime folklore and belief.

The movement of cultural influences such as artistic motifs and scribal techniques is not considered evidence for maritime connections at a particular site, unless that site has other evidence for maritime connections, in which case movement of cultural influences is included as additional evidence. Similarly, non-Welsh names on inscribed stones are included only as additional evidence for potential maritime connections at sites with other evidence for maritime connections. Names are not a proof of identity or origins, and could point towards ancestral links or a contemporary cultural milieu rather than direct maritime contact. Although sea voyages up and down the Welsh coast, across the Irish Sea and further afield certainly had an important part to play in the movement of people, objects and ideas, direct maritime connections in cultural influences are hard to pinpoint (for an unusual possible exception to this, see stone P98 at St Davids, 3.4.3.7). This study is more concerned with evidence for direct maritime contact and activity than with general cultural milieus caused by maritime movement.

The absence of boats but the ample evidence for maritime movement is a good indicator of the maxim that absence of evidence is not evidence of absence. There were certainly many more sites with maritime connections in early medieval Wales than those visible to us now.

2.5. Analytical methodology

All sites with evidence for early medieval activity within the three Welsh study areas were included in the data collection. These sites were recorded in Excel spreadsheets. Each study area has four sheets: 'Overview'; 'Artefacts'; 'Burials'; 'Plants and Animals'. A full list of, and key to, the data fields within these sheets is found in Appendix 1.

A range of evidence was used to determine sites that were possibly or certainly early medieval, including written evidence, diagnostic artefacts, radiocarbon dating, stratigraphy and similarity to sites or features that had elsewhere been shown to be early medieval. Radiocarbon dates are presented here to 2 sigma (2σ) and with their laboratory number, or with as much of this information as is known.

The site-type terms used in the data collection are: 'Settlement'; '*Llys*'; 'Industrial'; 'Crop-Processing'; 'Agricultural'; 'Fishtrap'; 'Ecclesiastical'; 'Burial'; 'Findspot'; 'Routeway'; 'Landing place'. The site type(s) noted for each entry indicate the most important activity definitions for that site.

It is possible to argue that almost every site in the data collection with evidence for early medieval activity could indicate an early medieval settlement –

cemeteries needed communities to use them, churches suggest communities close by and major ecclesiastical sites would have been home to ecclesiastical communities, whilst findspots of early medieval artefacts suggest activity in the vicinity and therefore possible settlements. However, to make the term more precise, sites are only labelled ‘Settlement’ in the data collection when there is considered to be evidence for secular occupation. Within the spreadsheets sites with evidence for crop-processing, industrial processes, agricultural activity or maricultural activity (i.e. fishtraps) but without evidence for occupation are not labelled ‘Settlement’ but rather are classified by the activity taking place there. However, the likelihood of such activities being related to a nearby settlement means that they are included within the settlement discussions in the data presentation chapters here (3-5).

‘*Llys*’ denotes settlement sites that are thought to have been high-status royal courts.

‘Ecclesiastical’ refers to those sites where early medieval ecclesiastical presence is known or supposed, based largely on Neil Ludlow’s gazetteers of early medieval ecclesiastical sites in Pembrokeshire, Carmarthenshire and Ceredigion (2003; 2004a; 2004b), Andrew Davidson *et al.*’s gazetteer of early medieval ecclesiastical sites in Gwynedd (2002) and Nancy Edwards’s seminal work on early medieval stone sculpture (2007; 2013). These works were also invaluable for information on burials, along with the burial gazetteers of David Longley and Ann Richards (2000) and Heather James (1987). ‘Burial’ denotes sites with evidence for certain or possible early medieval burial. Early medieval burial sites were collated from:

- Dated burials.

- Undated burials that might be considered early medieval from stratigraphy, burial type (especially long-cist graves) and/or relationship to other evidence for early medieval activity.
- Sites with place-name evidence that suggest early burial.
- Sites of early medieval inscribed commemorative stones.
- Sites of early medieval possible grave-markers.

‘Findspot’ denotes a site that is known only, or predominantly, through the finding of an early medieval artefact.

‘Routeway’ indicates an apparent early medieval routeway.

‘Landing Place’ indicates entries that are solely defined as early medieval landing places.

Ultimately, the diverse and disparate evidence for early medieval activity at each individual site in the study areas must be considered on its own terms before any wider themes can be drawn out, since not enough is certainly known of early medieval activity in Wales to confidently group sites without first clearly presenting the reasons for each individual site’s inclusion. Each site included in the data collection spreadsheets is therefore given a detailed text entry in its ‘Notes’ data field.

After collating this data, it was then mined for evidence for maritime connections, as outlined in section 2.4. This was achieved through spatial analysis in terms of local topography, distance from the nearest tidal waters and other findspots or sites of activity in the vicinity, and analysis of activities evidenced on sites or suggested by artefacts. Some quantification of the data was possible, exploring trends within

certain site types; this quantification is most fully explored in chapter 6. Chapters 3-5 present all sites with evidence for early medieval maritime connections within the three Welsh study areas, under the general headings of: ‘Settlements’, ‘Imports’, ‘Burial sites’ and ‘Ecclesiastical sites’.

Maps of site location made using QGIS are included throughout the text. There is no attempt to map sea-routes. The maps are simply intended to aid visual understanding of the locations of the sites in relation to the sea or tidal waters and, occasionally, the more detailed layout of a particular area. They enable the visualisation of general patterns of site location, whilst the discussion of individual sites in the data presentation chapters (3-5) helps to place the sites within their local landscape (cf. Tilley 1994, 2-3, whose aim is ‘filling a gap between the site plan and the distribution map’ in his discussion of Mesolithic and Neolithic sites in relation to the surrounding landscape). The birds-eye view of the maps is certainly not how an early medieval individual on these coasts would have visualised their landscape. Such an individual would have formed their own mental map including factors such as terrain, tidal reach, currents, headlands, high and low ground, productive and barren areas, local mythology and their social relationships with nearby communities.

2.6.Wider Irish Sea context

Welsh maritime communities are considered within their wider Irish Sea context in chapter 7, where evidence for maritime communities and activities in Ireland (particularly the east coast facing Wales, from the Boyne estuary down to Cork),

Cornwall (particularly the north coast) and Mann are discussed in relation to the Welsh material. Here, exploration of key themes sheds light on similarities and differences in the experiences of maritime communities around the Irish Sea.

2.7. Structure of analysis

Chapters 3-5 present, discuss and analyse all sites with evidence for potential early medieval maritime connections in the three Welsh study areas (Pembrokeshire, Gwynedd and Cardigan Bay) and touch on regional trends. Chapter 6 presents a full discussion and synthesis of the evidence for early medieval maritime connections within the three Welsh study areas detailed in chapters 3-5, bringing in an exploration of maritime folklore and belief and constructing an understanding of maritime communities in early medieval Wales and the different maritime cultural landscapes they inhabited. Chapter 7 explores the Welsh maritime communities within their wider Irish Sea context. Chapter 8 presents the final conclusions of the thesis under the headings of major themes that have emerged in the study.

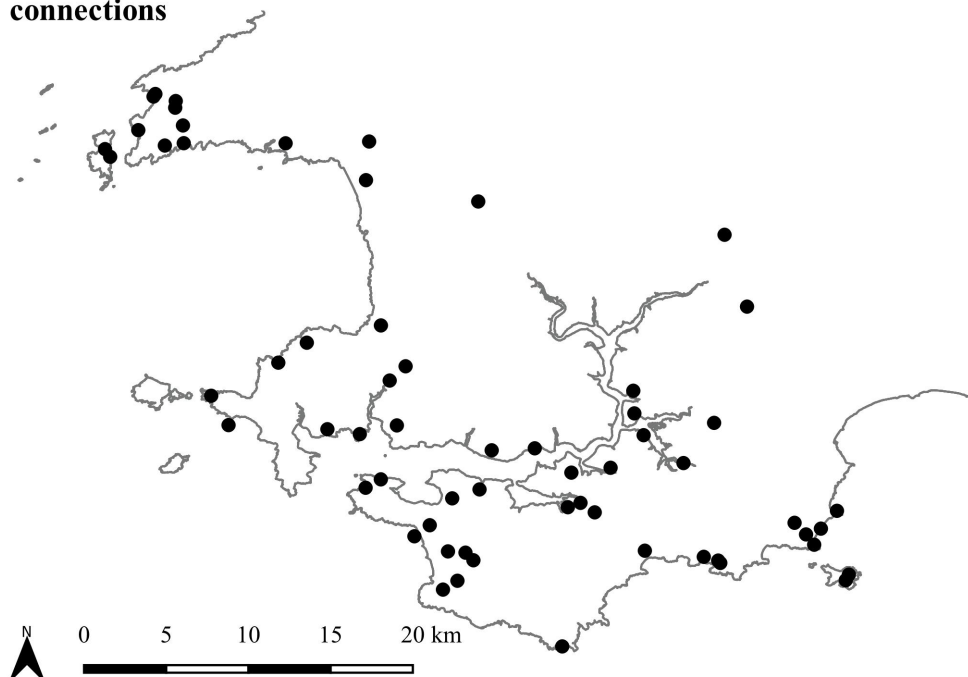
3.Pembrokeshire

3.1.Introduction

The geographical limits of the Pembrokeshire study area are given in the methodology chapter, section 2.3. There are 136 sites in the data collection for this area. Of these, 63 are considered to have evidence for potential maritime connections (fig.5). These sites are listed in Appendix 2 and detailed in this chapter.

Wherever you are in Pembrokeshire tidal waters are never far away, and it is tempting to assume that maritime activities must have played a part in the lives of any who chose to live in this area. However, Pembrokeshire also boasts some of the most fertile soil in Wales, making it perfectly possible to live beside the sea but not engage with it.

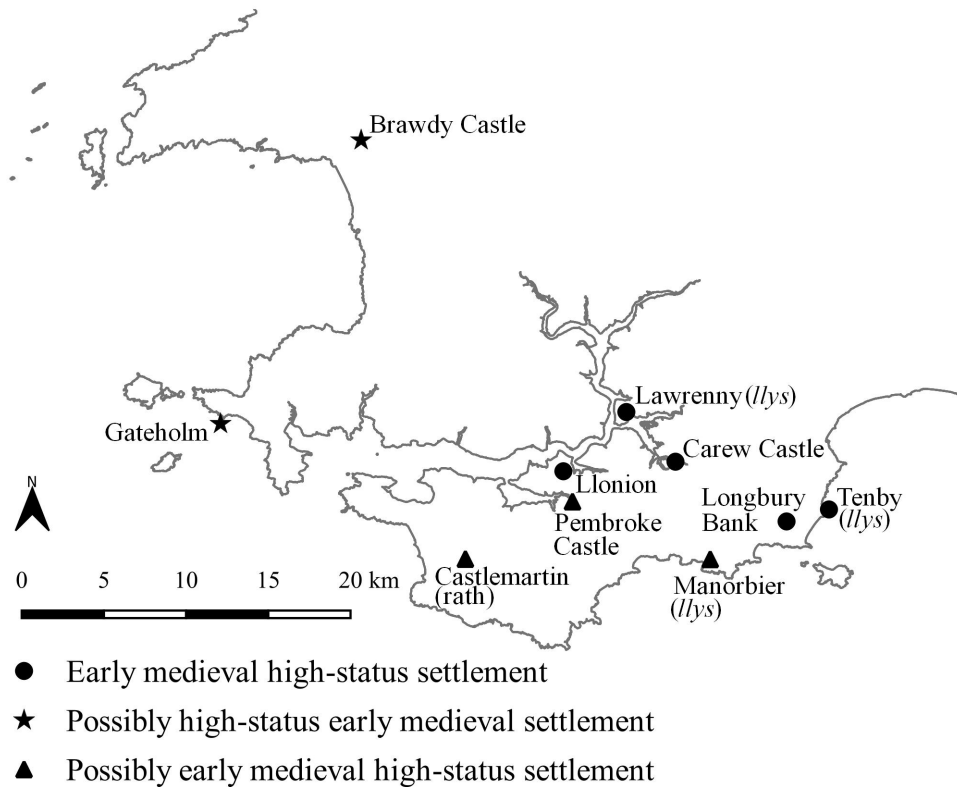
Figure 5
Pembrokeshire study area: all sites with evidence for maritime connections



3.2.Settlements

3.2.1.High-status settlements

Figure 6
Pembrokeshire study area: secular high-status settlements with evidence for maritime connections



3.2.1.1.Carew Castle

At Carew Castle, a defended enclosure underlying the medieval castle may have Iron Age origins and has produced evidence for Romano-British activity as well as a seventh- to eighth-century radiocarbon determination and parts of two imported E-ware jars (Austin and Drew 1995, 15; Drew and Austin 1995, 11; O'Mahoney 1993, 19; HJ in Murphy *et al.* 2007, PRN 37469). The status of the site (a probable *llys*) throughout the early medieval period is reflected in multiple ditches and ramparts

creating a landscape of power in the approach to the site and in the fact that these ditches seem to have been open and maintained until the Norman arrival, the Norman appropriation of the site itself suggesting its significance right up to the invasion (Drew and Austin 1995, 11-13; Austin 1993, 7, 11).

Carew Castle stands on the shores of the tidal, navigable Carew River and boasts what David Austin (1993, 5) called a ‘dual landscape’, sitting within an inland, farming, landscape, whilst maintaining maritime connections. The E-ware is likely to have arrived by boat up the river, as is the stone for the shaft and butt of the second-half of the tenth- or early-eleventh-century Carew Cross, which now stands near the castle, although the stone originated 40km north in the Preselis (Edwards 2007, 303-10; Jackson in Edwards 2007, 301). This stone is the same as that used for the cross head and neck of the contemporary free-standing cross at Nevern, north Pembrokeshire, and the two may have been created by the same sculptor (Edwards 2007, 308), who could also have travelled by sea. The shaft and butt piece is 3m long, a substantial block of stone to be bringing any distance, and the use of this non-local stone for the monument is likely to be the result of a patron’s request rather than a chance arrival.

3.2.1.2. Lawrenny (*Illys*)

Lawrenny, as ‘Leurenni’, is included in a list of royal sites in Dyfed in a probably pre-AD 1093 text (Charles-Edwards 2013, 661). The church here may also be pre-conquest (3.5.4). This site is bounded by the tidal waters of the Cresswell and Carew rivers to the south, the Cleddau Ddu to the west and Garron Pill to the north. The site

has access to both maritime connections and the inland interior of Pembrokeshire via the Cleddau rivers.

3.2.1.3.Llonion

Llonion, perhaps Llanion in Pembroke Dock, is included in a list of royal sites in Dyfed in a probably pre-AD 1093 text (Charles-Edwards 2013, 661), and as '*lys lonyon*' it is referenced in a mid-tenth-century poem from the Book of Taliesin (Charles-Edwards 2013, 661 n.52). It also appears in the triad of the three powerful swineherds, in which a pig from Cornwall swims to Gwent and then makes her way to Llonion in Pembroke (*Llonyon ym Phenvro*), where she leaves a grain of barley and a grain of wheat, thereby ensuring the arable success of the area (Bromwich 2014, 51-2, 56-7). The triad suggests that Llonion was associated with both maritime connections and agricultural activity.

3.2.1.4.Longbury Bank

Longbury Bank is an undefended high-status settlement with a large number of finds for an early medieval Welsh site, including imports from both the Mediterranean and Continental trades. Phocaean Red Slipware, Bi- (LRA2), Bii- (LRA1), Biv- (LRA3), Bmisc-, DSPA- and E-ware (including one E-ware vessel with fabric that is identical to a vessel from Carew Castle) and Continental glass are all represented; the pottery ranges in date from the later-fifth to the late-seventh century, and the glass from the

later-sixth to the seventh or even eighth centuries (Campbell 1993, 35-45; Campbell and Lane 1993, 65-6). Radiocarbon dates agree with this artefact dating (Campbell 1993, 53, 53 tbl.3), suggesting that the site was occupied early in the early medieval period. Heather James (1992, 2) has suggested that Longbury Bank may have been succeeded by a later high-status site at nearby Trefloyne (p.70).

A possibly Germanic strap-end and a belt-fitting of a type found in English contexts (although potentially of British manufacture) may also have been imported to the site (Campbell 1993, 34). Broken quartz crystal fragments of possible early medieval or prehistoric date were also imported, perhaps from St David's Head where they certainly occur (Campbell 1993, 51). The nearby river Ritec is now besanded but was probably navigable in the early medieval period (Campbell and Lane 1993, 18), and the imports may have arrived by boat up this river. Materials for activities on site, such as fine metalworking, smithing and textile working (Campbell 1993, 34, 49, 52) may likewise have arrived up the river from the sea.

A seventh- or early-eighth-century Type G penannular brooch from Longbury Bank is probably contemporary with what appears to be a crude copy of it found in Linney Burrows, and they may be of local manufacture (Campbell 1993, 32-3; Redknap 1995, 64). It is suggested below (p.80) that the Linney Burrows brooch was a potential export in maritime trade, and it is possible that the Longbury Bank brooch could have had a similar use.

The presence of a small number of marine molluscs (mostly oyster, with cockles, mussels, limpets and scallops also represented) suggests consumption on site (Campbell 1993, 52).

3.2.1.5.Tenby

The promontory of Castle Hill at Tenby is the site of an Anglo-Norman castle and probably also an early medieval *llys* known from a ninth- or tenth-century praise poem, *Edmic Dinbych* (Ifor Williams 1972, 158; Charles-Edwards 2013, 662 favours the ninth century, perhaps c.AD 814-70). Two Byzantine gold coins and a penannular brooch found at Tenby South Beach may indicate maritime activity in the vicinity (pp.82-3, 94-5).

3.2.1.5.1.A note on the poem *Edmic Dinbych*

The frequent references in *Edmic Dinbych* to Tenby's proximity to the sea suggests that its sea-shore location was important to contemporaries. It is possible that the reason for this emphasis is that Tenby's highly coastal location was unusual for an early medieval Welsh secular high-status court.

The only reference in the poem to sailing concerns people described as '*ffichti*', 'Picts' (ln.8: Williams 1972, 162-3). Given the poem's date, *ffichti* may refer not to Picts but to Vikings, the people of the new sea-borne threat given the name of those of the old (Gruffydd 2005, 99 n.8; Charles-Edwards 2013, 663).

Whilst an Irish monk of one ninth-century poem expresses relief that rough weather will prevent a Viking attack (Moriarty 2015), the *ffichti* in the Tenby praise poem appear to be almost a throwaway reference. Ifor Williams (1972, 163) and R. Geraint Gruffydd (2005, 97) suggest that line 8 should be translated as the sea being left 'to' the *ffichti* by the feasting court, whilst Paul Russell (2017, 31-2) translates the line as

the sea being left ‘on account of’ the *ffichti*, or perhaps ‘under’ the *ffichti*. In only one of these translations is it suggested that fear of the *ffichti* drove the court’s inhabitants to shore, and this would seem at odds with the rest of the poem, which is a trumpet-blast of praise for the court’s inhabitants. It is possible that the *ffichti* are simply being used, as the waves and the seabirds are, as poetic imagery to set the scene. The description of leaving the sea to the *ffichti* may imply that on other occasions the court’s inhabitants would go to sea themselves. Alternatively, the *ffichti* reference may be to show the sea as a place removed from the court: maritime activity in the vicinity of Tenby may have been undertaken by local lower-status maritime communities rather than by members of the *llys*.

In line 19 the fortress is described as ‘*ar ton nawuet*’, ‘on the ninth wave’ (Williams 1972, 163), ‘upon the ninth wave’ (Russell 2017, 29). In early medieval Ireland the ‘ninth wave’ seems to have marked the limit of the land’s jurisdiction (p.262). Similar concepts may have attended the term in early medieval Wales, and its appearance in this poem perhaps indicates interest amongst the poem’s high-status Welsh audience in defining and controlling the amorphous border between land and sea. Although the appearance of the ninth wave in Irish law suggests that there was some practical way of reckoning this distance, the description of Tenby being on the ninth wave is likely to be more poetic than practical. It is unlikely to refer to an offshore island location, as an island would have had its own ninth wave. It is most likely that the term is used to present Tenby as poetically inhabiting the very border between coastal waters under the land’s jurisdiction and the lawless sea beyond. Perhaps, in doing so, the poet is claiming that the power of the inhabitants of Tenby extends beyond the usual ‘ninth wave’, out into open sea.

3.2.1.6. Possibly high-status early medieval settlements

3.2.1.6.1. Brawdy Castle

The early medieval phase at the Iron Age fort of Brawdy Castle (2.5km north-west of a potential landing place at Newgale beach) includes timber-framed buildings which seem to have been associated with a clay bellows protector and knobbed crucible sherds, all probably of the sixth or seventh century, and also with notched slates said to be similar to examples at Tintagel (Dark 2000, 185). Clay bellows protectors are known on early medieval Irish sites and early medieval Irish settlements in Scotland and Mann (MM 2003 in PRN 14289). This might indicate Irish influence or presence at this site, perhaps an itinerant smith who originated from, or learnt their trade in, Ireland. Further evidence for early Irish influence in the area is found in the late-fifth- or first-half of the sixth-century commemorative stone (P1) bearing two probably Irish names of father and son found in a heap of stones in the farmyard of Brawdy Farm, adjacent to Brawdy Church, which lies 0.5km west-north-west of the fort (Edwards 2007, 281-3). Although P1's original findspot is unknown the stone itself originated just 3km away so the monument may not be far from its original location (Jackson in Edwards 2007, 281).

Brawdy's structures, defences and evidence for fine metalworking suggest a site of relatively high status, and the Irish influences suggest maritime connections.

3.2.1.6.2. Gateholm

Most datable artefacts from the tidal island of Gateholm, on which there are perhaps around 110 hut foundations, are of the Romano-British period (Davies *et al.* 1971, 103, 105-6, 109; Flaherty 2012, 12-13). However, an Insular copper-alloy ringed pin found with a small perforated hone and a broken shale ring inside an excavated structure has been dated to the fifth to eighth centuries (Lethbridge and David 1930, 371; Redknap 2005, 14-15), and the shale ring and hone might be early medieval also (Davies *et al.* 1971, 110). Whilst the ringed pin is considered an Insular artefact of Irish type (Redknap 1995, 60; 2005, 14-15; Campbell and Lane 1993, 70), its origin is uncertain and it could be a locally-made example. A single sherd of pottery incorporated into paving within the same structure has been dated AD 340-400 by Ewan Campbell, the secondary use of the sherd suggesting early medieval activity (Lane 1988b, 74-5; Lethbridge and David 1930, 371). Island finds of uncertain date include slag (including a piece of tap slag from iron smelting), remains from two possible knives, small fragments of colourless glass and an amber bead (Cantrill 1910, 276-9; Flaherty 2012, 15). Cereal remains and animal bone are undated (Flaherty 2012, 15, 17, 26 tbl.3; Cantrill 1910, 278).

A lost bronze stag said to have been found in a rabbit hole on Gateholm is a possible parallel for the stag on a sceptre or whetstone from Sutton Hoo, which Carola Hicks considers to be of native work, in a style influenced both by ‘Celtic’ elements and by Roman features, dating to perhaps the fifth or sixth century (Gordon-Williams 1926, 191; Hicks 1978, 379, 382). This stag may be a ceremonial object (Dark 1994, 14), suggesting some form of high-status activity on Gateholm in

the post-Roman period, although in this interpretation the lack of imported Mediterranean and/or Continental pottery might seem strange.

Ceramics of perhaps the eleventh to thirteenth centuries include imported French pottery (Lane 1988b, 74-5), suggesting later maritime connections for Gateholm. There is no direct evidence for earlier maritime activity here and the island can be reached on foot at low tide, but it is possible that the inhabitants would have undertaken some maritime activities at the nearby landing places of Marloes Sands and Martin's Haven.

The presence of tapped iron slag on Gateholm is intriguing since it is slag-tapping furnaces that are found at South Hook to the east (3.2.2.3). Gateholm is c.800m away from an outcrop of the Skomer Volcanic Group, which is likely to have provided material for bloomsmithing at South Hook. The two sites may not have been connected, but it is possible that, like South Hook, Gateholm was one of a postulated group of early medieval maritime-linked industrial sites (pp.210-12).

3.2.1.7. Possibly early medieval high-status settlements

A radial plan at Castlemartin rath may indicate an important pre-conquest focus of activity (Kissock 1997, 133-4) lying over 2.5km from the nearest coast at Frainslake Sands. This stretch of coast may have been busy with beach markets (3.3.2, 3.3.1.3), and c.600m north-west lies Castlemartin church, where a seventh- to ninth-century cross-carved stone (P10) may have links with western Scotland. Castlemartin rath may therefore have had maritime connections despite its distance from the coast.

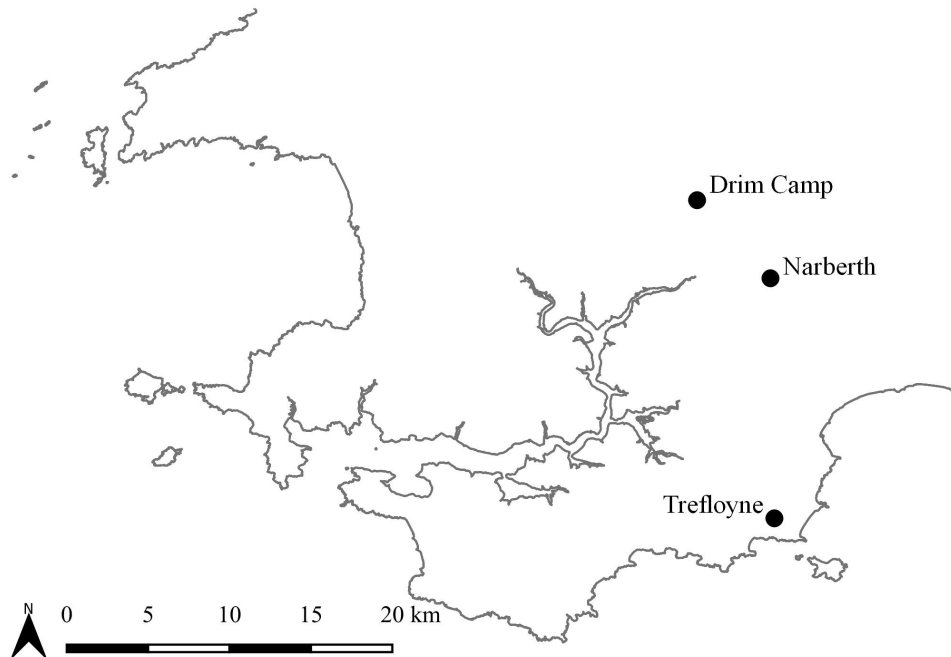
Manorbier castle may overlie a promontory fort and might be the site of an early medieval *llys* (Ludlow 2003, PRN 46832; Leach n.d.). The site's importance at the time of the conquest may be suggested by two harness fittings found nearby (3.3.6). Giraldus Cambrensis (who speaks of the twelfth-century Manorbier's good view of ships going to Ireland and availability of sea fish and wine for sale) links Manorbier's placename with that of Caldey (Ynys Bŷr) (*Itinerarium Cambriae* I §12: Thorpe 1978, 150), the common placename element perhaps suggesting early landholding links across the water. The proximity of the castle to Manorbier Bay suggests that this location may have been chosen to take advantage of maritime connections.

Pembroke Norman castle is a possible early medieval *llys* on a tidal river leading into the Milford Haven Waterway (Ludlow 2003, PRN 46811). A tenth- or eleventh-century sword pommel found near Pembroke could indicate activity in this area of Welsh, English or Viking warriors, and may have Hiberno-Scandinavian associations (Redknap 2000, 50 fig.61; 2007, 89).

3.2.1.8.High-status settlements without evidence for maritime connections

There are three high-status or possibly high-status settlement sites in the Pembrokeshire study area without evidence for maritime connections (fig.7).

Figure 7
Pembrokeshire study area: secular high-status settlements without evidence for maritime connections



At Drim Camp, a double-walled roundhouse could indicate a shared tradition with Ireland (Mytum 1995, 22; Mytum 1998, 63; O’Sullivan *et al.* 2013, 89-90), and the possibly locally-made Type-G penannular brooch found here is perhaps transitional between the G1 types of west and south-west Britain and the G2 type of western Scotland (Webster 1998, 89). Shared material culture and developing forms do not, however, require direct maritime connections, and this site lies over 4km north of the upper tidal stretch of the Cleddau Ddu at Canaston Bridge.

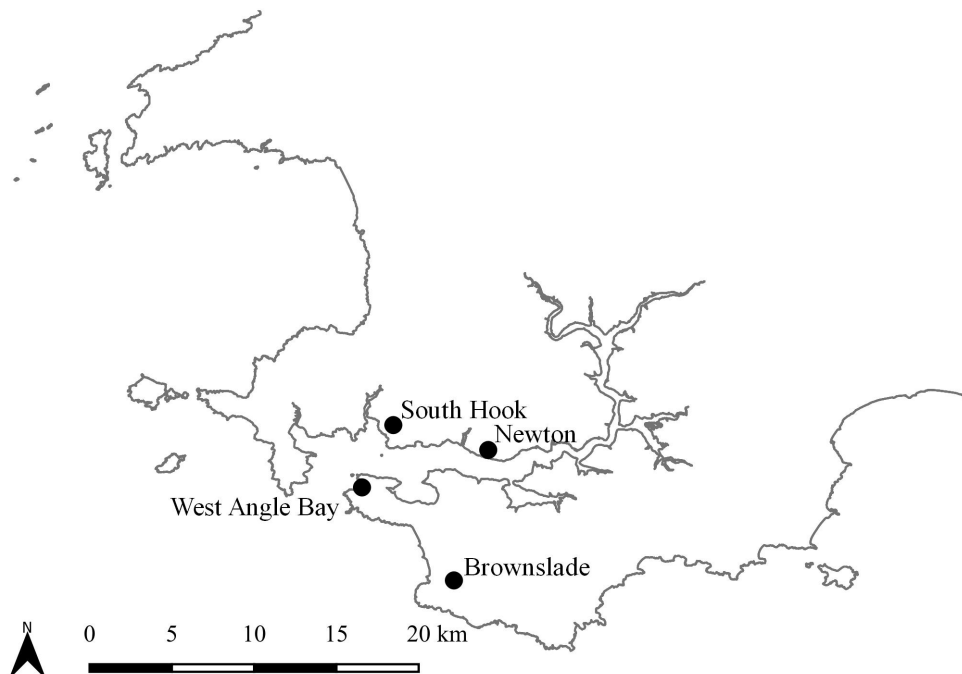
In the first branch of the Mabinogi, Arberth (Narberth) is named as one of the chief courts of Pwyll, prince of Dyfed (Davies 2007, 3, 8), and this may have been the site of an early medieval *llys*. The exact location of this possible *llys* is uncertain although it may lie beneath the Norman castle at Narberth, where the earliest burial in an excavated cemetery was dated cal.AD 1047-1264 (2σ:UB-4784) (Murphy and Crane 2002, 75). The site lies c.4.5km east of the upper tidal stretch of the Cleddau Ddu at Canaston Bridge.

A high-status settlement and church site at Trefloyne mentioned in a c.AD 1025 Llandaff Charter may have succeeded the settlement at Longbury Bank (James 1992, 2; Evans and Rhys 1893, 255; Davies 1979, 126 no. 253, 80; RCAHMW 1925, 291; Campbell and Lane 1993, 57). The site lies just over 1km north of the coast, and less than 2km from beaches at Lydstep Haven and Penally but there are currently no other indications of maritime connections, despite its possible relationship with Longbury Bank, a site with clear maritime connections.

3.2.2.Lower-status settlements

Figure 8

Pembrokeshire study area: secular lower-status settlements with evidence for maritime connections



3.2.2.1. Brownslade Barrow

Brownslade Barrow lies c.1.6km east of potential landing places at Blucks Pool and Frainslake Sands; its early medieval cemetery including burials of individuals with non-local origins is discussed in section 3.4.3.1. The distance from the coast may have been to protect the inhabitants from unexpected arrivals by sea, and to give them the choice to get involved in maritime activities or not depending on the benefits of any given interaction.

Five unstratified quernstones dated eighth to tenth centuries suggest settlement in the vicinity of the cemetery (Murphy 2011a), whilst part of a bone comb comparable to examples at Dinas Powys, Glamorgan and Llanbedrgoch, Anglesey (Murphy 2011c) may represent a casual loss. The stone of one of the quernstones probably originated in north Pembrokeshire and may have been glacially transported (Murphy 2011a, 155), although it is also possible that this was an import, perhaps as ballast within a boat (6.5.6). A shell midden included charred seaweed, limpet shells and other molluscs but may be post-medieval (Carruthers 2011, 162-3).

Evidence for iron smelting and smithing at Brownslade is unstratified and undated, with the quantity of ore suggesting that it outcrops nearby (Young 2011, 158-9). There is no evidence for maritime connections for this activity as suggested at South Hook (3.2.2.3).

3.2.2.2. Newton, Llanstadwell

This crop-processing site (possibly indicative of nearby settlement) lies just 500m from the Milford Haven Waterway. Two early medieval corn dryers (associated cereal remains consisting of oats, barley and bread wheat) and a quernstone were found beneath a later dovecote, with oat in the basal fill of one of the dryers dated cal.AD 720-960 (2σ:Beta-182946) (Crane 2004, 11-14 14 tbl.4, 17-18; Caseldine and Griffiths 2004, 14-17). The quernstone's form is consistent with the radiocarbon date, or a slightly later early medieval date, and its stone is possibly Skrinkle Sandstone, which outcrops to the south of Milford Haven (Redknap and Horák 2004), suggesting that it may have arrived at the site by boat. This highly coastal crop-processing site may have served a community living off the land but involved in the maritime activities of the Waterway.

3.2.2.3. South Hook

South Hook is a small, nucleated settlement on the north side of the Milford Haven Waterway, with evidence for both ferrous metalworking and crop-processing on a site where much archaeology is likely to have been lost to more recent industrial developments (Murphy *et al.* 2010, 186). Features include two slag-tapping iron-smelting furnaces, at least four corn dryers and perhaps at least eight buildings (Crane and Murphy 2010, 123-45). Radiocarbon determinations have been interpreted as showing activity on the site from the late-eighth to the middle of the

twelfth century, although occupation may have been much shorter and focussed on the tenth century (Murphy *et al.* 2010, 185).

The main cereals represented are oats and barley (some of which may have been malted) and some free-threshing wheat, whilst flax may have been used for its oil, or possibly for its fibre or for food or medicine (Carruthers 2010, 164-5, 174-5, 178-80). Two of the buildings appear to have been bow-sided, although it is unknown whether this was a local tradition or local adaptation of another cultural tradition (Murphy *et al.* 2010, 186, 189). Kenneth Murphy *et al.* (2010, 190) have argued that South Hook likely existed both before and throughout the Viking age in Wales, ‘absorbing technology and traits from other Irish Sea cultures’. Its location on the shore of the Milford Haven Waterway would have made it open to sea-borne individuals and ideas.

There is evidence for both iron smelting and smithing at South Hook. Whilst the ore used in the smelting operations seems to have been fairly local to the site, the high zirconium content of the ore used in the smithing suggests a relationship with rhyolitic rocks of the Skomer Volcanic Group which outcrops to the west, and the ore may have been from this area or was perhaps smelted in furnaces made of rocks high in zirconium (Young 2010, 162-3). It is likely that the raw or smelted ore was transported east to South Hook by boat, since this would be easier than transporting heavy industrial materials overland.

The smithing evidence suggests bloomsmithing rather than artefact manufacture (Young 2010, 160). Although artefact manufacture may have taken place in an area of the site now destroyed by later development it is also possible that following bloomsmithing the iron was sent to another site for further processing. This postulated journey may also have been easier by water than overland. South

Hook may, then, represent just one site in a maritime-linked chain of production on the Milford Haven Waterway.

3.2.2.4. West Angle Bay

The site at West Angle Bay consists of an egg-shaped cemetery enclosure lying within a larger, rectangular enclosure with rounded corners, now measuring c.110m east-west by 60m north-south, and a 30m wide ‘annexe’ on the eastern side, through which a stream flows; both annexe and enclosure seem to have lost their northern boundary through coastal erosion (Schlee and Ludlow 2011, 169). The ditch of the rectangular enclosure contains crop-processing or midden waste including emmer/spelt and oat, and a hearth or corn dryer was found in the annexe (Schlee and Ludlow 2011, 171; Caseldine and Griffiths 2011, 178). The rectangular enclosure ditch seems to be the earliest feature at the site, with charcoal from its basal fill dated cal.AD 540-650 (2 σ :Beta-229574), and it may be contemporary with the annexe which may have gone out of use by the seventh century (charcoal from the annexe ditch was dated cal.AD 610-90 (2 σ :SUERC-32876) and charcoal from the possible corn dryer was dated cal.AD 610-90 and cal.AD 750-60 (2 σ :SUERC-32877)); it’s unclear whether burial either inside or outside the egg-shaped enclosure overlapped with settlement activity, although it is interesting to note that the first phase ditch of the egg-shaped enclosure (charcoal from which was dated cal.AD 660-830 and cal.AD 840-70 (2 σ :Beta-229576)) contained crop-processing or domestic waste including emmer/spelt, bread wheat, oat and barley, with the remains suggesting a deliberate deposition in the ditch (Schlee and Ludlow 2011, 175-7; Caseldine and

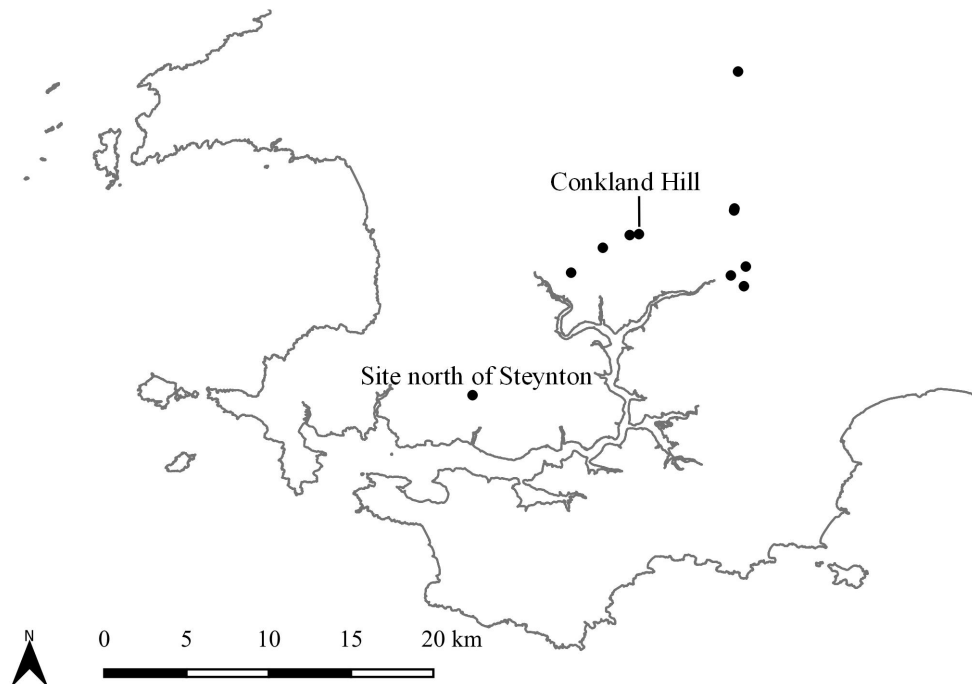
Griffiths 2011, 178-80). Grave 211 also produced some wheat, barley and oat, as well as wood charcoal, a bramble seed and some hazelnut shell fragments (Caseldine and Griffiths 2011, 180).

Settlement-cemeteries are a site type in early medieval Ireland (see O'Sullivan *et al.* 2013, 56), and West Angle Bay may be an unusual Welsh example of this. However, it is also possible that settlement activity ceased prior to burial (Ludlow 2011, 193-4). The occupants at West Angle Bay may have acted as look-outs for hostile forces approaching the Milford Haven Waterway, and probably also benefited from boats that put in at West Angle Bay itself prior to making the trip down the Waterway – they may even have provided pilots for such vessels.

3.2.2.5.Lower-status settlements without evidence for maritime connections

Several lower-status early medieval settlement and activity sites in the Pembrokeshire study area produced no evidence for maritime connections (fig.9). Maritime activity may simply be unrecognised – for example, it can be speculated that the community at Conkland Hill, which has similarities to South Hook (Hart 2014, 8-9, 11; Rackham 2014, 54-5), may have taken advantage of the maritime connections of the tidal Cleddau Ddu 4km away to transport raw materials and/or finished goods. However, it is equally possible that there was no maritime activity at any of the sites in figure 9.

Figure 9
Pembrokeshire study area: secular lower-status settlements without evidence for maritime connections

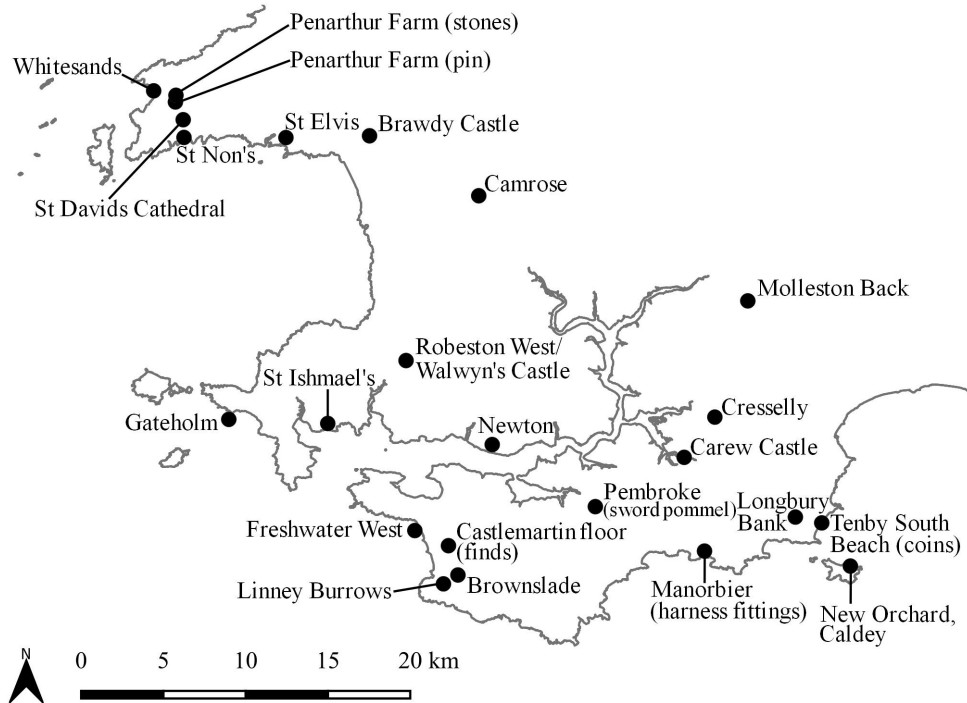


Broom or gorse, good for kindling and also specific activities such as warming bread ovens, was burnt at a site north of Steynton, 1.7km from the top end of the tidal Priory Pill (Challinor 2014, 29, 29 tbl.7). Collecting such fuel from coastal heathland is an example of a non-maritime activity undertaken near the sea.

Most of these sites were discovered due to construction of a pipeline, which has skewed the dataset towards the route of the pipe. It is likely that similar sites of early medieval activity occurred both further inland and closer to the sea, but remain unrecognised.

3.3.Imports

Figure 10
Pembrokeshire study area: findspots of probable and possible maritime imports



3.3.1.The Mediterranean and Continental trades

3.3.1.1.St David's, Caldey

One sherd each of E-ware and Phocaean Red Slipware were found in 'the new orchard, St Davids parish church' on Caldey island, this orchard probably being that c.150m north of the church (Campbell 1989, 59-60). Undated cist burials on the south side of the chancel of St David's Church (Evans 1917-18, 43; 3.4.1.3) may also indicate early medieval activity in this area.

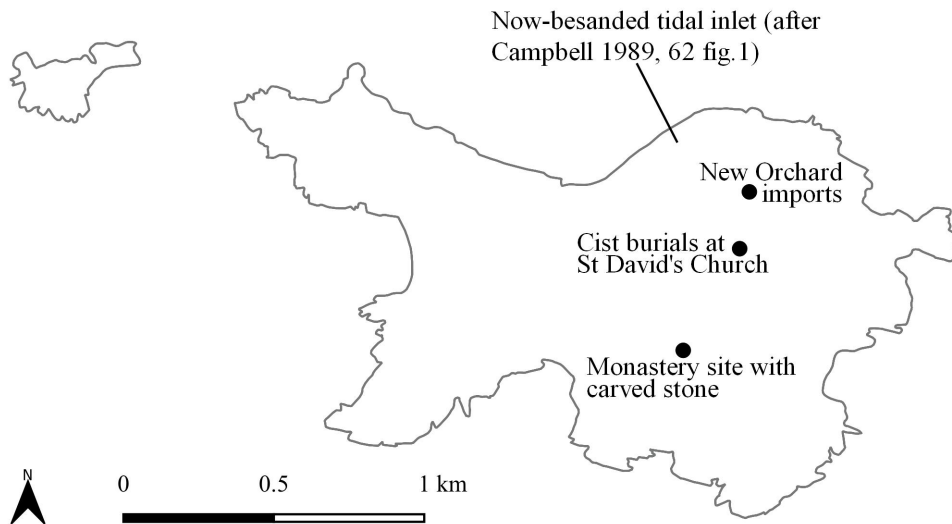
Neil Ludlow has suggested St David's as a possible site for the early monastery on Caldey (Ludlow 2003, PRN 4244), but it seems more likely that the

monastery was situated in the vicinity of the Old Priory, c.400m south-west of St David's church (3.4.1.1, fig.13). It seems probable, therefore, that the activity in the vicinity of St David's church represented through the imports and cist graves (and undated food-waste middens) was a separate site to the early medieval monastery. It was perhaps a secular settlement, within 150m of a protected tidal inlet that is likely to have been used as a landing place prior to its besanding (Campbell 1989, 61-3, 62 fig.1). The imports themselves were very close to this tidal inlet and may represent an exchange site. Ewan Campbell (1989, 60-3) draws possible links with 'shore-line' chapels such as St Patrick's, Whitesands, and suggests that the island location and imported pottery at Caldey may be compared with Dalkey Island, Co. Dublin, with traders possibly using the island as a neutral and safe space, including as a place to pick up fresh supplies, although he also suggests that the pottery indicates an important settlement on the island and draws tentative links with Longbury Bank. In a later publication, Campbell suggests that the New Orchard imports may be the result of 'an offshore trading place protected by the monastery' (Campbell 2007a, 117-18).

It is possible that the tidal inlet near the imports and burials in the vicinity of St David's, Caldey was used as a stopping-off point for boats carrying imports on the way to mainland Pembrokeshire, although it is also possible that the pottery arrived here from the mainland. The pottery alone is not enough to suggest a high-status secular settlement at this site, and it seems more likely that any settlement was that of a lower-status maritime community, perhaps preceding the monastery and/or contemporary with it and serving its maritime needs as the first point of contact with traders and travellers from elsewhere. The pottery might have been meant for the monastery, or have been broken there and found its way back to this site, or it may

represent barter with passing boats in exchange for fresh water, supplies and the services of pilots. There is currently no evidence to suggest that Caldey was an exchange hub on the scale of Dalkey Island, Co. Dublin.

Figure 11
Caldey island early medieval sites



3.3.1.2. Carew Castle

The E-ware at Carew Castle (3.2.1.1) probably arrived by boat up the Carew River, either directly from long-distance traders, or transported here by local boats from a trading place on the open-sea coast or in the Milford Haven Waterway.

3.3.1.3. Linney Burrows

In Linney Burrows a sherd of E-ware was found in the same area as an early medieval bone comb, a small, stamped copper-alloy object and a penannular brooch

(perhaps at a site just over 1km south-west of Brownslade Barrow) (Leach 1913, 412, 419 fig.4, 428; Campbell and Lane 1993, 74 n.59; Campbell 2007b, vessel E230; Campbell 1993, 33). The penannular brooch appears to be a crude copy of the Longbury Bank brooch; they are probably contemporary, dating to the seventh or early-eighth century, and may be of local manufacture (p.62). If the brooch was of local manufacture, its finding along with the E-ware may suggest that it represents an item of export.

David Griffiths suggests that these finds (along with two pins and a blue glass bead necklace) may point towards the existence of an undefended beach-market (Griffiths 2009, 272, 278). The pins are dated seventh- to ninth-century (square-headed pin) and seventh- to eighth-century (double spiral-headed pin) and the blue glass bead necklace might be early medieval or Roman (Mathias 1927, 191-2; Redknap 1991, 33 fig.a, 34 fig.a; Campbell and Lane 1993, 70). Ewan Campbell and Alan Lane (1993, 70) also consider the pins and necklace to have come from the same area of Linney Burrows as the E-ware and other finds, and suggest the finds assemblage may indicate a 'major settlement'.

However, from A.G.O. Mathias's description of walking to the findspot of the pins and necklace it seems this location was much further north than the site suggested by Campbell and Lane for the Linney Burrows finds. The pins and necklace were found on what the finder termed a 'Castlemartin floor', at a site over 2km north of Brownslade Barrow and perhaps c.1.5km from Freshwater West Beach, where a merchant's weight has been found (3.3.2). The origins of the pins are uncertain. The double spiral-headed pin is of a type that occurs in England and Ireland, and the square-headed pin's decoration finds comparisons in England and Wales, whilst both are comparable to examples from Caerwent, Gwent (Redknap

1991, 33 fig.a; 34 figs. a and b; 1995 60, 69). Whatever their origins, their discovery close together not far from Freshwater West may indicate their (and possibly also the necklace's) early medieval arrival by boat to south Pembrokeshire.

It seems likely that the sandy beaches on this stretch of coast were favoured spots for landing and exchange in south Pembrokeshire outside the Milford Haven Waterway to the north, the navigation of which may have required the services of a pilot. Boats may have come ashore all along this stretch of coast, and early medieval maritime communities are likely to have existed here to meet and interact with such vessels.

3.3.1.4.Longbury Bank

The goods from the Mediterranean and Continental trades at Longbury Bank (3.3.1.4) may have arrived along the Ritec river, either directly from long-distance traders or, perhaps more likely, in local boats ferrying goods from a trading site on the seashore.

3.3.2.Merchants' weights

An oval lead weight capped with a repoussé decorated sheet with an Insular animal design was found at Freshwater West beach buried face-up in a log of wood, although it is unknown whether the wood was dressed timber or a piece of driftwood and whether the lodging was deliberate or accidental (Grimes 1930, 416-17;

Redknap 2009, 38). The weight's presence hints at a beach market in an area that may have been busy with early medieval maritime activity (3.3.1.3).

Another lead weight, from a site between Robeston West and Walwyn's Castle was capped with a copper-alloy flat oval incised with crude interlace (Redknap 2009, 38; 2014). It may indicate trade activity nearby, perhaps with boats coming up Sandy Haven Pill.

Both these weights have Hiberno-Scandinavian associations (Redknap 2007, 89) and may indicate direct or indirect contact with Hiberno-Scandinavian towns in Ireland.

3.3.3.Coins

Two English coins, a silver penny of Harold II (AD 1066) and a silver penny of the types of William I, although not an official coin (perhaps AD 1080s, probably not later than AD 1086), were found 70-80 feet apart in the courtyard of the Bishop's Palace at St Davids Cathedral (Dolley and Knight 1970, 78-80, 78 n.27). It is likely that their journeys here were at least partly made by sea. They may represent loss of personal possessions, loss during exchange activity or offerings.

Two hardly-worn Byzantine gold coins minted in Constantinople were found at separate findspots at Tenby South Beach, one of Tiberius III (AD 698-705) which is pierced at the top of the obverse (the die is at six) (Johnson 2011a; Bland and Loriot 2010, 333 cat.no.867), and the other of Justinian I (AD 527-65) (Johnson 2011b; Bland and Loriot 2010, 329-30 cat.no.851). The pierced coin may have been worn as an adornment, perhaps with the portrait of Tiberius III facing out since the

location of the piercing would have made the cross on the reverse hang upside-down. The coins may have come from a wreck in the vicinity (Bland and Lorient 2010, 329-30 cat.no.851). Their hardly-worn states suggest that they may have come fairly directly from Constantinople with traders or travellers. The date of the pierced coin demonstrates that contact with the eastern Mediterranean continued even after the visible pottery imports ceased.

At Whitesands Bay, a silver English penny of either Edmund (AD 939-46) or Eadred (AD 946-55) (Eadred favoured from letter spacing) was found 'at the top of the beach' and is thought to have fallen from a cliff, rather than been washed in by the sea (Blackburn and Bonser 1985, 68-9). The description of the findspot suggests that it was found at the northern end of the beach, near the site of St Patrick's Chapel early medieval cemetery (3.4.2.18). If it had indeed fallen from a cliff it may have been associated with eroding burials and a possible early medieval stone (P102) on the cliff here (p.105). The coin is likely to have travelled to Whitesands by sea.

3.3.4.Artefacts with origins in, or influence from, Ireland

Some artefacts (or the cultural influences behind their manufacture) may have originated in Ireland. The merchants' weights at Freshwater West and between Robeston West and Walwyn's Castle, the sword pommel at Pembroke, the clay bellows protector at Brawdy Castle, the ringed pin on Gateholm and the double spiral-headed pin from the Castlemartin floor have been previously discussed (3.3.2, 3.2.1.7, 3.2.1.6.1, 3.2.1.6.2, 3.3.1.3).

A tenth-century copper-alloy ringed pin found c.300m south-east of a probable early medieval cemetery at Penarthur Farm (3.4.3.5) is comparable to ringed pins at Llanbedrgoch, Anglesey and Chester, Cheshire, and suggests links to Hiberno-Scandinavian material culture (Redknap 2007, 85, 87-9). The pin may have arrived in north Pembrokeshire through Whitesands Bay less than 1.5km to the west, perhaps from a site in north Wales. At Whitesands itself, a Hiberno-Scandinavian ringed pin of the eleventh century, probably made in Dublin, was found in rubble layer 88, on which a chapel was built over an early medieval cemetery (Murphy *et al.* 2016, 3, 5, 46; 3.4.2.18). This pin may reflect direct maritime contact with Dublin.

A late-ninth- or early-tenth-century silver penannular armring of ‘Hiberno-Viking’ type, with close parallels in hoards in Cheshire, Berwickshire, Lancashire and Co. Westmeath, was found near Cresselly, within 2km of the tidal river Cresswell at Cresswell Quay (Redknap 2014). The object is now flat and may never have been curved into a completed armring (Redknap 2014). Perhaps this artefact – which may have arrived at Cresswell Quay by boat – was never completed because a flattened armring was easier to transport as cargo or bullion. This may indicate not just contact with Scandinavian-influenced areas but also trade. It also suggests the presence of local craftspeople who could finish off half-made products brought by sea, perhaps people who had originated in, or trained in, Scandinavian-influenced areas.

3.3.5.Stone

There is evidence for maritime movement of stone in early medieval Pembrokeshire. Some of this stone may have been requested by a patron, whilst some may have been transported in the hopes of opportunistic sale and/or as ballast (6.5.6).

The sites in the Pembrokeshire study area with possible evidence for maritime movement of stone are Camrose (3.5.1), Carew (3.2.1.1), Penarthur (3.4.3.5), St Davids Cathedral (3.4.3.7), St Elvis (3.4.2.11), St Ishmael's (3.4.2.12), St Non's (3.4.2.14), Brownslade Barrow (3.2.2.1) and Newton (3.2.2.2).

3.3.6.Other

The possible maritime connections outside potential Irish connections of the sword pommel near Pembroke and the Castlemartin pins have been previously discussed (3.2.1.7, 3.3.1.3).

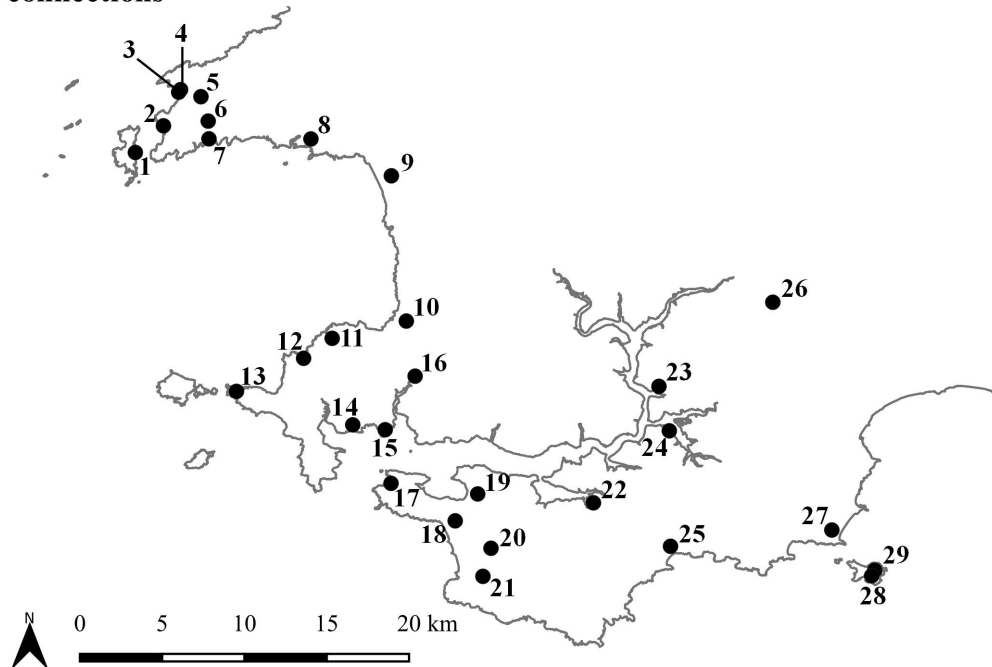
Not far from the potentially early medieval *llys* and church at Manorbier (3.2.1.7, 3.5.7), two harness fittings were found at separate findspots, one probably of the eleventh century and closely paralleled with an example from Sutton, Suffolk (Lodwick 2011) and the other, more crude, example possibly of the eleventh century (Battye 2006a). If imported from England they may have arrived overland as personal possessions of horses and riders (although they may also have been imported for the use of local riders). Two other potential imports from England, a strap-end and a belt-fitting, are found at Longbury Bank (3.3.1.4). If imported, it is unknown whether these artefacts arrived via land or sea routes.

Two Frankish finds – a sixth- or seventh-century biconical black burnished pot and a radiate headed bronze brooch – were found in a field north of Molleston Back Iron Age enclosure, just under 3km from the tidal Cleddau Ddu; as such artefacts appear elsewhere in funerary contexts, this may represent a furnished grave, perhaps of a newcomer, although geophysical survey has not revealed any further indications of burial here (Enright 2018, 2, 6, 27). The pot is particularly comparable to Belgian examples at Sint-Gillis-bij-Dendermode and one from Rosmeer, whilst the brooch has decorative similarities to a brooch from the Picardy/Artois region of northern France and brooches from Weimar, Germany; examples of this form of brooch are found in Kentish graves as well as in Cambridgeshire and Warwickshire (Enright 2018, 6-7, artefact descriptions by Mark Redknap). The site lies just over 600m from Mounton church which has possible early medieval origins (Ludlow 2003, PRN 46840), and early medieval settlement may have taken place within the nearby Iron Age enclosure (PRN 3615). It is unknown whether the artefacts – and potentially the person who may have been buried with them – arrived at this site overland or up the Cleddau Ddu from the sea.

3.4.Burial sites

Figure 12

Pembrokeshire study area: burial sites with evidence for maritime connections



- | | | |
|-----------------------------|------------------------|----------------------------------|
| 1 - Ramsey (burial) | 10 - Walton West | 20 - Castlemartin (church) |
| 2 - St Justinian's | 11 - Lower Broad Moor | 21 - Brownslade |
| 3 - Whitesands | 12 - St Brides | 22 - Monkton |
| 4 - Ty Gwyn | 13 - Martin's Haven | 23 - Coedcanlas |
| 5 - Penarthur Farm (stones) | 14 - St Ishmael's | 24 - Upton Churchfield/Graveyard |
| 6 - St Davids Cathedral | 15 - Longoar Bay | 25 - Porth Clew |
| 7 - St Non's | 16 - Capeston Tumulus | 26 - Molleston Back |
| 8 - St Elvis | 17 - West Angle Bay | 27 - Penally |
| 9 - Southwood Farm | 18 - Kilpaison Burrows | 28 - Caldey Monastery |
| | 19 - Rhoscrowdder | 29 - St David's, Caldey |

3.4.1.Islands

3.4.1.1.Caldey Monastery

Caldey (Ynys Bŷr) has been identified as the island with a monastic community led by Piro in the seventh- to eighth-century *Life* of St Samson of Dol (W. D. Bushell in Laws and Owen 1908, 109.12; Wooding 2017, 149-150). A fifth-century ogham

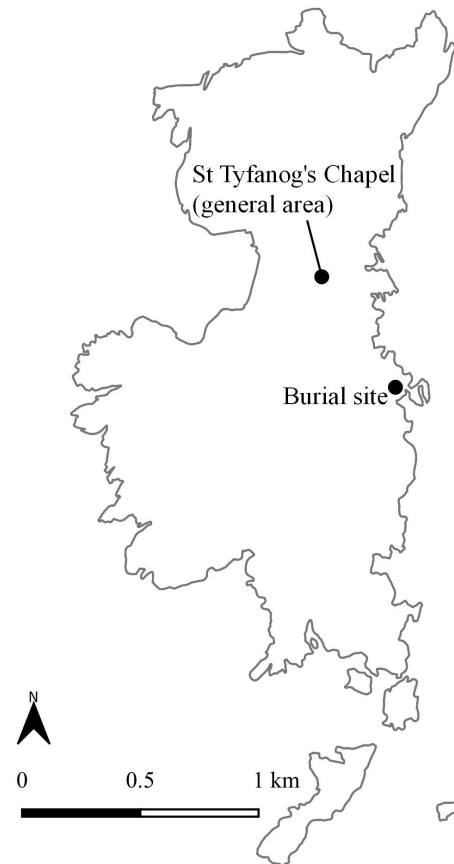
stone with an eighth- or early-ninth-century inscription and crosses (P6) is said to have been dug up from the ruins of the Old Priory on Caldey, possibly along with other inscribed stones (Fenton 1811, 458; Edwards 2007, 294-9; Bushell 1908, 250, 250 n.1), and since the Old Priory also had access to the only freshwater spring on the island (Campbell 1989, 61) it seems probable that this was the site of the early medieval monastic foundation. The fragmentary ogham inscription on P6 is suggestive of early Irish connections on Caldey. What remains of the inscription suggests a compound personal name (Edwards 2007, 296), and this may have been a commemorative stone with an associated burial. The eighth- or early-ninth-century inscription asks for prayers for the soul of Catuoconus and although it could be a grave-marker, Nancy Edwards (2007, 298-9) suggests that the form of the inscription and the presence of a cross on each of its four faces may suggest that Catuoconus was the patron rather than the deceased.

3.4.1.2. Ramsey

An early medieval cemetery at Ramsey island farmhouse is suggested by cist graves and carved stones, one of which (P99) is extant and appears to have been an eighth- or early-ninth-century sundial stone that commemorates 'Saturnbiu', perhaps Saturnbiu Hail, Bishop of St Davids, who died in AD 831, and on which an added cross may suggest re-use as a grave marker or perhaps graffiti of an early pilgrim (Fenton 1811, 123; H.W. Williams in Laws and Owen 1908, 44.8; James 2007, 50; Okasha 1970 68-9; Edwards 2007, 447-9). The identification of Saturnbiu Hail is uncertain, but as the Welsh for 'sun', '*haul*' is a homophone for '*hail*', 'generous', it

is possible that the name and the sundial were intended to be read together as a visual pun on the bishop's name. Ramsey may well have been related to St Davids Cathedral, perhaps as a hermitage or island retreat for that community (James 2007, 50-1; Edwards 2007, 449). Two medieval chapels stood on Ramsey, one dedicated to David or Justinian at the south end of the island, and one dedicated to Tyfanog at the north (Owen 1892, 112; Willis 1717, 59). Tyfanog's chapel may have had early medieval origins and was perhaps associated with a complex of ponds, platforms and enclosures revealed through LiDAR to the north of the farmhouse (Ludlow 2003, PRN 2712; RCAHMW 2018a). The cemetery, despite the monastic implications of the sundial, would appear to have been a little way removed from this ecclesiastical activity, perhaps sited to overlook the probable landing place below (fig.13). This may suggest that the cemetery is older than ecclesiastical presence on the island, and may have begun as the secular cemetery of a maritime community.

Figure 13
Ramsey island early medieval sites



3.4.1.3.St David's, Caldey

On the south side of the chancel of St David's church, Caldey, beneath 'a number' of approximately-orientated skeletons without apparent coffin structures, three stone cist graves were found, one orientated with feet to the north-east (Bernard Brown in Evans 1917-18, 43). These cist graves (and perhaps the dug graves also) may indicate early medieval burial at this site, near two sherds of early medieval imported pottery (3.3.1.1) and within 150m of a now-besanded tidal inlet (Campbell 1989, 61; fig.11). The graves may represent the cemetery of a secular maritime community, with ecclesiastical presence perhaps a later addition.

3.4.2.Mainland coast-edge burials

3.4.2.1.Capeston Tumulus

c.600m from the tidal limit of Sandy Haven Pill in the Milford Haven Waterway, a six foot east-west cist in a small mound may represent an early medieval burial in a Bronze Age barrow (RCAHMW 1925, 407; James 1987, 74; Ludlow 2003, PRN 3016). The re-use of the barrow may indicate a desire to claim a right to the land (see O'Brien 2009, 143). The proximity of a possible landing place might suggest that the individual and/or those who buried them were newcomers to the area, trying to legitimise their presence, or were local individuals sending a message of ownership and power to those using the landing place.

3.4.2.2.Coedcanlas

The church at Coedcanlas lies on the shore of Garron Pill on the tidal and navigable lower stretches of the Cleddau Ddu, and its early name, ‘Merthyr Cynlais’ might suggest a site of early medieval burial (Ludlow 2003, PRN 46785; Roberts 1992, 42). If so, such burials would have overlooked a safe and sheltered inlet and probable landing place.

3.4.2.3.Longoar Bay

Burials have been exposed in the cliff at Longoar Bay since at least the 1930s and most of the cemetery here may have been eroded, with recent excavations revealing evidence for only eight burials (Ludlow 2005, 22, 25; 2004c, 174; Mower 2003, 142-3). One of the cist graves on the cliff-top was child-sized, and at least one of the adult cist graves contained a female, over whose legs a seventh- to ninth-century cross-carved stone had been placed face-down as a lintel slab, probably an upright grave marker that was reused shortly after erection given its hardly-weathered appearance (Edwards 2007, 488-9; Mower 2003, 142-3). A single radiocarbon date of the seventh to ninth century (Ludlow 2004c, 174; Edwards 2007, 489) agrees with the dating of the cross-carved stone. Another carved stone may also have been found here but is now lost (Ludlow 2003, PRN 44703).

Despite the apparent desire for a burial site close to the sea, this cemetery has not been sited on the local area’s furthest extremity of land, Great Castle Head promontory fort. The cemetery may have been sited to overlook a potential landing

place below, within Longoar Bay itself. A similar situation is seen at West Angle Bay (3.4.2.17). Headlands may have been reserved for activities other than burial – perhaps for occupation, as look-out points and/or as sites of navigation markers and/or beacons.

3.4.2.4.Lower Broad Moor

Seven ‘stone coffins’ (probably cists: ‘the stones had not been cemented together, but merely roughly fitted to each other’) found during the cutting of a water course on Lower Broad Moor farm (Anon 1853) may be early medieval. They lie just under 500m from a potential landing place at Mill Haven.

3.4.2.5.Martin’s Haven

A ninth- to tenth-century cross-carved stone at Martin’s Haven could have arrived there as building material or ballast, or have come from an unknown early medieval site nearby (perhaps a cemetery, possibly in Wooltack Point Iron Age promontory fort, or perhaps the unlocated St Mary’s Chapel recorded as being in Marloes parish ‘situated near the beach’ and now lost to erosion: Ludlow 2003, PRN 46833; Lewis 1833, Marlais/Marloes). Nancy Edwards (2007, 379-80) favours identification as a way-marker and prayer-station for travellers using Martin's Haven, possibly pilgrims who were heading for St Davids across St Brides Bay.

This stone may indicate an early medieval cemetery overlooking a landing place, perhaps situated directly overlooking Martin's Haven and located on account of that landing place rather than on account of Wooltack Point promontory fort (Martin's Haven being partially inside and partially outside this large fort). This interpretation does not preclude the use of the stone as a way-marker for pilgrims.

3.4.2.6.Monkton

'Stone lined graves' found c.1978 600m from the medieval Monkton Priory, which may have early medieval origins and was perhaps related to a *llys* at Pembroke, might indicate the site of an early medieval cemetery (G.H. Williams 1980 in DAT archive PRN 8976, see PRN 8978; Ludlow 2003, PRN 46811). The distance between priory and graves may suggest that the location of the ecclesiastical site moved or that the graves represent a separate community, perhaps one that served the maritime needs of the ecclesiastical site. The burials are just over 300m from the tidal Quoits Water Pill and less than 600m from the tidal Pembroke River.

3.4.2.7.Penally

Penally church lies c.550m from a beach landing place at the southern end of Tenby South Beach and was clearly an important early medieval foundation. It receives several mentions in the Llandaff Charters, the earliest dating to c.AD 675, and it may have been a mother church in this region (Ludlow 2003, PRN 3442; Davies 1979,

no.151b). Early medieval burial is suggested by the presence of P85, a seventh- to ninth-century cross-carved probable grave marker (Edwards 2007, 422). However, the simple form of this cross might suggest that it came from a less influential site in the vicinity, perhaps a secular cemetery overlooking the landing place.

There are three other early medieval stones at this site: a later-ninth- or earlier-tenth-century cross and cross base (P82), a cross shaft dating to the first half of the tenth century (P83) and a later-ninth- or first-half of the tenth-century cross shaft with inscription (P84) (Edwards 2007, 410-21). P82, P83 and P85 are all of stone from north of Tenby, 4km away, and P84 of stone from either Tenby or Lydstep Haven, both 3km away (Jackson in Edwards 2007, 410, 414, 418, 422). The stone used in these monuments could have been transported overland or by boat.

An individual with the Irish name Máel Domnaig ('servant of the Church', perhaps an ecclesiastic) is recorded as erecting P84 (Edwards 2007, 418-20). This individual may have come from Ireland, or perhaps studied there. P83 has decorative links with Wessex plant-scroll and animal ornament, and with Insular ribbon animals and abstract ornament (Edwards 2007, 416-17), and the plant-scroll decoration on P82 is suggestive of links with Mercia and Wessex, and perhaps direct links with the Carolingian continent (Edwards 2007, 411-14). Decorative motifs from England may have arrived via an object carried by a returning traveller, perhaps a Welsh king or ecclesiastic (Edwards 2007, 89). Most long-distance travel to and from Penally is likely to have been by boat.

Byzantine coins at Tenby South Beach suggest maritime activities at an early date (3.3.3). A copper-alloy penannular brooch with eighth- or ninth-century interlace and spatulate terminals also found at Tenby South Beach (Lodwick 2017) might represent the casual loss of an individual embarking or disembarking here.

Alternatively, as this brooch may never have been finished and may be a failed casting (Lodwick 2017), it might hint at metalworking nearby, perhaps to produce goods for maritime export and exchange.

At the other end of the long beach below Penally is Tenby *llys*, and inland are situated Longbury Bank, Trefloyne and its associated church, Eccluis Guiniau (3.2.1.5, 3.2.1.4, 3.2.1.8; Ludlow 2003, PRN 46847). In this area of concentrated high-status activity the beach between Penally and Tenby is likely to have seen much maritime activity in the early medieval period.

3.4.2.8.Porth Clew

At Porth Clew an early medieval cemetery of cist and plain-dug burials saw use throughout the early medieval period, with the earliest dated burial dated cal.AD 430-610 (2 σ) and a stone chapel being built here in the twelfth century (Schlee 2009a, 10-12; 2009b, 5, 7, 10-11; Austin and Schlee 2000; Ludlow 2003, PRN 44001). Isotope analysis suggests a multicultural community buried here, with four of five individuals analysed appearing to have non-local origins, including one child who may have travelled from the Mediterranean Sea region (see section 6.6.2 for full discussion and details). This cemetery may have belonged to a secular maritime community who used the landing place at Freshwater East beach, 500m away.

3.4.2.9. Rhoscrowdder

Rhoscrowdder church lies just over 600m from a probable landing place in Angle Bay. It is probably ‘Llan Degeman’, one of the seven bishop-houses of Dyfed in a text of the second half of the ninth or beginning of the tenth century, with the possibility that there were already seven bishops in the fifth and sixth centuries (Charles-Edwards 1971, 247, 251, 262). This early ecclesiastical importance suggests burial here from an early date, as does the presence of a possible *capel-y-bedd* (Ludlow 2003, PRN 46851). Due to the site’s early importance, it may be the ecclesiastical site that attracted burial, rather than burial attracting ecclesiastical presence. The church was probably located to take advantage of maritime connections, which may have been exploited by the ecclesiastical community here and/or a secular community nearby.

3.4.2.10. St Brides

At a partially-eroded cemetery of cist and plain-dug graves at the head of St Bride’s Haven over 51 graves have been investigated, with individuals from two cist graves dated cal.AD 890-1205 (2σ:CAR-917) and cal.AD 715-940 (2σ:SUERC-43666) (Schlee and Murphy 2017-18, 141, 145 tbl.2, 147). Both adults and non-adults are represented, and two possible males and one possible female were identified (Caffell and Holst 2013, 21). A lost monument seen c.AD 1698 on the shore near St Brides church may have been an inscribed early medieval stone of perhaps the fifth to seventh century (Edwards 2007, 519), suggesting the cemetery may have spanned

the early medieval period. A seventeenth-century radiocarbon date from a plain-dug burial sampled in 1985 may be from a single later burial, or the bone may have been misidentified (Schlee 2013, 29, 35).

The diversity of grave forms at St Brides may suggest a cemetery outside ecclesiastical control, and one that had maritime connections (Schlee 2013, 31). Although it is possible there was ecclesiastical presence here in the form of a chapel or the nearby church (Schlee 2011, 13; 2013, 3, 31, 33; Ludlow 2003, PRNs 3138, 13294) this may have arrived after burial began, as would seem to be the case at, for example, Whitesands and Porth Clew (3.4.2.18, 3.4.2.8). The cemetery overlooks a landing place and may have belonged to a nearby maritime community. Grave markers of various forms (Schlee 2011, 7; 2013, 11, 15-17, 22, 25) ensured the visibility of the cemetery to those using the bay, leaving them in no question as to who held the power in transactions that took place on that shore.

3.4.2.11. St Elvis

To the north of St Teilo's church, 'many ancient graves', all or most of which seem to have been cists, were found in the late-nineteenth century (H.W. Williams in Laws and Owen 1908, 46.6), c.500m from a potential landing place amongst the cliffs at Porth y Bwch. A seventh- to eighth-century cross-carved stone (P127) used as a gatepost nearby may have been a grave marker, or possibly a focus within or on the edge of the cemetery (Edwards 2007, 482-3). The monument's stone comes from Carn Llidi, 11km away overland to the north-west, and may have been glacially transported (Jackson in Edwards 2007, 482). If moved by human agency, it was

almost certainly brought by boat round the coast of north Pembrokeshire, and perhaps even landed at Porth y Bwch.

The churchyard lies within a large, semicircular enclosure, perhaps a prehistoric ritual enclosure (Ludlow 2003, PRN 4326), and there are Iron Age, Neolithic and Bronze Age features nearby (PRNs 4325, 2798, 2792, 4611, 2788), as well as Ffynnon Ddegfel curative well (PRN 2783) c.700m to the north-west. These prehistoric associations may have had a bearing on the choice of location for early medieval burial and the (later?) ecclesiastical site here.

St Teilo's was probably originally dedicated to St Ailfyw, who baptises St David in Rhygyfarch's late-eleventh-century *Life* of David (§7: Sharpe and Davies 2007, 116-17; Ludlow 2003, PRN 4326; Edwards 2007, 483). Ailfyw/Ailbe is an Irish saint with a mythological maritime element to his eighth- or ninth-century *Life*, in which he travels in a bronze boat to another world and back (p.338). The dedication to him at this site close to a potential landing place might hint at maritime connections in this community, and possibly also Irish influence.

3.4.2.12. St Ishmael's

Ten cist burials with extended inhumations were found c.140m south-east of St Ishmael's church on the Milford Haven Waterway, and a 'further two graves' were found 60m south-east of the Vicarage; all graves were aligned east-west and had no grave goods (Freeman 1976, 44). Three early medieval carved stones found at the church hint at dating for these graves: a ninth- or tenth-century cross-slab of local stone (P128), a ninth- or early-tenth-century cross-carved probable grave-marker

(P129), the stone of which is from Caerfai Bay on the north Pembrokeshire coast south-east of St Davids, and a ninth- to tenth-century cross-carved probable grave marker of local stone, with inscriptions (P130) – an Alpha and Omega along with the smooth, rounded boulder shape linking it with a series of stones at St Davids, St Edrins and Walton West (Edwards 2007, 484-8; Jackson in Edwards 2007, 484-6). ‘Llan Ismael’ is listed as one of the seven bishop-houses of Dyfed in a text of the second half of the ninth or beginning of the tenth century, and there may already have been seven bishops in the fifth and sixth centuries (Charles-Edwards 1971, 247, 251, 262). This important ecclesiastical site may therefore have attracted burial, rather than burial attracting ecclesiastical presence.

P129 almost certainly travelled from north to south Pembrokeshire and into the Milford Haven Waterway by boat, its small size and simple carving suggesting that it was not brought in response to a patron’s request, but as ballast that was bartered or simply abandoned nearby. Nancy Edwards (2007, 484-5) has highlighted St Ishmael’s links with St Davids, through its status as a bishop-house, its sculptural links and the appearance of St Ishmael as a disciple of St David in Rhygyfarch’s late-eleventh-century *Life* of David (§15: Sharpe and Davies 2007, 120-1). These links probably encouraged maritime movement between the two, with movement of ballast a by-product of this. The choice of location for St Ishmael’s bishop-house is likely to have been informed by the proximity to a probable landing place at Monk Haven, 300m away.

3.4.2.13. St Justinian's

St Justinian's is a late medieval pilgrimage chapel associated with a holy well (PRN 7502); an earlier undated building beneath the chapel may also be post-conquest, although a possible small circular enclosure and potential outer enclosure may suggest earlier origins (Ludlow 2003, PRN 7470). C.A. Raleigh Radford (1962, 335) has suggested that the dedication to an 'obscure Celtic saint' may point to a pre-AD 1100 origin. Two cist graves well below the level of the earlier building may be early medieval, the alignment of one suggesting that its foot would have been under the northern wall of the earlier building, presumably therefore preceding it (Boake 1926, 387-8). If excavation were to take place outside the chapel an early medieval cemetery might be revealed, as at Whitesands Bay (3.4.2.18).

St Justinian's sits on a cliff above Porth Stinan, considered the 'chief Landing-Place' in Ramsey Sound and the embarkation point for Ramsey in the late-sixteenth century (Willis 1717, 56-7). It is still the embarkation point for Ramsey today, and the association can be seen at least as far back as the fourteenth-century *Life of St Justinian*, in which, after his martyrdom on Ramsey, Justinian walks across Ramsey Sound to be buried at St Justinian's (James 2007, 50).

Early medieval burial here may have begun in a secular context as suggested on Ramsey (3.4.1.2), those buried at St Justinian's perhaps members of a maritime community with close links to Ramsey both before and after the arrival of ecclesiastical presence at the two sea-linked sites (with this community probably facilitating maritime movement of ecclesiastics to and from the island).

3.4.2.14. St Non's

St Non's is a north-south aligned chapel on the east periphery of a circular cropmark enclosure c.55m in diameter, which might be within a larger, subcircular enclosure with St Non's well (PRN 2727) on its east boundary (Ludlow 2003, PRN 46863). Cists have been found whilst digging for earth within the chapel walls (Fenton 1811, 113). A seventh- or eighth-century cross-carved stone (P100) from this site may be a grave marker, or, given its large size, a focus in or on the edge of the cemetery (Edwards 2007, 449-50). The stone may be from Penclegyr on the north coast of north Pembrokeshire, 7km away (Jackson in Edwards 2007, 450). An overland journey would have been the shorter distance but it is possible that the stone was transported round the coast, perhaps as ballast.

St Non's might be the foundation referred to as marking St David's birthplace in Rhygyfarch's late-eleventh-century *Life* of David (§6: Sharpe and Davies 2007, 114-17; Ludlow 2003, PRN 46863; Edwards 2007, 450). If excavation were to take place outside the building an early medieval cemetery preceding the chapel might be revealed, as at Whitesands (3.4.2.18). A possible Neolithic or Bronze Age stone setting here (PRN 2730) may have encouraged a perception of sanctity in the early medieval period. The site is c.100m from sea-cliffs, and does not seem to overlook a landing place – Porth Coch Bach and Porth Coch Mawr, despite the '*porth*' name elements, would have been unlikely choices of landing place along a coast that has many other more sheltered and less rocky landing places, such as Porthclais less than 1km west (3.5.2). St Non's is well placed to watch maritime traffic and it is possible that local expertise and lost harbour structures may have made it more accessible by sea, but this is unknown. The community buried here

may have had an agricultural focus and buried their dead on marginal land with prehistoric associations, or perhaps the sea-edge situation was related to Christian concepts of the sea as desert (p.217), and St Non's as a retreat from the world.

3.4.2.15. Ty Gwyn

Around 1860, cist graves were found at Ty Gwyn, just inland of the north end of Whitesands Bay and the cemetery there (3.4.2.18) (H. Owen in Laws and Owen 1908, 31.12). Ffynnon Faidog holy well (PRN 2641) is nearby and possible cropmarks might suggest early ecclesiastical activity, although none of the field names in the area have ecclesiastical elements (Ludlow 2003, PRNs 2633, 2640), and the cropmarks may be natural features (F. Murphy in Murphy *et al.* 2009, 35, PRNs 47481-2; Hall and Sambrook 2012, 102, PRNs 47481-3). If contemporary with burial at Whitesands, the cemetery at Ty Gwyn may have been used by individuals who wished to remain separate from those buried at Whitesands, perhaps members of an agriculturally-focussed community, or a family group.

3.4.2.16. Upton Churchfield/Graveyard

The field name 'Graveyard' or 'Churchfield' and a circular enclosure (perhaps originally Iron Age) on the bank of the Carew River suggests a burial site; this might be the location of Upton church, alienated by Bishop Wilfrid between AD 1085 and 1115 and thereby suggesting an early origin, and the site is intervisible with another

probable early medieval church site at Lawrenny on the other side of the river (Ludlow 2003, PRNs 3450, 46802; K. Murphy in Murphy *et al.* 2007, PRN 3450; 3.5.4). It is uncertain whether this was a landing place, although it is possible. The site certainly has a good view of tidal riverine traffic.

3.4.2.17. West Angle Bay

Burials at West Angle Bay may or may not have overlapped with settlement activity (3.2.2.4). Although a chapel is thought to have later stood at this site, settlement and burial is likely to have begun in a secular context (Ludlow 2011, 193; Schlee and Ludlow 2011, 169; Ludlow 2003, PRN 3092). All ages and both males and females are represented, with a minimum of 25 individuals recorded, and whilst non-adults dominate the excavated area of the egg-shaped enclosure it is unknown whether this is representative of the enclosure as a whole (Ludlow 2011, 190; Schlee and Ludlow 2011, 173, 174 tbl.9). Four cist graves are recorded from the north-west corner of the rectangular enclosure, and a more extensive burial ground here is probable, given the likelihood that the northern edge of the site has been lost to erosion and Richard Fenton's early-nineteenth-century description of the active erosion of a large cemetery extending to the shore here (Schlee and Ludlow 2011, 169, 171; Ludlow 2011, 189; Fenton 1811, 402). Less than 5% of the egg-shaped enclosure was excavated to reveal ten cists, two possible cists and a dug grave, with longevity of the site indicated by intercutting (Schlee and Ludlow 2011, 171). The earliest dated burial is one of those on the cliff-edge, at cal.AD 650-780 (2 σ :Beta-229577), and the broad date for the establishment of the egg-shaped enclosure and the burials within is

suggested to be cal.AD 660-870, whilst dating of a stratigraphically late burial suggests the cemetery was out of use by the early-twelfth, or perhaps late-ninth century (Schlee and Ludlow 2011, 176-7).

Activity at West Angle Bay was therefore long-lived. The confinement of the cliff-edge burials to one area in the rectangular enclosure (overlooking the landing place below) might argue in favour of contemporaneity with the settlement. The establishment of the egg-shaped enclosure might then indicate a cessation of settlement activity on this site (and perhaps the arrival of ecclesiastical control: Ludlow 2011, 193). Neil Ludlow (2011, 194) has suggested that the proximity of a coastal promontory fort (PRN 99104) to this cemetery may be comparable to the relationship between Longoar Bay cemetery and Great Castle Head (3.4.2.3). There may have been settlement in the fort, a look-out point, a navigation marker and/or a beacon. Individuals at West Angle Bay were certainly in a prime position to warn those further up the Waterway of impending danger.

3.4.2.18. Whitesands Bay

The cemetery at Whitesands Bay lies at the north end of a sandy beach landing place. It is thought that as much as 25m of land has been lost to the sea here in the last 125 years (Murphy *et al.* 2014, 2). It is possible that the area of St Patrick's Chapel and the surrounding cemetery was once almost an island, created by a river on its way to the sea (Kenneth Murphy pers. comm.). Over 100 individuals have been found (Badger and Green 1925; Hague 1970; Murphy *et al.* 2016), with

Murphy estimating that there may be up to 1000 people buried here (Pembrokeshire County Council Newsroom 2019).

Around the time of the 1970 excavation, burials were also seen eroding out of the cliffs c.125m north of St Patrick's chapel (Murphy *et al.* 2014, 2). A possibly early medieval cross-carved stone of uncertain date (P102) which is now lost but was seen in 1912 on a cliff in the west wall of the third field west of Ty Gwyn farmhouse (RCAHMW 1925, 333; Edwards 2007, 521) may have originally been associated with these cliff burials. Whether this represents an extension of the beach cemetery or the separate cemetery of a distinct group is unknown.

The 2014-16 excavations have revealed a stratigraphic sequence for the cemetery, beginning with plain-dug graves within a wall of beach boulders on sand that had accumulated over prehistoric features including a possible Bronze Age funerary cairn to the east of the excavated area; sand continued to accumulate and the wall went out of use, with burials now made through and outside it and long-cist graves appearing; the wall was eventually buried although its area remained visible as a platform on which (and spreading out to the north) rubble layer 88 was laid, through which more graves were dug, mostly of children, and over which the chapel was built, possibly contemporary with some of the child graves (Murphy *et al.* 2016, 2-3). Radiocarbon dates for burials range from the second half of the seventh century to the second half of the twelfth at 2 σ calibration (Murphy *et al.* 2016, 45). This was a long-lived cemetery with a diversity of grave forms and both males and females and all ages represented (Murphy *et al.* 2016, 6-41; Hague 1970, 28; Hemer *et al.* 2017, 427 tbl.1). The simple forms of the associated cross-inscribed stones (P101 and finds 402-3, 422 and 444: Edwards 2007, 520-1; Murphy *et al.* 2016, 20, 46-7) are suggestive of a secular cemetery. The unusual form of P102 is more complex,

but its date and style are uncertain (Edwards 2007, 521) and it could post-date the arrival of ecclesiastical presence, or instead belong to a secular period of the site and have been carved by a stonemason unused to creating such monuments.

The growing sand mound and grave markers including upright slabs, cross-carved stones and perhaps quartz pebbles that were meant to be seen (Edwards 2007, 520-1; Murphy *et al.* 2016, 5, 11, 13, 20, 38, 46-7) would have made the cemetery clearly visible to those using the bay, signifying the community's claim to authority in this area.

One adult female may have grown up in south-east Wales (Hemer *et al.* 2017, 436-7), and it is likely that other individuals buried here also began their lives elsewhere.

Limpet shells associated with an adult possible male buried east-west within the chapel in a plain-dug grave with their knees supported by a stone and with white quartz pebbles and limpet shells 'closely associated' (Badger and Green 1925, 98), and a possible adult skeleton, 235, laid in a crouched position on rubble layer 88 and associated with limpet shells (Murphy *et al.* 2016, 17), may be simply an accidental by-product of burial near the sea, as might oyster shell found in the fill of grave 101 (Murphy *et al.* 2016, 46). However, limpet shells found between three covering slabs and the skeleton beneath in an infant grave (skeleton 223) (Murphy *et al.* 2016, 13) and spread in a layer between the upright side slabs of cist grave 86 (possible child, unexcavated) (Murphy *et al.* 2016, 40) appear to represent deliberate deposition.

The visual impression of the limpet shells on cist grave 86 is of a layer of white pebble-like objects. It is possible that limpet shells were being used here in lieu of quartz pebbles, a fairly common inclusion in early medieval Welsh burials, including ten of the graves at Whitesands (see Murphy *et al.* 2016, 10, 13, 25, 31, 35,

38; Badger and Green 1925, 98, 100; Schlee and Ludlow 2011, 173; Schlee 2013, 15; Ludlow 2011, 191). However, the exclusive use of limpet shells in these two burials suggests that they were not a substitute for quartz, but desirable in themselves. Perhaps the association of limpet shells with the intertidal zone was significant to those who buried these individuals.

A short episode of copper-alloy casting probably belongs to the early medieval period (Young 2017, 1), perhaps creating objects for maritime exchange. There are a surprising number of finds for an early medieval Welsh cemetery, including two glass beads, amber, a bone pin, a copper-alloy pin (possibly a shroud pin), a shale bracelet, a ringed pin probably made in Dublin in the eleventh century and a tenth-century English coin found nearby (3.3.4, 3.3.3) (Murphy *et al.* 2016, 46-7). The number of finds suggests a busy landing place, with casual losses getting mixed with the cemetery deposits.

The use of Whitesands Bay (Porth Mawr) as a landing place is likely to have had a long history, with the medieval route to St Davids from Haverfordwest possibly originating as a Roman road heading for Whitesands (James 2007, 53). The amber, ringed pin and coin, especially, suggest early medieval maritime activity here, and the site's role as an embarkation point for Ireland in early literature may have been based in reality. It is from here that Marchell, mother of Brychan Brycheiniog, is said to have left for Ireland in *De Situ Brecheniauc*, a story recorded in writing at least as early as the eleventh century (Wade-Evans 1906, 24, 31; dating: Phillimore 1886, 105-6), and from here that St Patrick leaves for Ireland in Rhygyfarch's late-eleventh-century *Life of St David* (§3: Sharpe and Davies 2007, 112-13). Rhygyfarch tells us that before leaving, Patrick raised from the dead an old man who had been buried near that shore for twelve years (§3: Sharpe and Davies

2007, 112-13). This is the earliest known written reference to burial in the area of Whitesands Bay, and draws an explicit link between burial site and landing place.

3.4.3. Other burial sites with evidence for maritime connections

3.4.3.1. Brownslade Barrow

Evidence for settlement at Brownslade Barrow, including a quernstone that may have been a maritime import, is discussed in section 3.2.2.1. The long-lived early medieval cemetery here was made in and around a barrow whose central inhumation might be Romano-British or Bronze Age (Groom, Hughes and Crane 2011, 136, 145-6; Laws 1882, 52-6), and re-use of this site may have been to claim ownership and authority in the area (see O'Brien 2009, 143). Radiocarbon determinations of skeletal material range from between the second quarter of the fifth century to the first quarter of the eleventh calibrated at 2σ (Groom, Hughes and Crane 2011, 145-6). Both plain-dug and cist burials were found here, and all ages and both males and females represented, with remains of 52 individuals recognised in the 2006 excavation (Coard 2011, 146-50; Groom, Hughes and Crane 2011, 140-4; Laws 1882, 52-3). The very simple forms of cross-carved stone P11 and grave 517's marker (Edwards 2007, 514-15; Murphy 2011b, 157) suggest a secular community, as argued at Whitesands (3.4.2.18).

Isotope analysis suggests a multicultural community, some of whom will have travelled by sea at least once in their lives. Of ten individuals analysed, six

seem to have had non-local origins, including at least two possibly from regions around the Mediterranean Sea (see section 6.6.2 for full discussion and details).

Skeleton 517, a male aged over 45 in a plain-dug grave with a grave marker at its head, may have originated in the Mediterranean region or continental Europe and seems to have consumed a diet rich in meat throughout life and may have suffered from Diffuse Idiopathic Skeletal Hyperostosis, suggestive of a high status which might also be indicated by the grave marker (Hemer et al 2013, 2354 tbl.1; Coard 2011, 152; Groom, Hughes and Crane 2011, 144; Murphy 2011b, 157). This individual's possible non-local origin does not seem to have lowered his status in the community.

The diversity in origins of individuals buried at Brownslade and the presence of a non-local quernstone suggests that this community was at least occasionally involved in maritime activities. The distance from the coast (c.1.6km) may have been to protect the inhabitants from unexpected arrivals by sea, and to give them the choice to get involved in maritime activities or not depending on the benefits of any given interaction.

3.4.3.2.Castlemartin (church)

Castlemartin church lies c.2.3km from the beach at Frainslake Sands, in an area with evidence for maritime activity (3.3.1.3). The possibly early medieval high-status settlement at Castlemartin rath (3.2.1.7) is c.600m from the church. A seventh- to ninth-century cross-carved stone (P10) with a Latin cross on two sides built into the churchyard wall was probably a grave marker; the monument is very simple and not

a common type in south-west Wales, but there are examples of similar crosses carved on two sides on monuments in western Scotland (Edwards 2007, 310-11). The stone could indicate direct maritime contact with western Scotland, although movement of artistic influences does not prove direct contact.

3.4.3.3. Kilpaison Burrows

Just over 800m inland of the probable early medieval landing place of Freshwater West beach (3.3.2), a Bronze Age round barrow at Kilpaison Burrows contains a single, secondary, possibly early medieval, roughly east-west long-cist possibly of an adult male (Ludlow 2003, PRN 3080; Fox 1926, 22, 31; Keith 1926, 32). The re-use of the barrow may indicate a desire to claim a right to the land (see O'Brien 2009, 143). The proximity of the landing place could suggest that the individual and/or those who buried them were newcomers to the area, trying to legitimise their presence, or were local individuals sending a message of ownership and power to those using the landing place. However, the barrow may be too far from the beach for a connection of this type.

3.4.3.4. Molleston Back

The Frankish finds at Molleston Back may indicate a burial, perhaps of or by a newcomer (p.86). The finds and/or this postulated newcomer may have arrived by boat up the tidal Cleddau Ddu (just under 3km away), although an overland journey

from England is also possible. Whether or not there were one or more burials here, the finds themselves hint at multiculturalism in a more inland location than that suggested at Brownslade or Porth Clew (3.4.3.1, 3.4.2.8).

3.4.3.5. Penarthur Farm

The probable early medieval cemetery near Penarthur Farm, c.1.5km from Whitesands Bay, is represented by four probable grave markers (P103-6) on land that was a medieval possession of the Bishop of St Davids (Edwards 2007, 453). Most links for the eleventh-century P103 are found at St Davids (P93-8), with the cross-type on face A comparable to Irish recumbent grave-slabs, especially one from Cloonburren, Co. Roscommon (Edwards 2007, 451-4). The second-half of the tenth-century or eleventh-century P104 also finds links at St Davids (Edwards 2007, 454-5), as does the tenth-century P105, although P105's design also suggests Irish influence, with comparisons drawn to examples in Cloonburren, Co. Roscommon, Clonmacnoise, Co. Offaly and Kilfenora, Co. Clare as well as decorative elements in some Irish thistle brooches of the late-ninth and first half of the tenth centuries (Edwards 2007, 455-6). The cross-type on the ninth- to eleventh-century P106 has no good parallels in south-west Wales but is identical to B32 at Llanhamlach in Brycheiniog (Powys) (Edwards 2007, 457). Although maritime connections may have had a part to play in the decorative influences of these stones, influences from Brycheiniog may have arrived overland and Irish influences could have come from St Davids rather than directly from Ireland.

None of the Penarthur monuments are made from local stone. P103's stone came from the Carn Llidi intrusion, 4km away (Jackson in Edwards 2007, 452) and could have been brought round the coast to Whitesands, although is more likely to have been brought overland. P105 is from the St Davids Head intrusion, 5km away, and P106 is from St Davids Head, 3km away; both were possibly glacially transported (Jackson in Edwards 2007, 455, 457), and would probably have been brought overland if they were transported by human agency. However, P104 is possibly from Penclegyr, 6km away overland (Jackson in Edwards 2007, 454), and may have been transported as ballast in a boat, perhaps to Whitesands. There may well have been a dump of ballast stone at Whitesands, used by boats but also, perhaps, by stonemasons as a readily-available source of raw material. Stonemasons might also have directly bartered with vessels for suitable ballast stones for carving.

The possible maritime movement of P104 and the Irish decorative links do not, then, necessarily indicate direct maritime connections in the community buried at Penarthur. However, in this area of Pembrokeshire, with St Davids attracting many travellers, communities are likely to have been multicultural and at least some of the individuals buried at Penarthur may have had maritime connections.

The ringed pin found c.300m south-east of this site (p.84) may have been lost by a traveller who had passed through Whitesands Bay.

3.4.3.6.Southwood Farm

P141, a ninth- to eleventh-century cross-carved stone built into a farm building at Southwood Farm c.1822 is of unknown provenance, although perhaps came from an

ecclesiastical site at Bathesland, c.800m south-east; the stone was probably a grave-marker or focus in an early medieval cemetery, although it might also have been a way-marker or marker of ecclesiastical land, with its closest parallels being P52 at Llanychlwydog and P86 at St Brynach's Church, Pontfaen in north Pembrokeshire (Edwards 2016, 193-6). Bathesland has possible early medieval origins (Ludlow 2003, PRN 2806). The findspot of P141 is c.900m from Newgale Beach, and Bathesland not much further than this. Whether or not the stone originally came from Bathesland, both stone and ecclesiastical site may have been located due to the proximity of a good landing place.

3.4.3.7. St Davids Cathedral

St Davids ('Mynyw') is listed as the most important of the seven bishop-houses of Dyfed in a text of the second half of the ninth or beginning of the tenth century, with the possibility that there were already seven bishops in the fifth and sixth centuries (Charles-Edwards 1971, 247, 251, 260, 262). The monastery may have originated nearby before moving to its present site (Edwards 2007, 427). St Davids was a place of learning, with Latin annals compiled there from the late-eighth century onwards (Edwards 2007, 427). Welsh, English and Viking attacks on this monastery testify to its importance and wealth (see IHBW 545003, 545039, 545821, 545063, 545073, 545079, 545082-3, 545096, 545107; the majority of recorded attacks are in the tenth and eleventh centuries but the earliest recorded attack is AD 643 in the *Annales Cambriae*: Gough Cooper 2012, §227). Although St Davids is situated in a valley just over 1km from the coast, perhaps to protect it from opportunistic raiders who did

not know the area, at least some of this recorded aggression is likely to have come by sea. The dangers of the location would have been offset by the advantages of maritime connections.

The nearest natural harbour to St Davids is Porthclais to the south, and it is this landing place that Gruffudd ap Cynan is said to have arrived at from Ireland in AD 1081 to be met by the Bishop of St Davids and Rhys ap Tewdwr (*Life of Gruffudd ap Cynan* §17: Russell 2005, 68-9; Evans 2007, 38-9). Although the details of this event may have been altered to suit the purpose of Gruffudd's biographer, to the extent that Gruffudd may actually have landed at Newport, Pembrokeshire on this occasion (Border Archaeology 2009, 3-4), the use of Porthclais as a landing place for St Davids is likely to have been grounded in reality, so that the story would ring true for contemporary audiences.

P90-8 are early medieval monuments at St Davids, the majority of which are probable grave markers and indicate a cemetery (Edwards 2007, 427-46). P90, a ninth-century cross-slab, is made of stone from Newgale, 13km away (Jackson in Edwards 2007, 427), and was probably transported by boat to a nearby landing place; the cross-head type is found in Wales, Ireland, Scotland and Mann, and the most diagnostic parallels are with Insular metalwork and sculpture in Ireland and Scotland (Edwards 2007, 427-9). P92 is a ninth- to eleventh-century shaft with a fragmentary inscription, the stone for which came from Carn Meini in the Preseli Hills, at least 40km away (Edwards 2007, 431-3; Jackson in Edwards 2007, 431) and was probably transported by boat around the north coast of Pembrokeshire, perhaps at the request of a patron.

The stones of monuments P93 (ninth-century), P94 (ninth- or early-tenth-century) and possibly also P97 (late-eleventh- or early-twelfth-century) may have

come from the vicinity of Whitesands Bay, c.3km away (Edwards 2007, 433-7, 440-4; Jackson in Edwards 2007, 433, 435, 440). They were probably brought overland to St Davids, although it is possible they were brought by boat, perhaps as ballast, to another landing-place closer to the cathedral. This might also be argued for the stone of P95 (ninth-century) from the St Davids Head intrusion at Llenchenhinen, although this is likely to have been glacially transported (Edwards 2007, 437; Jackson in Edwards 2007, 437).

Another possible origin for the stone of P97 is the coast to the south of St Davids, as has been suggested for P91 (second-half of the tenth- or early-eleventh-century), P96 (tenth- to eleventh-century) and P98 (late-eleventh- or early-twelfth-century) (Edwards 2007, 429-31, 438-46; Jackson in Edwards 2007, 429, 439, 440, 444).

Ornament added to P98 in perhaps the first half of the twelfth century is similar to ornament on artefacts from Hiberno-Scandinavian Dublin and suggestive of a craftsperson more used to working in leather or wood than stone (Edwards 2007, 444-6). This suggests the presence of an individual who may have trained in a Hiberno-Scandinavian environment, and although this additional ornament post-dates the period of this study, such links with the east coast of Ireland would have been long-established.

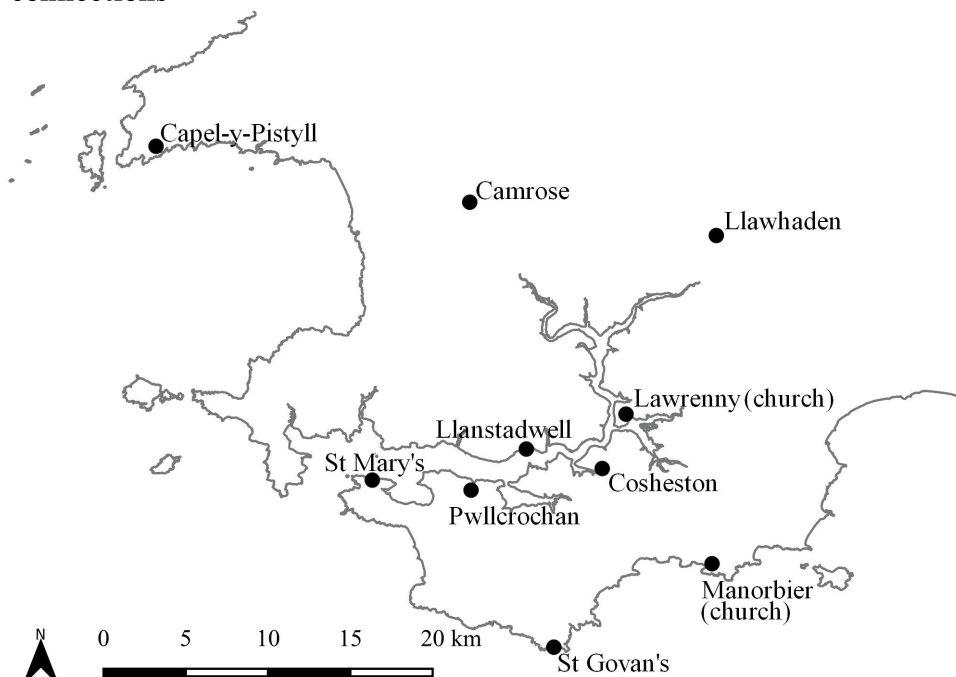
The community at St Davids is likely to have had both direct and indirect maritime connections, as indicated by transported stone, the eleventh-century English coins in the Bishop's Palace courtyard (3.3.3) and artistic influences (especially noticeable in P90 but also in other stones such as P91, P94 and P96), whilst scholars, too, would have been moving by sea (see Charles-Edwards 2013, 453-4).

3.4.3.8. Walton West

Walton West church has possible early medieval origins (Ludlow 2003, PRN 47492). Early medieval burial is suggested by a ninth- or early-tenth-century cross-carved grave marker (P139) made from a waterworn stone probably from a local beach that was found during grave-digging south of the church and can be grouped with monuments in north Pembrokeshire at St Davids (P93-4) (a further link to St Davids is perhaps indicated by the former dedication of this church to David) and St Edrins (P123-4), with the Walton West stone probably carved by the same sculptor as P124 at St Edrins (Edwards 2007, 506-8; Jackson in Edwards 2007, 506). The site lies c.700m from a probable landing place at Little Haven.

3.5. Other sites with evidence for maritime connections

Figure 14
Pembrokeshire study area: other sites with evidence for maritime connections



3.5.1. Camrose

A ninth- or early-tenth-century carved stone (P7), possibly part of a small cross-slab, is built into the nave of St Ismael's church, Camrose; its closest parallel is with P132 at St Lawrence's Church at Welsh Hook further inland to the north, and comparisons can also be drawn to P103-5 at Penarthur and P95 at St Davids, as well as with some recumbent Irish grave-slabs (Edwards 2007, 299-300). The Ishmael dedication may indicate a further link with St Davids, since Ishmael is one of David's disciples in Rhygyfarch's late-eleventh-century *Life of David* (§15: Sharpe and Davies 2007, 120-1; Edwards 2007, 300).

Camrose lies almost 5km from the tidal limit of the Cleddau Wen at Haverfordwest, but less than 2km west of the Cleddau Wen above this tidal limit. P7's stone may have originated 13km south, or 16km west-north-west in the Caerfai Group (Jackson in Edwards 2007, 299-300), its small size perhaps suggesting transportation as ballast. If the former, it may have come along the Milford Haven Waterway and up the Cleddau Wen. If the latter, it may have come ashore at Newgale to the west of Camrose – although as this would require a long overland journey it seems more likely that the stone was brought down St Bride's Bay, into the Waterway and up the Cleddau Wen. Whether such a journey was direct or indirect, the stone's arrival at Camrose and the site's links to St Davids suggest riverine connections with maritime activity.

3.5.2. Capel-y-Pistyll

Capel-y-Pistyll, a pilgrimage chapel to St Davids associated with a curative well (PRN 4329) and a possible circular enclosure (Ludlow 2003, PRN 2709), stood at the head of Porthclais creek. In his *Life* of St David, Giraldus Cambrensis says the spring miraculously appeared for the baptism of David (§3: Brewer 1863, 383; RCAHMW 1925, 333), suggesting a tradition of sanctity from an early date. The use of Porthclais as a landing place for St Davids is discussed above (p.114), and early medieval use of this landing place is also suggested in the tale *Culhwch ac Olwen* (probably first written down in the first half of the twelfth century), in which the legendary boar Twrch Trwyth swims from Ireland to Porthclais (Davies 2007, xxii, 210). Capel-y-Pistyll may, then, have been an early medieval ecclesiastical and/or burial site overlooking an important landing place on the route to St Davids.

3.5.3. Cosheston

Cosheston church has possible early medieval origins (Ludlow 2003, PRN 46786). It lies c.200m from the head of Cosheston Pill, a potential landing place leading into the Milford Haven Waterway.

3.5.4.Lawrenny (church)

There may have been an early medieval *llys* at Lawrenny (3.2.1.2). Lawrenny church is recorded as having been alienated by Bishop Wilfrid between AD 1085 and 1115, suggesting an early origin; it is intervisible with a probable early medieval cemetery and ecclesiastical site on the other side of the river, at Upton Churchfield/Graveyard (Ludlow 2003, PRN 46802; 3.4.2.16). Lawrenny is bounded by the tidal waters of the Cresswell and Carew rivers to the south, the Cleddau Ddu to the west and Garron Pill to the north. The site has access to both maritime connections and the inland interior of Pembrokeshire via the Cleddau rivers.

3.5.5.Llanstadwell

Llanstadwell church lies within a large, suboval churchyard and was recorded as being alienated by Bishop Wilfrid between AD 1085 and 1115, suggesting an early origin (Ludlow 2003, PRN 46820). Its situation on the north shore of the Milford Haven Waterway offers it a good view of passing maritime traffic and it overlooks a potential landing place.

3.5.6.Llawhaden

Llawhaden, as ‘Egluyss Hwadeyn’, is included in redaction A of the list of early medieval ‘bishop-houses’ in Dyfed, probably an addition made by a St Davids editor

as Llawhaden was an important church belonging to the Bishop of St Davids (Charles-Edwards 1971, 248; Lloyd 1911, 208 n.66). The first Norman Bishop of St Davids built a castle at Llawhaden in AD 1115, suggesting a link between the two sites, and perhaps an attempt to appropriate some pre-existing status at Llawhaden (Milne 2007, 4). The dedication to St Aidan also hints at a relationship with St Davids, since Aidan is noted as one of David's disciples in Rhygyfarch's *Life* of David (§15: Sharpe and Davies 2007, 120-1; Edwards 2007, 373).

A ninth-century cross-carved pillar and base with graffiti crosses added in the ninth century or later (P55: Edwards 2007, 371-4) also hints at an important early site. Graffiti crosses are unusual in south-west Wales, with only one certain (P8, Capel Colman) and two possible (P16, Fishguard South and potentially P99, Ramsey) examples, and better parallels are found on a cross-slab from the keeill at Ballavarkish, Mann, and graffiti crosses in caves in western Scotland; P55's graffiti may be votive crosses carved by pilgrims, and/or may record the swearing of oaths (Edwards 2007, 373-4). Alongside the evidence for links with St Davids this suggests that Llawhaden was an important pilgrimage site, the tradition of graffiti crosses perhaps imported with well-travelled pilgrims. It is likely that at least some pilgrims would have come by sea, through the Milford Haven Waterway and up the Cleddau Ddu (which, c.3km above its tidal limit, forms the eastern side of the churchyard).

3.5.7.Manorbier (church)

Manorbier church has possible early medieval origins (Ludlow 2003, PRN 46832).

The church and castle (a possible early medieval *llys*: p.68) lie close to a probable landing place at Manorbier Bay, and both may have been sited to take advantage of maritime connections.

3.5.8.Pwllcrochan

Pwllcrochan church has possible early medieval origins (Ludlow 2003, PRN 30131).

It lies c.400m from a potential landing place at Martin's Haven on the south shore of the Milford Haven Waterway.

3.5.9.St Govan's

St Govan's cliff-side chapel has possible early medieval origins (Ludlow 2003, PRN 46770). If early medieval, this is an unusual land-edge ecclesiastical site since it is fairly inaccessible from the sea, the small rocky cove it overlooks unlikely to have been favoured as a landing place.

3.5.10.St Mary's

St Mary's chapel has possible early medieval origins (Ludlow 2003, PRNs 7596, 3093). It lies c.60m from Chapel Bay, a potential landing place, and without current tree cover would have excellent views of traffic on the Milford Haven Waterway. It lies c.1.1km north-east of the early medieval activity at West Angle Bay (3.2.2.4, 3.4.2.17).

3.6.Preliminary conclusions

Most high-status settlements and possible high-status settlements in the Pembrokeshire study area do not face the open sea but have good maritime accessibility, with the Milford Haven Waterway in particular emerging as a focus of activity. Some lower-status settlements are likely to have had maritime connections, such as West Angle Bay with its excellent views over the entrance to the Milford Haven Waterway, or South Hook to which industrial materials may have been transported by boat. Lower-status settlements a little further inland could potentially have been linked to maritime activity via tidal rivers. It is clear that maritime accessibility could also be important to both high- and lower-status ecclesiastical sites.

Whilst there are some burial sites with evidence for maritime connections that are not right beside tidal waters (e.g. Brownslade), a striking number of burial and ecclesiastical sites are situated overlooking, or close to, potential landing places.

Imports can be suggestive of maritime movement and contact, both overseas and coastal. Isotope analysis provides a glimpse into the multicultural make-up of communities in early medieval Pembrokeshire, demonstrating that not only goods and ideas but also people were moving by sea.

The Pembrokeshire data will be discussed with that from Gwynedd and Cardigan Bay in chapter 6.

4.Gwynedd

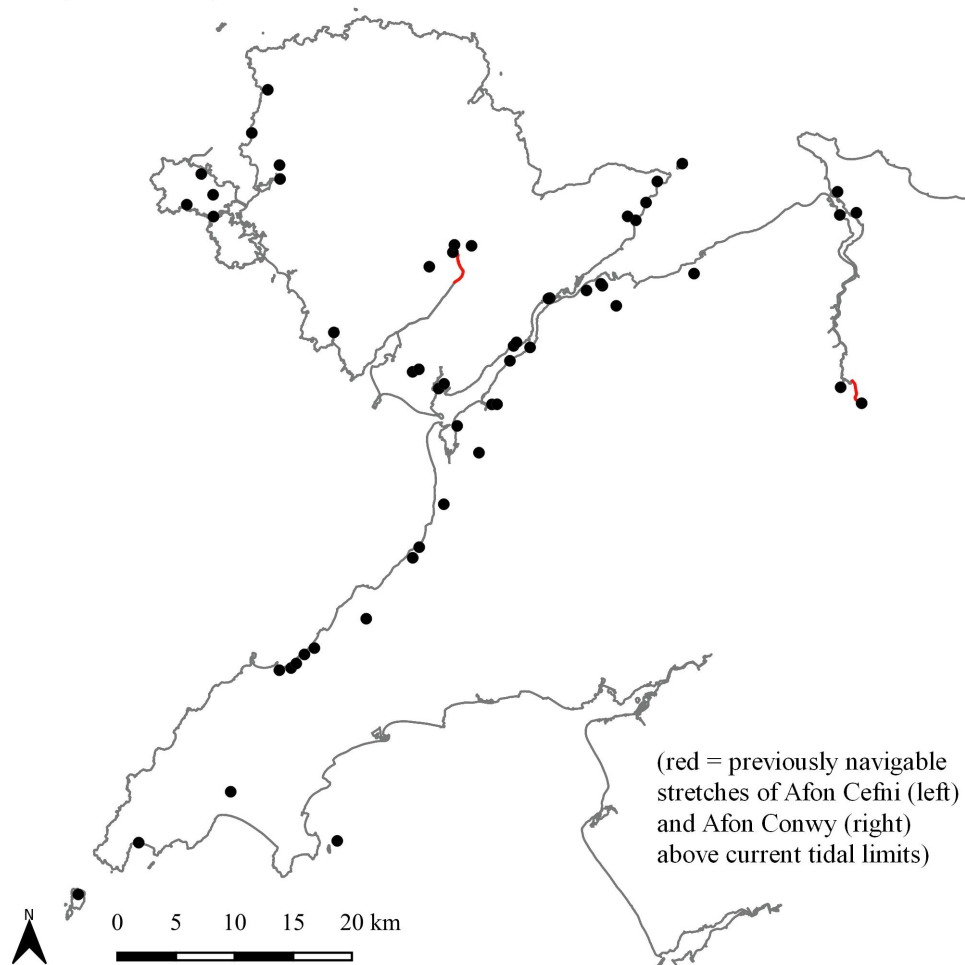
4.1.Introduction

The geographical limits of the Gwynedd study area are given in the methodology chapter, section 2.3. There are 149 sites in the data collection for the Gwynedd study area. 58 of these sites are considered to have evidence for potential maritime connections (fig.15). These sites are listed in Appendix 3 and detailed in this chapter.

As in Pembrokeshire, fertile land in coastal areas (especially in Anglesey) may have encouraged activity in these areas that did not have maritime connections.

Figure 15

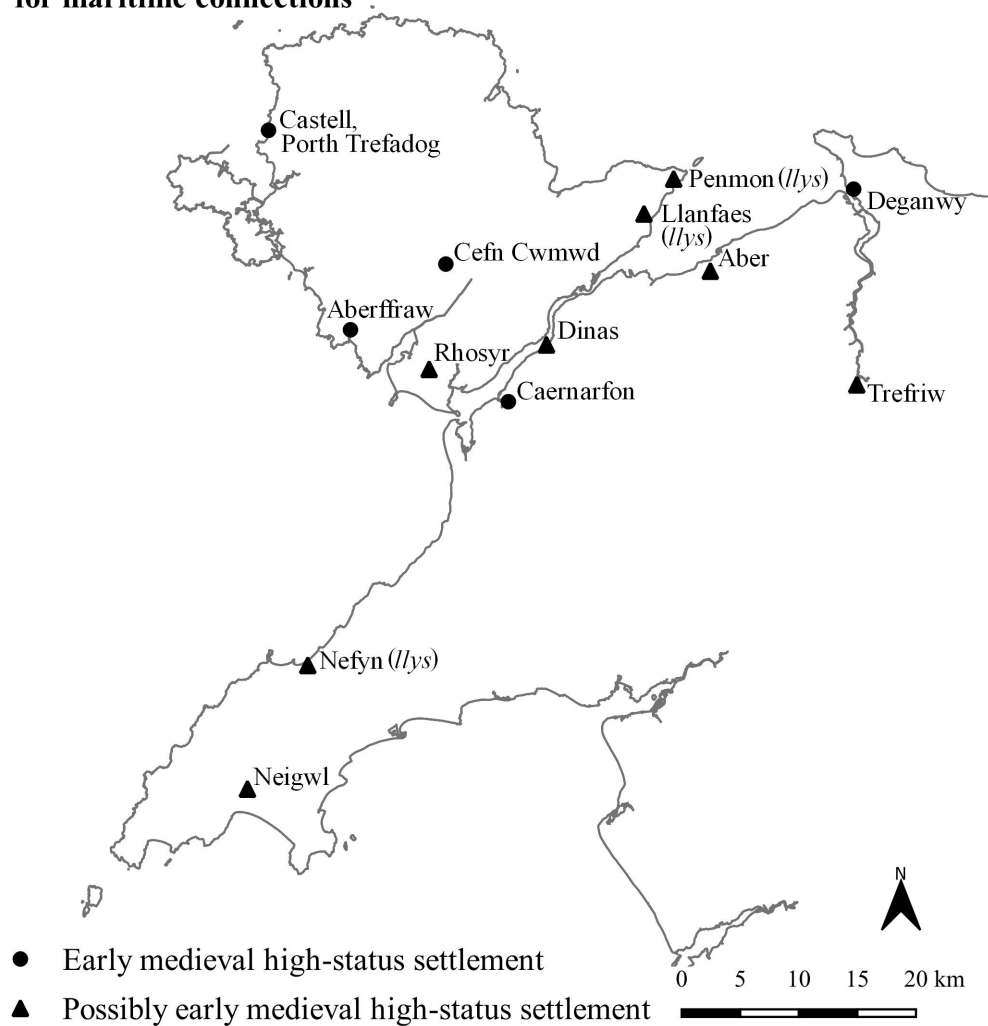
Gwynedd study area: all sites with evidence for maritime connections



4.2.Settlements

4.2.1.High-status settlements

Figure 16
Gwynedd study area: secular high-status settlements with evidence for maritime connections



4.2.1.1.Aberffraw

Aberffraw was an early medieval *llys* on or near the estuary of the Afon Ffraw. It was the chief seat of the medieval princes of Gwynedd, a status that may have had early medieval origins (Edwards 1988, 20; Johnstone and Riley 1995, 17). It may

have been the court of the sixth-century Maelgwn of Gwynedd, whom Gildas terms ‘insularis draco’, the ‘island dragon’ (*De Excidio* §33: Stevenson 1838, 42; Johnstone and Riley 1995, 17), and was certainly a site worth raiding by AD 968 (*Pen.*, *RBH* and *ByS* AD 968: Jones 1952, 8; 1955, 14-15; 1971, 38-9). This is the site of the wedding feast of Branwen, sister of the Welsh king Bendigeidfran, and Matholwch, king of Ireland in the second branch of the Mabinogi; Bendigeidfran makes his way there by land and Matholwch by boat (Davies 2007, 23), suggesting that the site was noted for both its inland and maritime accessibility.

The site of the *llys* remains elusive. A possible rectilinear enclosure in the village of Aberffraw might be a Roman fort re-used in the early medieval period or perhaps an early medieval enclosure (Longley and White 1995, 18-19; Edwards 1988, 20-1), whilst another possible location is suggested by farms sharing the name element ‘Henllys’ almost 2km north of the village (Johnstone and Riley 1995, 22). As the medieval *llys* is thought to have lain near St Beuno’s church at the south-west end of the village (Johnston 1997, 63) and the recorded raid is likely to have arrived by sea, it seems probable that the early medieval *llys* was (at least by the second half of the tenth century) not far from the modern village.

As early church and *llys* sites can be located at some distance from one another, further evidence for an early *llys* at Aberffraw is found in the important early church and ecclesiastical site at Eglwys Ail 3km east-north-east, where a seventh-century stone commemorates a king of Gwynedd and the church’s name is suggestive of antiquity (Johnstone and Riley 1995, 8-9; Edwards 2013, 182; Roberts 1992, 42 – see also Deganwy and Eglwys Rhos, 4.2.1.5).

Aberffraw village lies on the shore of the tidal Afon Ffraw c.1km from open sea at a point where the river can be forded (Edwards 1988, 19), a relatively

defensible site from maritime incursions whilst retaining good maritime accessibility. With Holyhead and Llŷn visible from the site, Caernarfon, Llanfaes and Deganwy accessible through the Menai Strait and Ireland within reach, this *llys* might be argued to be at the maritime heart of Gwynedd.

4.2.1.2. Caernarfon

A *llys* at Caernarfon is implied by the planting of a Norman castle here c.AD 1090, probably within what was to become the upper ward of the later medieval castle at the river's mouth, where a motte has been identified (Johnstone and Riley 1995, 25, 27). The early medieval *llys* may have been in or near the Roman fort of Segontium c.300m from the tidal Afon Seiont, c.700m east-south-east of the castle.

Caernarfon seems to have enjoyed at least legendary importance from an early date – as ‘Caer Segeint’ in the ninth-century *Historia Brittonum* it is said to be the location of the tomb of Constantine, son of Constantine the Great (§25: Morris 1980, 24, 65). In the second branch of the Mabinogi, Bendigeidfran receives news from Branwen in Ireland whilst he is at ‘Kaer Seint’ (Davies 2007, 28; Hughes 2017, 6 lns.212-15), and in the ‘Dream of the Emperor Maxen’ Maxen dreams of, and then visits, ‘Aber Saint, and the castle at the mouth of the river’, and the Roman fort there was built for his bride (Davies 2007, 107-8). Maxen arrives at the site overland, but a potential sea-route from Ireland to Caernarfon is implied by Branwen's story, despite a bird rather than a boat making the journey. The earlier place-name Caer (fort) Saint became Aber (river mouth) Saint, and as the Norman motte was on the estuary this

suggests that an early medieval *llys* may have been situated in or near the Roman fort (Roberts 2005, lxxviii-lxxix, 40-1 n.229).

A bivalve mould and stone ingot mould in the fort may suggest early medieval metalworking (Casey and Davies 1993, 6; Davies 1988, 115-16) but they could also belong to the Roman occupation. A ninth-century silver styca of Eanred from the fort's south-west gate guardroom (EMC 1976.0001; Wheeler 1922, 266; Boon 1976, 79), a hardly-worn silver penny of Cnut (AD 1017-23) from the fourth-century outer ditch near the north-east gate of the fort (Casey 1974, 71; Casey and Davies 1993, 17; EMC 1976.0008; Boon 1976, 79) and a Carolingian coin of Pepin I or II (AD 814-53) from 'Caernarfon' (EMC 1991.0117; E. M. Besly in Cook and Besly 1991, 151-2 cat.no.117 favours Pepin II, AD 839-52) may all have arrived by boat to Caernarfon, as might a bronze horse's cheekpiece found at 'Segontium' and tentatively dated '? Viking' (RCAHMS 1960, lx).

At Ysgol yr Hendre, c.400m east of the fort, is a cemetery including three mortuary enclosures, charcoal from the ditch of one dated cal.AD 540-635 (2 σ :SUERC-41965) and cal.AD 635-70 (2 σ :SUERC-41964), overlain by crop-processing with radiocarbon dates ranging from the late-tenth through to the late-thirteenth centuries (2 σ) (Kenney and Parry 2013, 11, 13, 39-40; Hamilton 2013, 99 tbl.III.9.1). The cemetery may have been associated with St Peblig's church, c.250m south-west (Kenney and Parry 2013, 35-6). The crop-processing may reflect food production for the *llys*. There is no direct evidence for maritime connections, although a lower-status community here might also have seen to the maritime needs of the *llys*.

4.2.1.3.Castell, Porth Trefadog

Castell is a defended promontory on the Anglesey coast north-east of Holyhead, overlooking the potential landing place of Porth Trefadog. An early medieval rectangular structure was built on the promontory at the same time as a remodelling of earlier, probably prehistoric, defences, to create a bank and ditch thirteen metres wide, with the bank standing at least six metres above the bottom of the ditch (Longley 1991, 67-71, 81). All artefacts are of uncertain date – a whetstone and a bronze pin were found in association with occupation layers, and post-abandonment contexts have produced iron nails, two iron knives and a spindlewhorl (Longley 1991, 73-4). The building was later used for ironworking and contains at least five hearths and spreads of charcoal and slag; dates from four of the hearths range from cal.AD 902-1152 (2 σ :CAR-907, CAR-908) to cal.AD 1161-1386 (2 σ :CAR-904) (Longley 1991, 74-6).

Although there are no high-status artefacts and the site is not a known *llys*, the resources required to rework the defences suggest a high-status site (Longley 1991, 81-2), perhaps of a minor lord. David Longley (1991, 82-4) draws the site's closest parallels to Norse reoccupation of Manx promontory forts, suggesting that this site was granted to a Manx or Dublin Viking in exchange for services rendered. There is no evidence for aisles or benches in the Porth Trefadog house, such as those found in Manx examples (Longley 1991, 82-4), perhaps suggesting that it was designed by a traveller who had seen the Manx Norse style and wished to copy it but did not remember all the elements. The location gave the inhabitants good visibility over, and access to, the sea. The later industrial activity may have been sited to take

advantage of maritime connections in transporting raw materials or worked metals to and from the site (see South Hook, Pembrokeshire, 3.2.2.3).

4.2.1.4.Cefn Cwmwd

Cefn Cwmwd is an Iron Age to Romano-British settlement on a ridge c.2.5km west-north-west of the tidal limit of the Afon Cefni; the site consists of at least three buildings and several other structures either side of a pebble trackway, with later (perhaps early medieval?) activity hinted by a gully or drain cutting the wall of one of the structures, and pits encroaching on the trackway (Roberts *et al.* 2012, 30, 58, 63; Waddington 2013, 162). The site may have been more accessible by boat before the draining of Malltraeth Marsh and the canalising of the Cefni.

Early medieval high-status activity is suggested by an imported sherd of fifth- to sixth-century DSPA-ware found in the rubble layers over one of the structures (Roberts *et al.* 2012, 47), an imported sixth- or seventh-century garnet Byzantine intaglio depicting a scorpion in the rubble overlying another (Roberts *et al.* 2012, 57-8; Henig 2012), and a penannular brooch from a post-occupation stone deposit just outside the third structure (Roberts *et al.* 2012, 58, 63). Ewan Campbell (2007a, 78) suggests that the Byzantine intaglio may have come via western France along with the DSPA-ware. The penannular brooch is the only Dickinson's Type G1.7 known in north Wales and is of uncertain date, although Type G1 brooches may date from the fourth to sixth centuries; its best parallel is from Cornwall and the closest find of this type is at Meols (White 2012; Dickinson 1982, 51 tbl.1, 53-7), perhaps indicating that this, too, was a maritime import (note that Nancy Edwards

(2017, 68) suggests that as well as the possibility that this brooch was a maritime import it may perhaps instead have been a local imitation).

4.2.1.5.Deganwy

The *llys* at Deganwy was at two rocky outcrops less than 500m from the mouth of the river Conwy. Eglwys Rhos church, a name suggestive of antiquity (Roberts 1992, 42), lies c.1.5km north-east of Deganwy, which may indicate early origins for both (Johnstone and Riley 1995, 8-9; see Aberffraw, 4.2.1.1).

Early medieval imports at Deganwy consist of B-ware sherds (including at least one sherd of Bi-ware, LRA2) and a glass vessel bodysherd of uncertain type and origin (Campbell 2007b, vessel B31, vessel G82; Alcock 1967, 198). These may have arrived via gift-exchange or trade redistribution from perhaps Pembrokeshire or Cornwall, or with longer-distance travellers.

‘Decantorum’, believed to be Deganwy, was burnt by lightning in AD 811, and destroyed by the Saxons (‘*Saxonibus*’) in AD 822 (*Ann.Cam.* AD 811, 822: Dumville 2002, 8-9, 10-11), and the place-name Vardre (from *maerdref*) in the area of the two hills may indicate the presence of a pre-Norman bond community related to the *llys* (Lane 1988a, 52-3; Johnstone and Riley 1995, 3, 9, 33). A Norman castle built at Deganwy in the later-eleventh century (Orderic Vitalis *Ecclesiastical History* VIII §3: Chibnall 1973, 138-9, 140 n.1) was probably sited to appropriate the site's already-existing status.

The tidal reach of the Conwy penetrates far inland, and Deganwy would have benefited from both riverine and maritime traffic. Maritime connections on the

Conwy near Deganwy are suggested by a coin of Harthacnut found in ‘Conwy’ (EMC 2014.0232) and a sixth- to seventh-century basalt hone found at Llandudno Junction which T. D. Kendrick suggests may have been of Irish or Welsh make, with the carved face decoration considered to be of Irish type (Kendrick 1941, 73; BM collection online 1940,1006.1). Loose parallels to this face-carved hone are found in Ireland and Scotland, at Church Island, Co. Kerry, Broch of Main, Shetland and Portsoy, Aberdeenshire, with a larger example known from Lochar Moss, Dumfries and Galloway (Bruce-Mitford 1978, 367 fig.268, 368 fig.269).

4.2.1.6. Possibly early medieval high-status settlements

Llanfaes may have been the site of an early medieval *llys* on Anglesey towards the eastern end of the Menai Strait. A battle here in AD 817 hints at the site’s importance (*Ann. Cam.* AD 817: Dumville 2002, 10-11; *Pen., RBH* and *ByS* AD 817: Jones 1952, 3; 1955, 6-7; 1971, 12-13). A tenth- or eleventh-century sword pommel similar to that near Pembroke, Pembrokeshire has been found at Llanfaes and could indicate the presence of Welsh, English or Viking warriors and may have Hiberno-Scandinavian associations (Redknap 2000, 50 fig.61; p.68). Tenth-century activity with Hiberno-Scandinavian associations in the vicinity is also suggested by a small fragment of an early-tenth-century broad-band armring found c.200m north-east of Llanfaes church and the cut end of a silver ingot with nicks that suggest a tenth-century date (perhaps later than the armring) found east of the church (Redknap 2009, 35). Both of these objects are suggestive of tenth-century maritime connections at Llanfaes. Early medieval activity is also suggested by an incomplete

sub-circular sandstone bowl found north-east of the church that has been paralleled with a similar (although rectangular) stone bowl re-used in a tenth-century house floor at Llanbedrgoch c.10km east-north-east (Lodwick 2003a). A single fragment of an English coin (possibly of Cnut) associated with medieval coins in the vicinity of the church (over 700 medieval coins were found, suggesting a site of medieval commercial activity) may be present as scrap silver (Besly 1995, 47, 49, 62), and could have been imported to the site at a later date rather than indicating early medieval activity. The construction of a Norman motte and bailey castle at Aberlleiniog between Llanfaes and Penmon (PRN 2570) suggests that this area was strategically important by the later eleventh century (see below and 4.4.2.11 for Penmon). It is possible that Llanfaes, which was a major trade port in the thirteenth century, with fisheries and a ferry across the Strait (Johnstone and Riley 1995, 36; Johnstone 1997, 7), may have already been an important landing and exchange site from at least the tenth century (Redknap 2009, 35), although this does not necessarily mean there was a *llys* here. The church lies c.750m from the current coastline near the place where the stream that runs past Llanfaes meets the sea. This has been suggested to be the site of the port, now eroded (Delaney and Soulsby 1975, sections 4.2.3 and 4.4.2), although there is no direct evidence for this. Erosion has certainly erased evidence for burials seen in this cliff before 1855 (Jones 1855, 80). The burials may have been related to the nearby medieval leper house (Longley and Richards 2000, PRN 2579; Johnstone and Riley 1995, 37), in which case the port being in the same place seems unlikely, but it is possible that the burials were early medieval and overlooked a landing place (see 6.6.1).

A possible early medieval *llys* at Neigwl on the south-east end of Llŷn may have been on Faerdre farm, c.2km from a potential landing place at Porth Neigwl

(Johnstone and Riley 1995, 42-3, fig.26; Gresham 1976, 11). A third of the township seems to have been granted to Clynnog Fawr as early as the later-twelfth century (Johnstone and Riley 1995, 42), suggesting early origins.

There was a medieval *llys* at Nefyn on the north coast of Llŷn (Johnstone and Riley 1995, 39-42). It is uncertain whether there was an early medieval *llys* here but it was certainly an early medieval landing place (4.4.2.10).

Penmon was an important early medieval ecclesiastical site (4.4.2.11) and there may also have been a *llys* here. ‘Penmon Lys’ is mentioned in a note in a thirteenth-century collection of genealogies where Rhodri Mawr’s son is said to be the ancestor of the men of this court (*Achau Brenhinoedd a Thywysogion Cymru* 7[t]: Bartrum 1966, 102; Charles-Edwards 2013, 546), and a raid on Penmon in AD 971 (see p.165) could have been directed at a court as well as the ecclesiastical site. A Norman motte built between Penmon and Llanfaes c.AD 1088-90 suggests a strategically important area (see above). A Sasanian coin metal-detected on intertidal coastland in the vicinity suggests maritime connections (p.147).

There is no evidence for an early medieval site at the medieval *llys* of Trefriw at the tidal limit of the river Conwy (Johnstone and Riley 1995, 54), although its potential for riverine and maritime connections may have made it an attractive site from an early date.

There was certainly a *llys* at Rhosyr between the estuaries of the Braint and the Cefni by the thirteenth century, and the sacking of St Peter’s church here in AD 1157 may suggest earlier activity (Johnstone and Riley 1995, 50; *Pen.*, *RBH* and *ByS* AD 1157: Jones 1952, 59; 1955, 136-7; 1971, 158-9; Carr 1982, 267). Early medieval activity (perhaps with maritime connections) at Newborough c.600m east-north-east of the medieval *llys* and c.500m east-north-east of St Peter’s church may

be indicated by a whetstone that has been likened both to a Viking-age example from Llanbedrgoch, Anglesey and two pre-Viking Irish examples; however, its date is uncertain and it may instead belong to the medieval activity in this area (Rees 2015, section 6.1; fig.18).

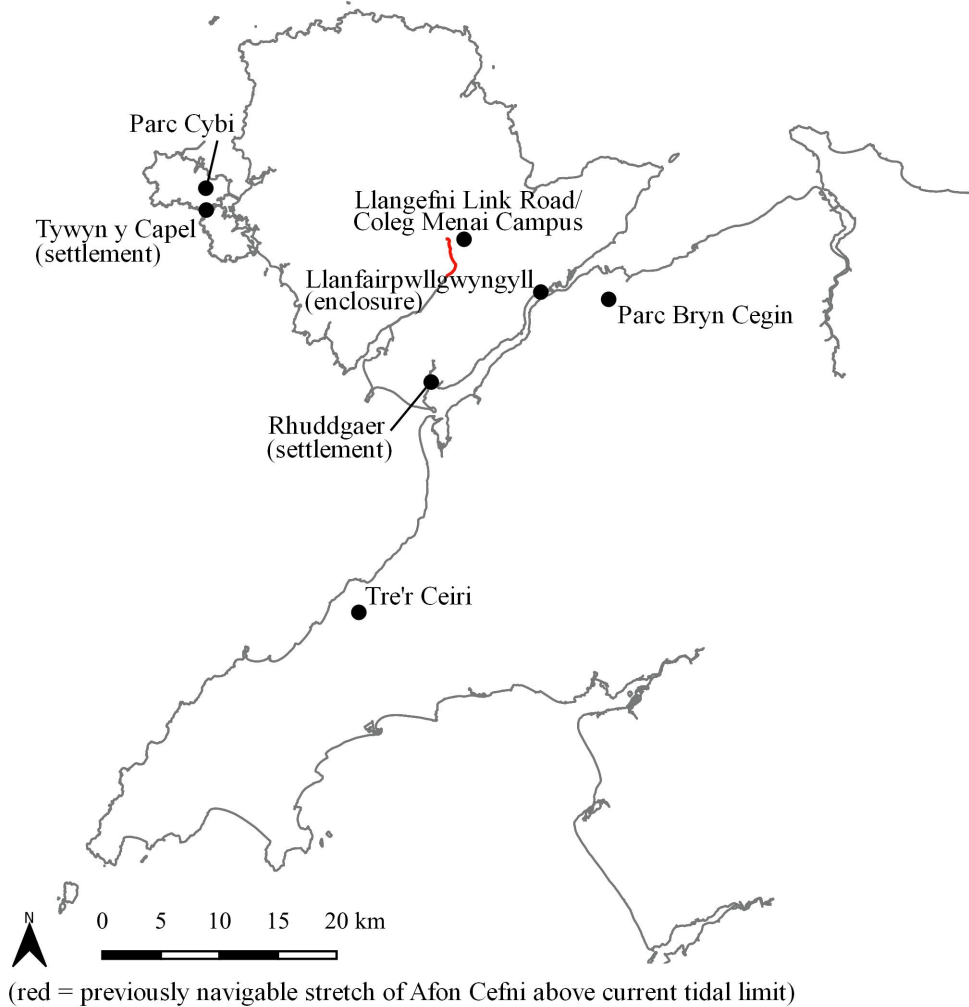
The thirteenth-century *llys* at Aber lay near the mouth of the river Aber, at a place where a prehistoric and Roman routeway descends onto the coastal plain having crossed the uplands from the Conwy valley; a motte stands on the river's west bank, St Bodfan's church being 300m west of this motte (Johnstone and Riley 1995, 13). The distance between church and potential *llys* site could indicate early origins for both (cf. Aberffraw, p.126 and Deganwy, p.131), but this is speculative.

Dinas promontory fort on the mainland side of the Menai Strait is probably Iron Age (Kenney 2012a, 5), but two later rectangular buildings inside the fort and a possible third outside it may be medieval (RCAHMS 1960, 201) or early medieval (PRN 3683). Rectangular buildings inside a highly coastal prehistoric promontory fort is reminiscent of Porth Trefadog (4.2.1.3), hinting at early medieval high-status activity, perhaps with Manx Norse influences.

4.2.2.Lower-status settlements

Figure 17

Gwynedd study area: secular lower-status settlements with evidence for maritime connections



4.2.2.1.Llanfairpwllgwyngyll (enclosure)

A sub-rectangular enclosure with a ditch, an internal bank and evidence of a defensive gateway that was later dismantled (Smith 2012, 24, 27-9, 36) on low-lying land right on the edge of a narrow, shallow area of the Menai Strait at Llanfairpwllgwyngyll is likely to have had maritime connections. The decision to construct a new defended enclosure here when a defensible settlement could have

been situated in an inland promontory fort (PRN 2704) only a short walk inland suggests that the highly coastal location was important.

No structures have been found, but butchered animal bone and crop-processing evidence (Smith 2012, 30; Caseldine and Griffiths 2012, 33-4) suggest occupation. Probable smithing waste, iron slag and iron nails hint at metalworking activity (Smith 2012, 29-30), which may have taken advantage of maritime transport links (see South Hook, Pembrokeshire, 3.2.2.3). Radiocarbon determinations for the enclosure date from AD 1025 through to the third quarter of the twelfth century (2σ: Smith 2012, 35), suggesting that the enclosure is independent of a tenth-century ringed pin found in the churchyard c.130m to the east (p.149).

George Smith (2012, 36) suggests that difficult currents in this area make it an unlikely ferry location, and that the enclosure may have been sited for the inhabitants to use and protect fishtraps, perhaps ones that belonged to the Bishop of Bangor. Later fishtraps are known to the north-east of this site (Hopewell 2000, PRNs 7221, 14617) and may have had predecessors in the vicinity.

4.2.2.2.Llangefni Link Road/Coleg Menai Campus²

Settlement in the vicinity of the Llangefni Link Road/Coleg Menai Campus cemetery (4.4.3.4) on the east side of Llangefni, c.1.2km from the once-navigable Cefni c.3.5km above its tidal limit (Jones and Jones Rowlinson 2015, 54), is suggested by two pits containing material related to grain drying, with barley, wheat

² I am grateful to Irene Garcia Rovira (Archaeology Wales) and Richard Madgwick (Cardiff University) for correspondence concerning, and access to preliminary information on, these sites.

and oat identified (charred material from one has been dated cal.AD 600-65 (2σ:UBA-39643), and from the other cal.AD 669-770 (2σ:UBA-39644)), as well as a possible corn dryer and an undated pit containing animal bone (perhaps secondary food waste) sealed by a stone surface incorporating six quern stones (Joyce 2019: 14-19; Hunter Dowse 2018; Parry *et al.* 2017, 17 tbl.5.1.1, 24). There is a small amount of evidence for industrial activity near the site, suggested by low levels of hammerscale and fragments of slag (Joyce 2019, 28). Maritime connections are suggested by isotope indications of the presence of individuals with non-local origins in the cemetery and a non-local sheep, and a brooch that may be a maritime import (4.4.3.4; Faillace and Madgwick 2019b, 8, 13).

4.2.2.3. Parc Bryn Cegin

Parc Bryn Cegin lies to the east of Bangor Mountain, c.2.5km from the Menai Strait. There is sixth- to seventh-century iron-smithing and crop-processing here (Flook and Kenney 2008, 75, 79-80; Marshall *et al.* 2008, 200-201), as well as a corn dryer with a date range of the late-tenth to mid-thirteenth century, and another dryer perhaps contemporary with this (Schmidl *et al.* 2008, 131; Marshall *et al.* 2008, 201; Kenney 2008, 116). Peter Crew (2008, 120) suggests that as the metalworking evidence is purely for smithing, the iron was probably brought to the site as partly-refined billets or bars. A small piece of coal might be intrusive (Flook and Kenney 2008, 75) but if it indicates the use of coal as fuel it may have been imported from Anglesey (Crew 2008, 120).

Transportation of partly-refined metal to this site for smithing suggests it may have been linked to other sites in an organised metalworking production chain. A predicted Roman road runs just to the east of the site (Hopewell 2007, Map 97), heading for the coast and passing an early medieval cemetery at Llandygai c.800m north in an area of prehistoric activity described as a 'natural meeting place of land and sea routes' (Houlder 1968, 219). The early medieval activity at Llandygai on the line of the routeway linking Parc Bryn Cegin to the coast suggests early medieval use of this routeway and hints at maritime connections for the postulated metalworking production chain, especially given the possible provenance of the coal.

4.2.2.4. Parc Cybi

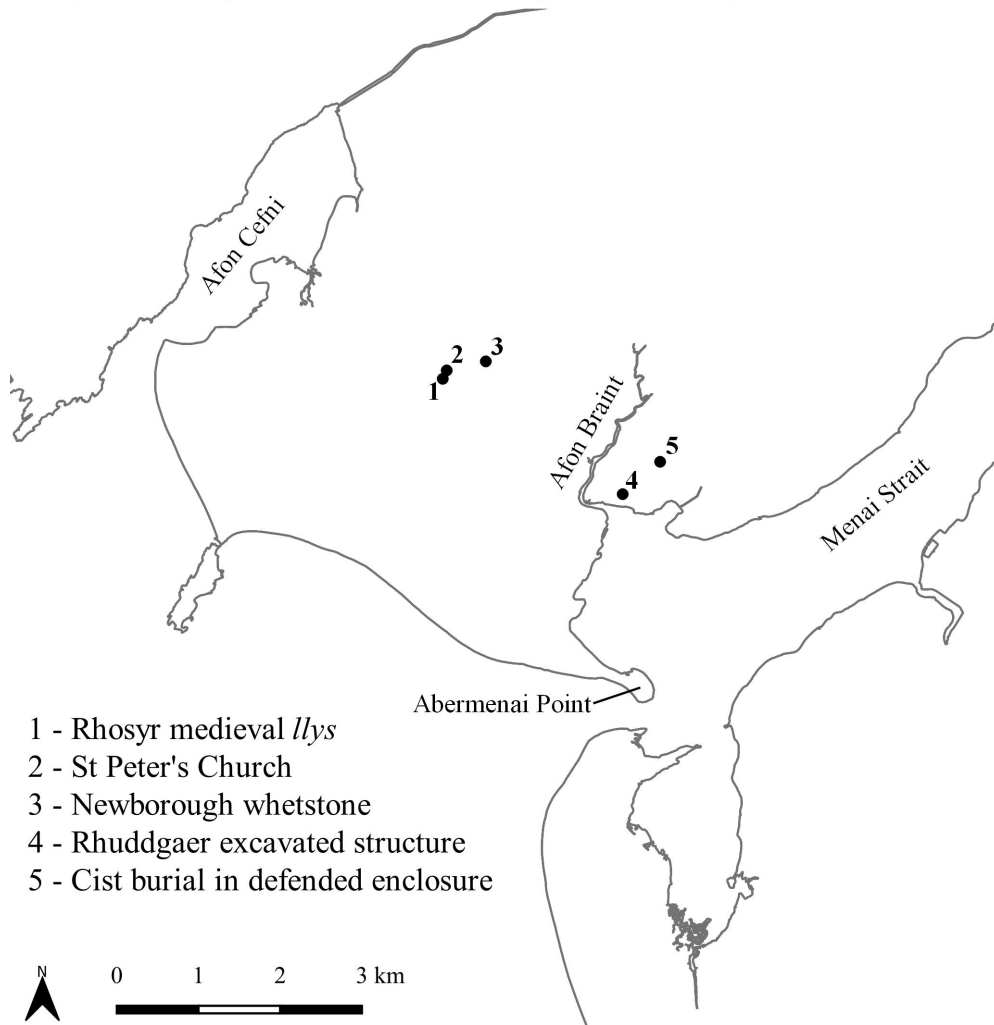
Parc Cybi lies c.950m from Penrhos Beach on the east side of Ynys Gybi; it is an early medieval cemetery with possible later evidence for early medieval crop-processing and metalworking, although both are undated and may belong to later periods (Kenney *et al.* 2011, 108-109; Young and Kearns 2011, 105, 107). An Iron Age to Romano-British settlement at the base of the hill on which the cemetery stands might have seen early medieval occupation (Kenney *et al.* 2011, 102), although this is conjectural. Slag could be early medieval or earlier, and a large smithing hearth cake which would date to the thirteenth century if found in England but could indicate early medieval activity if found in Ireland (Young and Kearns 2011, 107, 108) may suggest that there was early medieval ironworking here with links to Irish practice, perhaps as a direct result of maritime connections at the nearby landing place of Penrhos Beach.

4.2.2.5. Rhuddgaer (settlement)

At Rhuddgaer on the Afon Braint estuary, Anglesey, at the south-western end of the Menai Strait (fig.18), two roughly contemporary early medieval field systems incorporating a nucleated settlement of at least eight, and possibly ten, sub-rectangular buildings in their field boundaries are truncated by the sea (Hopewell and Edwards 2017, 219, 231). One building (c.150m from the current coastline) was excavated and is thought to have been used for domestic occupation and later as an animal shelter, with radiocarbon determinations suggesting a potential date range of activity from the mid-fifth to the mid-tenth centuries, the most stratified of these dates, cal.AD 660-770 (2 σ :SUERC-63636), coming from what is thought to have been the building's floor either during or just after the main period of use (Hopewell and Edwards 2017, 230-3; 238-9). Potential material culture links with Ireland might be seen in flint flakes that may have been early medieval strike-a-lights and a stone with a pecked circular hollow that has been tentatively identified as an oil lamp, as at Garryduff, Co. Cork, where stone lamps were found in a context that also contained E-ware (Hopewell and Edwards 2017, 228; Edwards 1990, 96; Collins and Proudfoot 1959, 98; Williams 1984, 42, 46; O'Kelly 1963, 88).

Just over 600m north-east of the excavated building, within the ramparts of an Iron Age/Romano-British defended enclosure, a cist found c.1821 may be Bronze Age (Williams 1861, 37-8; Longley and Richards 2000, 15), but the settlement at Rhuddgaer raises the possibility that it was early medieval, perhaps the sole find from an otherwise undisturbed cemetery. If so it is interesting that the settlement is closer to the shore than the burial (see fig.18), perhaps indicating more importance being placed on maritime proximity in life than in death.

Figure 18
Gwynedd study area: detail of Rhuddgaer and Rhosyr



Although the field system indicates agricultural activity the settlement's location suggests a maritime element to the inhabitants' lives as well. The Afon Braint estuary is probably the site of the port of Abermenai (IHBW 404304), a key landing place named multiple times in the *Life* of Gruffudd ap Cynan, including when Gruffudd seizes it as an important blow against the then-ruler of Gwynedd, Trahaearn ap Caradog, and when he bequeaths its harbour dues to his wife (§15, §35: Russell 2005, 66-7, 88-9), and an embarkation point for Ireland in the second branch of the Mabinogi (Davies 2007, 27). This suggests high-status interests, although the nearest known possibly early medieval high-status settlement site is just over 2.5km inland at Rhosyr (pp.134-5, fig.18). The distance between Abermenai

and Rhosyr may have protected Rhosyr from sudden raiding by sea and enabled those who worked at the landing place to be fairly independent. A lower-status maritime community at Abermenai (probably including the inhabitants of Rhuddgaer) may therefore have had what Christopher Loveluck (2017, 316) has termed a ‘symbiotic relationship’ with the ruling powers at Rhosyr, seeing to the maritime needs of the high-status individuals who in turn provided prestige and protection.

4.2.2.6. Tre’r Ceiri

Tre’r Ceiri is a stone-walled Iron Age hillfort with Romano-British occupation c.2.5km from the north coast of Llŷn, with over 150 huts inside the fort, and over twenty curvilinear enclosures outside (Waddington 2013, 220-1; Hogg 1960, 14-15). The hillfort commands a wide view of the north coast of Llŷn, over the sea towards Anglesey. A bone comb with circle and dot decoration found inside one of the structures (Baring-Gould and Burnard 1904, 10) has been likened to examples from Llanbedrgoch, Anglesey, raising the possibility that there was early medieval occupation here and even that some of the later structures adjoining the roundhouses could be early medieval (Waddington 2013, 110, 223, who draws possible parallels with cellular buildings on Gateholm, Pembrokeshire (3.2.1.6.2) and Orkney). The comb could be of Roman or early medieval date, with the possible early medieval occupation at Tre’r Ceiri perhaps dating to the seventh century (pers. comm. Kate Waddington). The comb’s Llanbedrgoch comparisons may hint at the movement of

artistic influences or objects by sea, although this need not indicate direct maritime connections at Tre'r Ceiri.

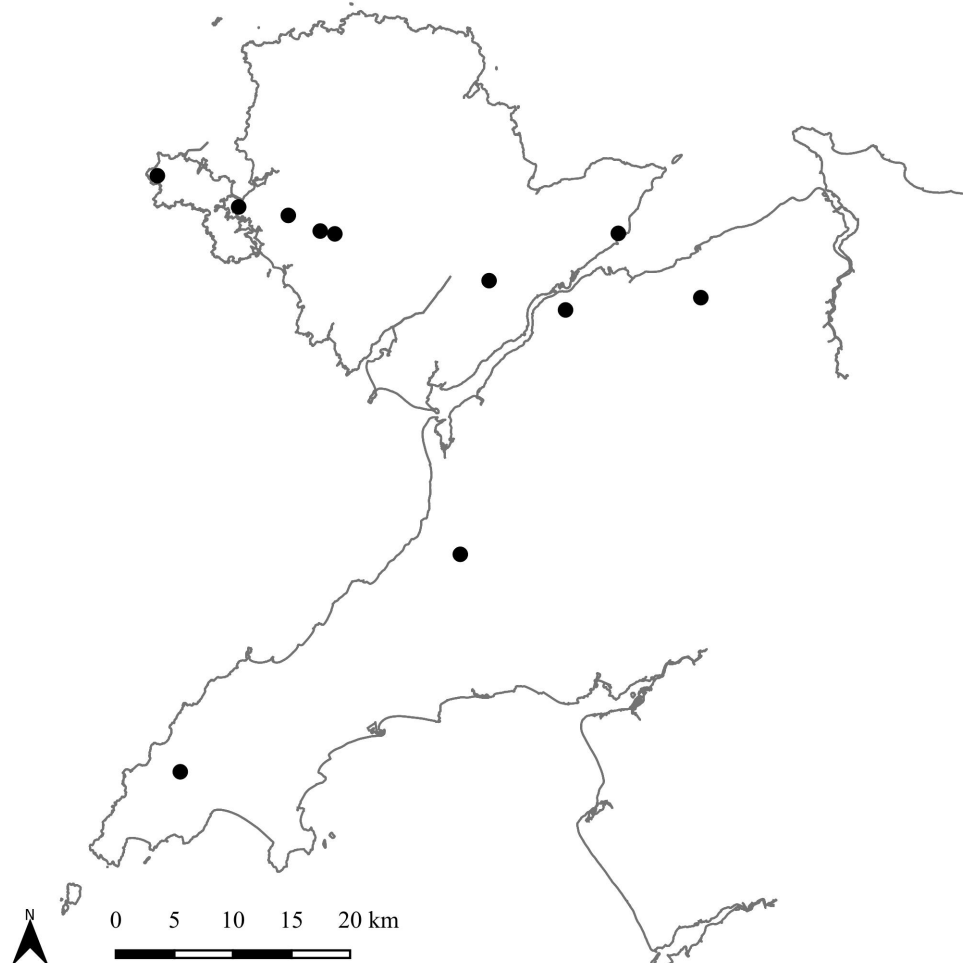
4.2.2.7. Tywyn y Capel (settlement)

Occupation preceding the cemetery overlooking a potential landing place at Tywyn y Capel (4.4.2.15) is suggested by a buried soil containing small quantities of animal bone (cattle and pig teeth, and a cattle scapula and sheep scapula showing signs of butchery) along with wood charcoal dated cal.AD 547-655 (2σ:Beta-204435) (Davidson 2009, 174-5, 180-1).

4.2.2.8. Lower-status settlements without evidence for maritime connections

As figure 19 shows, many sites of early medieval settlement and settlement-related activity in the coastal areas of Gwynedd have no evidence for maritime connections.

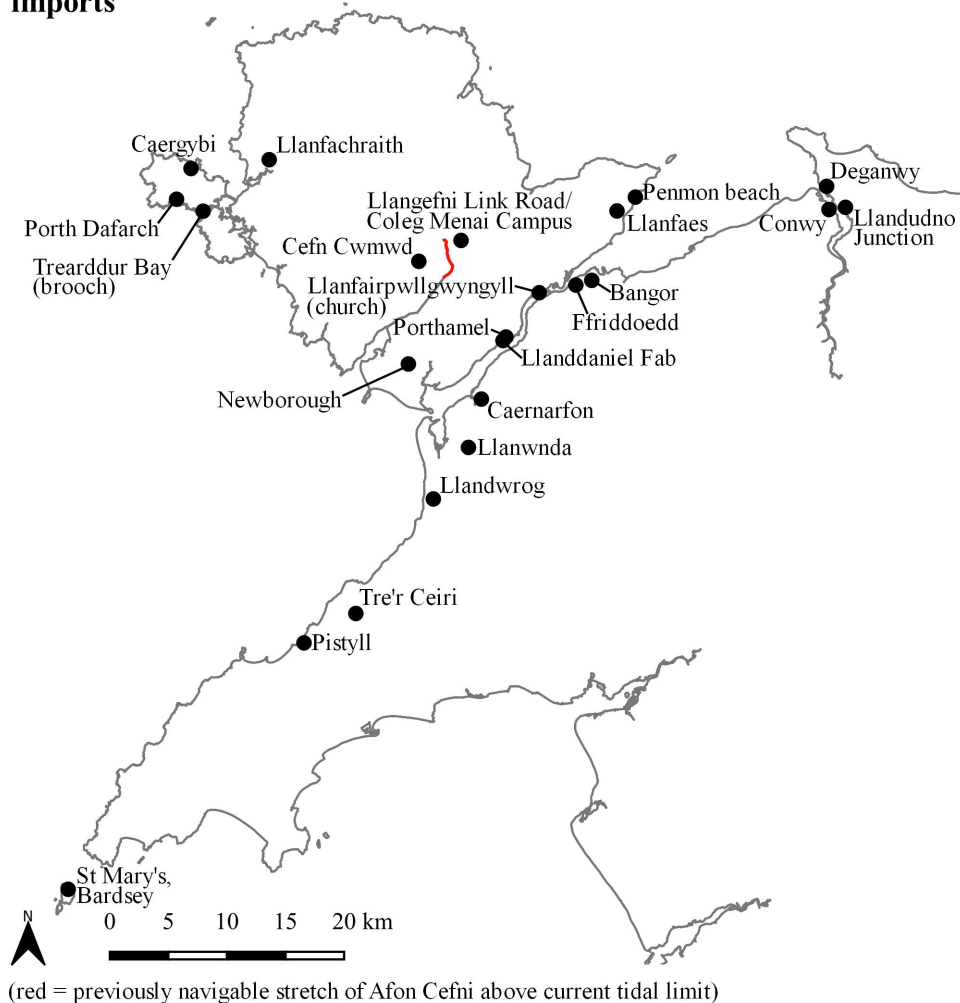
Figure 19
Gwynedd study area: secular lower-status settlements without
evidence for maritime connections



4.3.Imports

Figure 20

Gwynedd study area: findspots of probable and possible maritime imports



4.3.1.The Mediterranean and Continental trades

The B-ware and imported glass at Deganwy (4.2.1.5) almost certainly arrived by sea into the mouth of the Conwy. The DSPA-ware and Byzantine intaglio at Cefn Cwmwd (4.2.1.4) would have arrived by sea to Anglesey and may have been brought closer to the site up the tidal Afon Cefni.

4.3.2. Merchants' weights

A lead weight capped with a recycled copper-alloy mount with millefiori and enamelled decoration was found near Porthamel farm, Anglesey, just under 300m from the Menai Strait (M. Redknap in Geake 2003, 214; Flook and Flook 2013, 18-19). The style of metalwork capping the weight has been closely paralleled with a recycled ninth-century Insular enamelled mount offcut capping a weight found at Llanbedrgoch, Anglesey, and similar decoration has been found in Oseberg, with similar weights found in Dublin and in a Viking grave from the Inner Hebrides (M. Redknap in Geake 2003, 215; Redknap 2000, 61 fig.82; 1995, 65, 66 fig.4b). Two other possible weights were found nearby: a lead 'loaf-shaped' weight with a possible broken central attachment, which may be early medieval and has been likened to some of the Llanbedrgoch weights, and a possible copper-alloy medieval coin weight (Flook and Flook 2013, 20). The weights are suggestive of trade with maritime connections and perhaps with Viking/Hiberno-Scandinavian associations. Closer to the shore the Llanddaniel Fab cast copper-alloy object (a 'decorative fitting') with decoration typical of eighth- or early-ninth-century fine Irish metalwork (M. Redknap in Flook 2014) is also suggestive of maritime connections, perhaps prior to Viking-age economic activity in this area.

The Porthamel weight was found in a field named Bryn Beddau (Hill of Graves) (OS 6" 1888 Anglesey XXIII.NW). Although the presence of early burial is uncertain (Flook and Flook 2013, 21-3) this may be another example of an early medieval burial site close to a landing place.

4.3.3.Coins

There are eight sites in the Gwynedd study area with imported coins. Three of these sites have already been discussed, with coins of Eanred, Cnut and Pepin I or II at Caernarfon (4.2.1.2), a Harthacnut coin at Conwy (pp.131-2) and a possible Cnut coin fragment at Llanfaes (p.133).

There are three other isolated coin finds indicating maritime movement in Gwynedd. A silver penny of Edward the Martyr (AD 975-8) was found inside the fort/churchyard at Caergybi (Dolley and Knight 1970, 80-1), overlooking a probable early medieval landing place (4.4.2.2). A tenth-century silver penny of Edgar was placed in the mouth of one of the individuals buried on Bardsey island (p.153). A silver Sasanian drachm of Xusro II (AD 590-628) was found on Anglesey (Herepath 2002). The exact findspot of this last coin is unclear, since on the PAS database its grid reference is within the Llanddyfnan community in the centre of the island, but its findspot is also recorded as 'Penmon Beach', with the land-use given as intertidal coastland (Herepath 2002). The find was recorded eighteen years ago and it was not possible to resolve this discrepancy with certainty. However, Penmon beach seems the more likely of the findspots, given the land-use data, the fact that the find would certainly have arrived by sea, and the proximity to early medieval activity at Penmon and Ynys Seiriol (4.4.2.11, 4.2.1.6, 4.4.1.2). The grid reference in Llanddyfnan community (SH4278) may be the result of an inputting error, since if the first digit is changed to a 6 (SH6278), a location just down the coast from Penmon is indicated. The findspot of the Sasanian drachm is therefore considered to be Penmon beach, with the understanding that this could refer to a fairly long stretch of coastline in the vicinity of Penmon. Two tenth-century coins of Edgar found in the same area as the

Berllan Bach burials, Bangor (4.4.3.1) may also be isolated finds, although ‘other similar coins’ found here previously might indicate a scattered hoard (Anon 1846, 276).

A definite hoard in Bangor, deposited c.AD 925 not far from the Berllan Bach burials (possibly in the vicinity of the present HSBC bank, 274 High Street), contained part of an ingot, a fragment of a silver Hiberno-Scandinavian armband, five Samanid dirhams (one an imitation, perhaps by the Khazars), three coins of Edward the Elder (one a Scandinavian imitation) and five coins from Viking York (Boon 1986, 93-7, 94 n.1). In the community of Llandwrog a hoard deposited c.AD 1020-30 near the Afon Llifon and within 1km of the coast at the top of Llŷn contained Hiberno-Scandinavian and English coins and bullion, the nicks on the ingots testifying to their use in commercial transactions with one of the ingots close in weight to the Irish Sea region ounce and the Dublin ounce; the mixed nature of the hoard is paralleled by bullion and coin hoards on Mann (Domscheit 2015; E. Besly in Domscheit 2015; M. Redknap in Domscheit 2015). The Llandwrog hoard may indicate an otherwise unknown beach market on the nearby coast.

Both hoards suggest maritime connections with Viking and Hiberno-Scandinavian economic routes, and as the concealment of hoards is unusual in early medieval Wales their deposition may have been by individuals who travelled by sea themselves.

4.3.4. Artefacts with origins in, or influence from, Ireland

Some artefacts (or the cultural influences behind their manufacture) may have originated in Ireland. The Porthamel merchants' weights, the Llanddaniel Fab object with decoration typical of eighth- or early-ninth-century fine Irish metalwork, the Bangor and Llandwrog hoards, the whetstone at Newborough near Rhosyr, the hone at Llandudno Junction and the sword pommel, armring and ingot at Llanfaes have been previously discussed (4.3.2, 4.3.3, 4.2.1.6, 4.2.1.5).

In the community of Llanwnda and c.2km from Foryd Bay, a potential landing place at the western mainland end of the Menai Strait, a tenth- or eleventh-century sword pommel comparable to those at Llanfaes and near Pembroke could indicate the presence of Welsh, English or Viking warriors and may have Hiberno-Scandinavian associations (Lodwick 2003b; Redknap 2000, 50 fig.61; pp.68, 132).

During grave digging at St Mary's church, Llanfairpwllgwyngyll, c.100m from the Menai Strait, the shaft of a tenth-century ringed pin closely paralleled to Dublin examples was found c.130m east of the later early medieval settlement (4.2.2.1; Fox 1940; Redknap 2007, 87). Its presence may hint at a nearby landing place.

A ninth-century zoomorphic penannular brooch from Trearddur Bay (the location of Tywyn y Capel early medieval cemetery, 4.4.2.15) has loose parallels in Scotland and Ireland (Lewis 1982, 151-3; NMW Collections Online 80.102H) and may have been lost in the course of this bay being used as a landing place.

4.3.5.Stone

Sites with possible evidence for maritime movement of stone in the Gwynedd study area are Bangor (4.4.3.1), Bardsey (4.4.1.1), Ffriddoedd (4.4.2.5), Llanfachraith (4.5.1) and Pistyll (4.5.4).

4.3.6.Other

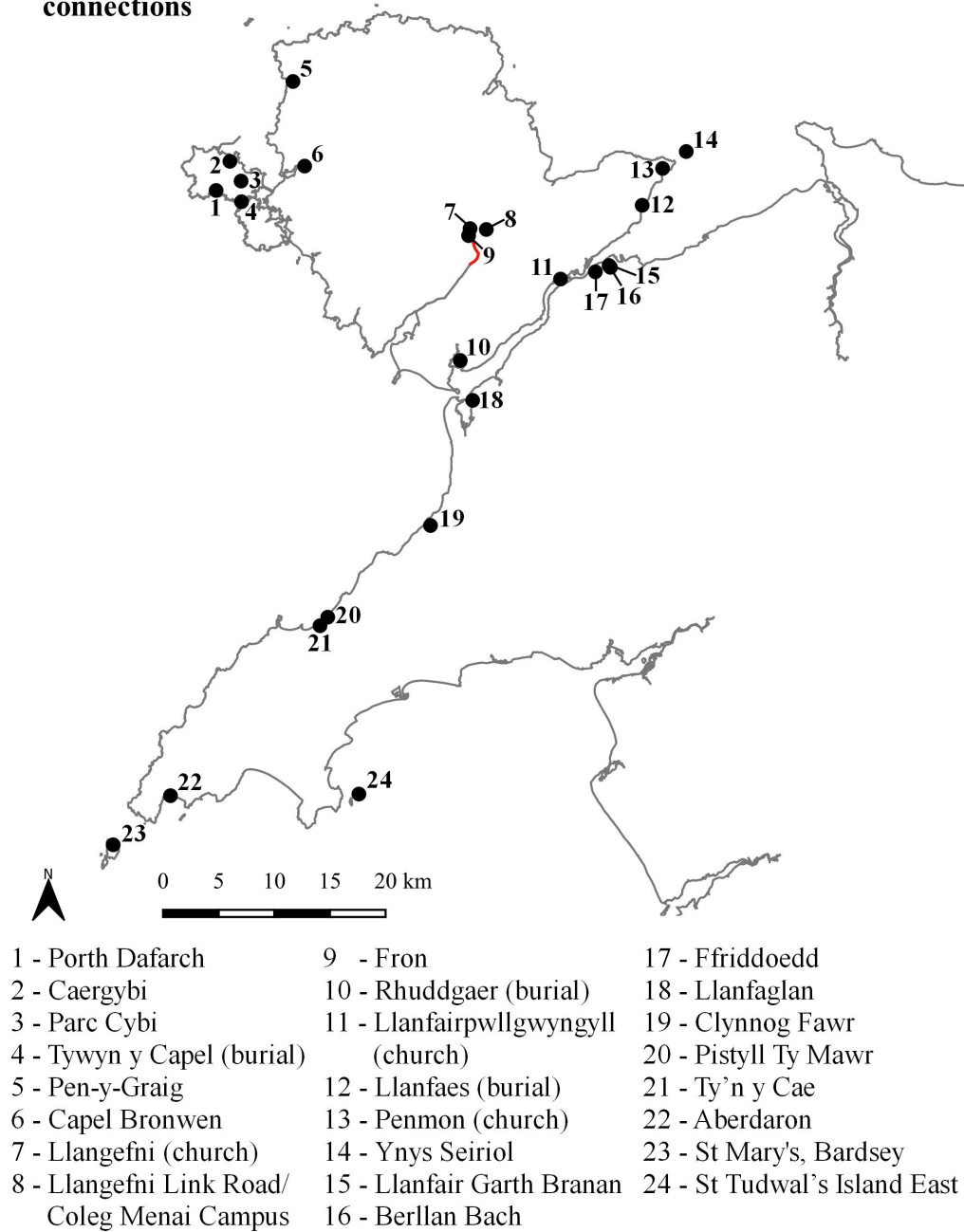
The possible maritime connections outside potential Irish connections of the Llandudno Junction hone, the penannular brooches at Cefn Cwmwd and Llangefni Link Road/Coleg Menai Campus, the sword pommels at Llanfaes and Llanwnda and the Trearddur Bay brooch have been previously discussed (4.2.1.5, 4.2.1.5, 4.2.2.2, 4.4.3.4, 4.2.1.6, 4.3.4).

At the Ynys Gybi burial site of Porth Dafarch (4.4.2.13), a potential landing place, a zoomorphic penannular brooch of Fowler's Type F could be late-Roman (N. Edwards in Waddington 2013, 173) but may be fifth- to sixth-century, perhaps made in the West Midlands (Youngs 1989, 31 cat.no.15). This is a probable maritime import, although one preceding the period of this study.

Isotope analysis on a sheep from the Llangefni Coleg Menai campus excavation suggests that it was likely to not be local to Anglesey (Faillace and Madgwick 2019b, 8; 4.2.2.2). It is therefore suggestive of maritime movement, whether the sheep was brought by boat or was swum across to the island.

4.4.Burial sites

Figure 21
Gwynedd study area: burial sites with evidence for maritime connections



(red = previously navigable stretch of Afon Cefni above current tidal limit)

4.4.1. Islands

4.4.1.1. St Mary's, Bardsey

Cists and plain-dug burials of adults and juveniles and both males and females are recorded from several sites in the vicinity of St Mary's Abbey on Bardsey, which is c.300m from the nearest coast (Wynn 1876, 152; Arnold 1998, 105-110; Kenney 2016, 4-6; Kenney and Hopewell 2016, PRNs 59949, 59959-61, 59968, 61120; Thomas 2015, 32). A tenth-century coin and seventh- to ninth-century probable grave marker (see below) indicate an early medieval date for at least some of these burials.

A tenth- or eleventh-century cross-shaft associated with the abbey (CN12) is made from stone brought 80km by sea from south-eastern Anglesey (Horák in Edwards 2013, 259; Edwards 2013, 259-61), and the stone of the seventh- to ninth-century cross-carved probable grave marker (CN11) may also have arrived on the island through human agency (although it may instead derive from glacial deposits) (Horák in Edwards 2013, 257; Edwards 2013, 257-8). The distance travelled by CN12's stone could indicate the request of a patron, although it may instead have arrived as ballast in the hopes of an opportunistic sale. CN11's stone may also have travelled to the island as ballast, then either bought or abandoned. CN12's decoration has possible parallels in Ireland, at Llanfachraith, Anglesey, St Dogmael's, Pembrokeshire and in Mann, and the vertical inscription has been likened to Manx Viking cross-slabs (Edwards 2013, 259-60). As well as Welsh parallels, CN11 has a good parallel with a monument from Knock Sharry, Mann (Edwards 2013, 258).

The tenth-century silver penny of Edgar in the mouth of an adult male aged 40-50 (Grave 25: plain-dug, edge-set stones around edge) also hints at Manx links as it is a rite paralleled in the Irish Sea only at St Patrick's Isle, Mann (it may also indicate direct links with Viking-age Scandinavia) (Arnold 1998, 101, 106; Graham-Campbell 2002, 94; p.325). The integration of this individual within the cemetery suggests a community open to maritime movement of people and traditions.

Frequent trips between island and mainland can be expected, especially since the ecclesiastical site on Bardsey probably had close links with its nearest mainland ecclesiastical site, Aberdaron (4.4.2.1), with whom an agreement made in AD 1252 implies a previous connection (RCAHMW 1964, 17; Longueville Jones 1847, 67-9; Record Commission 1838, 252). Even the short journey to Llŷn, however, would have required the presence of a skilful maritime community, since the tidal races and currents in Bardsey Sound are notoriously complex and dangerous (Smith 2016; North West Venturers Yacht Club 2017, 18-19). Bardsey's Welsh name, *Ynys Enlli* ('island in the currents') refers to and warns of these navigational dangers.

Bardsey's status as a major pilgrimage destination may have early medieval origins, since relics of St Dyfrig and St Elgar were translated from here to Llandaf, Glamorgan in AD 1120 (Jankulak and Wooding 2010, 18-19), suggesting that by this date Bardsey was already an important pilgrimage site from which Llandaf hoped to glean popularity.

4.4.1.2. Ynys Seiriol

Ynys Seiriol lies off the south-east tip of Anglesey. It is a likely early medieval ecclesiastical site, hosting a religious community of ‘hermits’ by at least AD 1188 (Giraldus Cambrensis *Itinerarium Cambriae* II.7: Thorpe 1978, 190). The early medieval relationship between Ynys Seiriol and Penmon on the mainland (4.4.2.11) may have been that of hermitage and principal site (Davidson *et al.* 2002, 7).

A small structure pre-dating and immediately east of the probably mid-twelfth-century tower may have been comparable in style to early Irish oratories (RCAHMW 1937, 141; Hughes 1901, 94, 96; 1934, 44-6). Above an east-west burial of an adult (possibly male) in a rock-cut hollow under this structure, knees bent to fit within the structure’s walls, a 1ft-thick layer of beach pebbles and marine shells (mostly limpet, whelk, oyster and periwinkle) contained five large stones, laid flat (Hughes 1901, 97-8; 1934, 44). The flat stones may have been to cap the grave, and the beach pebbles and marine shells may reflect deliberate deposition and maritime associations (cf. Whitesands Bay, Pembrokeshire, 3.4.2.18). The grave might be that of a saint or founder (Davidson *et al.* 2002, 12), the bent knees suggesting interment or re-interment post-dating the structure’s construction. Burials outside the small structure, the majority plain-dug although there was also a cist and one at least partially rock-cut, are aligned varying degrees north of east (Hughes 1901, 101-3, Sheet V; P.J. White in Hughes 1901, 106-8) and may therefore pre-date the small east-west structure. Shells in the upper layers of some of these burials (P.J. White in Hughes 1901, 106-7) are likely to be accidental inclusions.

The *Annales Cambriae* entry for AD 630 records Cadwallon being besieged on Ynys Seiriol, named ‘*insula glannauc*’ (Gough-Cooper 2012, §211). This early

name seems to derive from Glannog, a legendary Welsh king whose son, Helig ap Glannog, lost his kingdom to the sea (Thorpe 1978, 190 n.369; Bromwich 1950, 230). Perhaps, traditionally, the island was thought to be a hill within this lost kingdom. It is uncertain whether Cadwallon ap Cadfan, king of Gwynedd, was besieged on an inhabited or uninhabited island, or whether the island's associations were secular or ecclesiastical at this date.

Early medieval use of the small island of Ynys Seiriol required maritime activity, and the possible Irish building-style comparisons and marine shells associated with the east-west burial hint at further maritime connections.

4.4.1.3. St Tudwal's Island East

St Tudwal's Island East lies off the north-east point of Llŷn. Four east-west aligned burials beneath the north-east to south-west thirteenth- or fourteenth-century stone church may belong to an earlier phase, although whether as recent as the medieval period or as old as the Roman is uncertain (RCAHMW 1964, 48; Longley and Richards 2000, PRN 4009; D.B. Hague in Hurst 1964, 248). Early medieval ecclesiastical activity is possible but not proved (Davidson *et al.* 2002, 15). The two Tudwal's islands protect the anchorage of St Tudwal's Road (RCHAMW 1964, 48), and passing maritime traffic may have encouraged activity on the islands.

4.4.2. Mainland coast-edge burials

4.4.2.1. Aberdaron

At Aberdaron on the end of the Llŷn Peninsula, displaced, undated bone exposed after a collapse of the sea wall that bounds the churchyard, including a fragment from beneath the level of the wall, could indicate burials lost through erosion (Longley and Richards 2000, PRN 7240; GAT 1996, 2). Given the likelihood of an early medieval ecclesiastical site here (Davidson *et al.* 2002, 57), at least some of these burials may have been early medieval.

The church's dedication to St Hywyn may reflect real or perceived links with Brittany (*Bonedd y Saint* §20: Bartrum 1966, 57; Roberts and Davidson 2007, section 2.4.4). Aberdaron may have had close links with the early medieval ecclesiastical site on Bardsey (4.4.1.1), and pilgrims heading for Bardsey would have reached the land-limit of their journey here. Aberdaron's late-eleventh-century ecclesiastical community seems to have owned at least one sea-going boat, in which Gruffudd ap Cynan escaped to Ireland, later returning it to the same river he had set out from (*Life of Gruffudd ap Cynan* §22: Russell 2005, 74-5). This river was probably the Afon Daron which meets the sea near the church. Aberdaron therefore overlooks a probable early medieval landing place. Some of the ecclesiastics may have been sailors but it is likely that they were aided by a secular maritime community nearby, who may even have crewed the boat Gruffudd ap Cynan is said to have borrowed.

On the west side of Aberdaron bay, Porth Meudwy ('Hermit's Port') is another good landing place, protected from south-westerlies unlike Aberdaron

(Roberts and Davidson 2007, section 2.4.7). It is used today as the embarkation point for Bardsey (Mordaith Llŷn Cyf. 2019), and its name suggests historic links with the ecclesiastical sites on Bardsey and at Aberdaron.

4.4.2.2. Caergybi

Cist graves outside the walls of the Roman fort at Caergybi, Ynys Gybi (Llwyd 1833, 205) may represent a secular early medieval burial ground. An ecclesiastical cemetery was perhaps situated inside the walls, where the Eglwys y Bedd chapel may have marked a grave associated with Cybi (a ‘stone coffin or chest’ containing human bones found under an arch in the north side of the chancel of this chapel is of uncertain, possibly medieval, date, but burial here may have begun in the early medieval period) (Davidson 2017, 6-7; Longley and Richards 2000, PRN 7022; Price 1783, 8). Prior to land reclamation in the early-nineteenth century, the cliff the fort/churchyard and the burials are on stood five metres above the shoreline (Longley and Richards 2000, PRN 7022; Hughes 1930, 356).

In his c.AD 1200 *Life*, Cybi is said to have built a church at Macop (§13: Wade-Evans and Lloyd 2013, 240-1; dating: Edwards 2013, 159), perhaps in Co. Meath (Edwards 2013, 159) or Co. Dublin (Orme 2000, 99), suggesting a close connection between the east coast of Ireland and Caergybi from an early date. Caergybi was an important landing place from at least the Roman period, and the north and south walls of the fort once ran down to the shore to protect beached boats (Gruffydd 1992, 1; RCAHMW 1937, 31). The maritime rewards of this location were presumably worth the dangers. Caergybi was raided at least once, in AD 961

by 'the sons of Amlaibh' (*Pen.*, *RBH* and *ByS* AD 961: Jones 1952, 8; 1955, 14-15; 1971, 36-7), but a silver penny of Edward the Martyr (AD 975-8) found inside the fort/churchyard might signify friendlier maritime contact as well (p.147).

4.4.2.3. Capel Bronwen

In the second branch of the *Mabinogi*, the survivors of the war in Ireland land at Aber Alaw, where Branwen dies and is buried in a four-sided ('*petrual*') grave on the bank of the Alaw (Davies 2007, 33; Hughes 2017, 10 Ins.373-80). The Alaw joins the sea on the west coast of Anglesey opposite Ynys Gybi. Branwen's grave may be inspired by a real-life cist found in the vicinity of the Alaw (Davidson *et al.* 2002, 42), although this could have been Bronze Age rather than early medieval. The presence of Aber Alaw in the second branch suggests a well-known early landing place (cf. Abermenai, p.141), perhaps overlooked by a contemporary burial site.

Although a site named 'Bronwen Chapel' at Yr Arw near the estuary of the Alaw (Hughes 1796, 287; Baynes 1920, 40 no.56) has been associated with AN46, a sixth-century commemorative stone (Longley and Richards 2000, 1, 44), this seems to be a name-induced misunderstanding, since AN46 is recorded as coming from a site named Cappel Bronwen near Ty'n Rhosydd farm much further inland, and is of a stone local to that area (Edwards 2013, 210-16).

4.4.2.4.Clynnog Fawr

At Clynnog Fawr, an important early medieval ecclesiastical site c.500m from the north coast of Llŷn, possible early medieval burials (especially one partial and one complete long-cist) are associated with a rectangular structure (perhaps twelfth-century: Edwards 2013, 265) inside a sixteenth-century mortuary chapel to St Beuno (Longley and Richards 2000, PRN 7316; Stallybrass 1914, 271, 274-8). The site was raided (potentially by sea but probably by land) by Hywel ap Ieuaf (later king of Gwynedd) and ‘the Saxons’ in AD 978 (*Pen.*, *RBH* and *ByS* AD 978: Jones 1952, 9; 1955, 14-15; 1971, 42-3; Bartrum 1993 (2009), 424; IHBW 505057). An eighth- or ninth-century sundial (CN14) probably originally from Clynnog Fawr, although it was found 2-3km north-east of the church, has close parallels with Irish monastic sundials (Edwards 2013, 264-6).

‘*Llan Bevno*’ in stanza four, line 4 of the *Englynion y Beddau* in the Black Book of Carmarthen is probably Clynnog Fawr: ‘*yn yd vna ton tolo, / Bet Dilan Llan Bevno*’ – ‘where the wave makes a noise, / the grave of Dylan is at Llanfeuno’ (Jones 1967, 118-19). This is Dylan Eil Ton, who may have been a Welsh sea-god (pp.263-5). Clynnog Fawr therefore had mythological maritime associations as well as the potential for practical maritime connections.

4.4.2.5.Ffriddoedd

An extended adult inhumation and other human bone including a second skull were found at Ffriddoedd, south-west of Bangor, on a ridge with views of the Menai Strait

c.500m away (Hughes 1938, 262-4; Edwards 2013, 256). ‘Numerous’ shells (oyster, cockle and ‘ordinary snail’) found during the excavation (Hughes 1938, 264) may have been deliberately deposited, although since no direct association with the burials was noted they could simply indicate a favoured dinner-place for birds. A tenth- or eleventh-century carved stone found here (CN10), perhaps a hogback grave cover, resembles Silurian sandstones (Edwards 2013, 256; Horák in Edwards 2013, 256) and may have been transported by boat round the coast from beyond the Conwy to the east, perhaps as ballast. The only definite hogback in Wales is at Llanddewi Aberarth in Cardigan Bay (5.4.1.2). Nancy Edwards (2013, 257) has suggested that the presence of CN10 and the fact that situations overlooking the sea were favoured for ‘Viking pagan burials’ could mean that burials here are indicative of a ‘Viking mercantile community’ at Bangor. Although Bangor is likely to have had contact with Viking and Hiberno-Scandinavian trade routes (p.148), not all mercantile activity there was necessarily Viking, and neither are the burials in a potential cemetery at Ffriddoedd, even if the hogback marked the grave of an individual with a Scandinavian cultural background. Stephen H. Harrison (2007, 175-6) has demonstrated that although there was a bias towards coastal locations in furnished insular Scandinavian burials, some of these locations were previously used for burial by ‘indigenous groups’. Similarly, this current study has shown that maritime proximity in death was not confined to ‘Viking’ burials in early medieval Wales (6.6.1), and that the presence of CN10 is more likely to indicate the burial-ground of a multicultural community than that of a distinct cultural group (6.6.2).

4.4.2.6.Llanfaes (burial)

Potentially early medieval burials overlooking a possible landing place have been recorded eroding out of a cliff near Llanfaes, which may have been the site of an early medieval *llys* and seems likely to have been a site of maritime-linked exchange from at least the tenth century (pp.132-3).

4.4.2.7.Llanfaglan

A late-fifth- or first-half of the sixth-century commemorative stone (CN24) used as a lintel in Llanfaglan church (Edwards 2013, 280), c.150m from the mouth of Foryd Bay at the western mainland end of the Menai Strait, may indicate an early medieval cemetery overlooking a probable landing place. Cropmark enclosures surrounding the church may be late prehistoric or medieval (Driver and Davidson 2005) and perhaps had an early medieval phase. Fishtraps at the mouth of Foryd Bay may have been related to the medieval church (T. Driver 2009 in Coflein 408635; Hopewell 2000, section 6.4, PRN 14601), and could potentially have had early medieval predecessors.

4.4.2.8.Llanfair Garth Branan

Burials at Llanfair Garth Branan, Bangor, c.600m from the Menai Strait are discussed in section 4.4.3.1 along with other sites in Bangor.

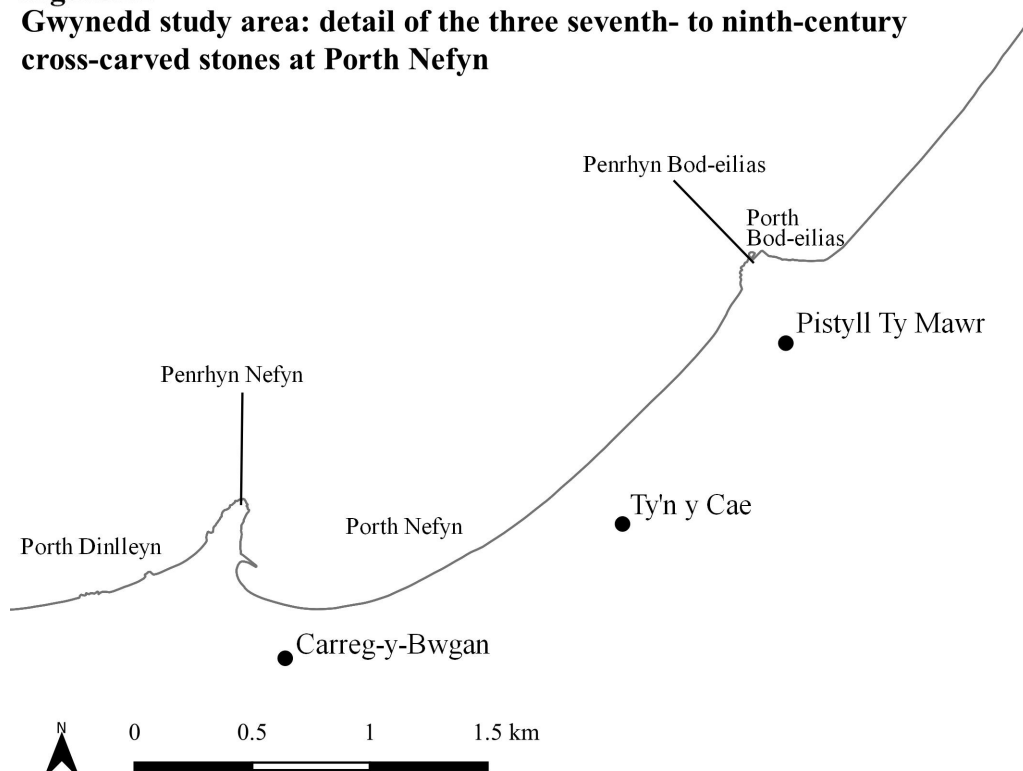
4.4.2.9.Llanfairpwllgwyngyll (church)

The tenth-century ringed pin shaft closely paralleled to Dublin examples found during grave digging at St Mary's church, Llanfairpwllgwyngyll, c.100m from the Menai Strait, may suggest early medieval burial and/or ecclesiastical activity here although this is uncertain (pp.149, 257).

4.4.2.10.Nefyn (cross-carved stones)

Three seventh- to ninth-century cross-carved stones, two associated with burial, are spread out along the length of Porth Nefyn, a landing place recorded as being used by Gruffudd ap Cynan and his men in the late-eleventh century (*Life of Gruffudd ap Cynan* §23: Russell 2005, 74-5; fig.22).

Figure 22
Gwynedd study area: detail of the three seventh- to ninth-century cross-carved stones at Porth Nefyn



Less than 300m inland of the north end of Nefyn beach, the Pistyll Ty Mawr stone (CN40) had a heap of stones around it and was known by some as Carreg y Bed, 'the grave stone' (Owen 1896a, 169; Westwood 1879, 182). There are good views from this site along the north coast of Llŷn, and the heap of stones and its name suggest that it marked a grave or was a focus for a burial ground (Edwards 2013, 311).

Just over 1km down the bay from CN40 and also less than 300m from the beach, the stone at Ty'n y Cae (CN33) stood facing the sea on a slight mound that contained bones, as did the field around it (Owen 1896a, 170-1). Superstition against moving CN33 suggests it stood here from time immemorial (Owen 1896a, 171). The mound and stone may have been prehistoric and the cross a later addition but this need not preclude the early medieval use of the site for burial, with CN33 a focus or grave marker (Longley and Richards 2000, 35, PRN 1536; Edwards 2013, 297-8).

The third stone, Carreg-y-Bwgan, 'the bogey/ghost stone' (CN34) is lost but may have been similar to CN33 and CN40 (Owen 1896a, 172; Edwards 2013, 470). It stood on the 'south side of Nefyn, near the Vicarage, at a corner of the road which leads to the sea' (Owen 1896a, 171). Nancy Edwards (2013, 469) interprets this as being in the area of Nefyn town itself. However, the location would seem to have been further down the bay, where a sharply-cornered road leads to the sea near a habitation named Vicarage; CN34 may have stood at the corner of this road nearest the Vicarage, only about five minutes' walk from it (fig.23). This would mean that CN34 stood c.200m from the south end of Nefyn beach and just over 1.5km from CN33.

Figure 23³
Location of CN34



Black oval: site of Vicarage west-south-west of Nefyn.
 Red circle: suggested findspot of CN34.

These three stones mark the length of Porth Nefyn beach. They may be related to the land pilgrimage route to Bardsey (Owen 1896a, 172), but their association with a landing place suggests maritime connections also. They could have been a display of ecclesiastical or secular power to those using the bay, or perhaps markers of the furthest land-limit of ecclesiastical jurisdiction, with the

³ Data from OS 25" 1889 Caernarvonshire XXXII.9, reproduced from <https://maps.nls.uk/view/136052265> with the permission of the National Library of Scotland under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence. Modified by the author.

liminal seashore beyond a more neutral space. They may have been navigation markers, and/or markers of a safe landing place in terms of maritime geography and a welcoming community. Perhaps they marked sites of safe maritime trade, as suggested by Ole Crumlin-Pedersen (2010, 142-3) for coastal crosses in Scotland and Denmark.

CN33 lay near the postulated site of a medieval *llys* (Johnstone and Riley 1995, 41-2). It is unknown whether this *llys* had early medieval origins (p.134), but Gruffudd ap Cynan's late-eleventh-century arrival by boat and the three seventh- to ninth-century crosses marking the bay suggest an important early medieval landing place.

4.4.2.11. Penmon (church)

Early medieval burial at Penmon is suggested by a cemetery of mostly cist graves and perhaps both males and females c.90m west of the church and a ninth- to eleventh-century possible grave-marker (AN55) built into the refectory undercroft (Anon 1847, 180-1; Edwards 2013, 234-5). The distance between cemetery and church and the possible presence of both males and females may suggest a secular burial ground, perhaps of a maritime community. The church is c.250m from Penmon beach, a probable landing place. The discovery of a silver Sasanian drachm of Xusro II (AD 590-628) on intertidal coastland in the vicinity (Herepath 2002; p.147) suggests maritime activity. In AD 971 Penmon was raided, probably from the sea, by Maccus mac Araillt, king of the Isles (*Pen.*, *RBH* and *ByS* AD 971: Jones 1952, 8, 143; 1955, 14-15; 1971, 38-9; IHBW 545053; Charles-Edwards 2013, 545-

6). The location's maritime advantages must have been worth the dangers to the ecclesiastical site and possible *llys* (p.134). Penmon probably had close maritime connections with the nearby island of Ynys Seiriol (4.4.1.2). Artistic influences in Penmon's tenth-century sculpture (AN51-4) include parallels in Ireland, Scotland, Mann, north-east Wales and north-west England, and AN55's effect of a sunken ring may be paralleled at Llangernyw, Conwy, with versions of its cross-form (common in Ireland, Scotland and Mann) also found at Llanrhaeadr-ym-Mochnant, Powys and in Pembrokeshire (Edwards 2013, 221-35). A tenth- to twelfth century cross (AN56) is lost (Edwards 2013, 235). The temptation of St Anthony on the c.925-75 free-standing cross AN51 finds its closest parallel in Kells, Co. Meath (Edwards 2013, 225-6).

4.4.2.12. Pen-y-Graig

At Pen-y-Graig on the north-west coast of Anglesey, four adult-length cist graves disturbed during road widening c.500m from a potential landing place at Porth Swtan (Baynes 1935, 189) may be early medieval and part of a wider cemetery. 80m north-north-east is Llanrhuddlad church, in which was found a ninth- to tenth-century handbell (Fisher 1926, 326; RCAHMW 1937, 109).

4.4.2.13.Porth Dafarch

At the head of the small inlet and probable landing place of Porth Dafarch on Ynys Gybi, two cist graves and two dug graves were inserted into two of three Bronze Age mounds, on and next to which was constructed a late Iron Age to Romano-British settlement (Waddington 2013, 172-3; Longley and Richards 2000, PRN 1776). The cists could date to the sixth or seventh centuries (Lynch *et al.* 2009, 34), but could also be late Roman (N. Edwards to Waddington 2013, 174). The fill of one cist grave included enough limpet and periwinkle shells to be noted by William Stanley (1876, 139), who does not mention shells in the other graves. This could suggest that the shells were deliberately deposited (cf. Whitesands Bay, Pembrokeshire, 3.4.2.18), perhaps hinting at maritime connections also suggested by the presence of a late-Roman or fifth- to sixth-century brooch that may have been made in the West Midlands (4.3.6).

The mounds and the possible standing stones upon them (Stanley 1876, 139, O'Neil 1940, 70) may have been used as navigation markers for the inlet, and later burial within them could have been to appropriate ancestral power and send a message of ownership to those using the landing place.

Even if post-Roman, the brooch and possibly the burials precede the period of this study. However, use of the inlet as a landing place may have continued later into the early medieval period.

4.4.2.14. Rhuddgaer (burial)

A cist within the ramparts of an Iron Age/Romano-British defended enclosure near the early medieval settlement at Rhuddgaer could be early medieval and represent an isolated burial or an otherwise undisturbed cemetery c.600m from the estuary of the Afon Braint (4.2.2.5, fig.18).

4.4.2.15. Tywyn y Capel (burial)

At Tywyn y Capel in Trearddur Bay, Ynys Gybi, sixth- to seventh-century occupation activity (4.2.2.7) preceded sand incursion, with burial of cists followed by plain-dug graves beginning in the mid-seventh century and continuing to the eleventh or twelfth (Davidson 2009, 181). 127 burials of all ages and both males and females were found in modern excavations, with at least ninety more lost previously to erosion (Davidson 2009, 181-2, 195, 200, 202; Stanley 1846; Baynes 1921; 1928; Thomas 1937; 1938). The burials and sand accumulation created a mound said to have been visible from Bardsey in the nineteenth century (Stanley 1846, 226-7). Its potential as a sailing landmark might explain its being one of the few sites marked on Ynys Gybi on Christopher Saxton's 1578 map *Mone Insulæ* (Saxton 1578). It seems likely that the mound was used as a navigation marker in the early medieval period.

A masonry chapel on the mound dates to the twelfth century at the earliest (Davidson 2009, 181). Burial probably began here in a secular context, as at Whitesands, Pembrokeshire (3.4.2.18).

Trearddur Bay is a probable early medieval landing place, and a ninth-century penannular brooch with loose parallels in Scotland and Ireland found here could represent a maritime import (4.3.4).

The difficulty of placing heavy cist slabs into unstable sand (Davidson 2009, 197) indicates a determination to use this site for burial. Isotope analysis suggests that two individuals buried here may have grown up in Norway and another in Iceland (Davidson 2009, 209). Although the method of these findings has been questioned (pers. comm. Andrew Davidson) it is not unlikely that this was the burial site of a multicultural maritime community (cf. Brownslade and Porth Clew, Pembrokeshire, 3.4.3.1, 3.4.2.8). A further tentative link with Scandinavia might be seen in the six adult cists each marked with a mound of sand and ring of stones (Davidson 2009, 195-7), the rings of stones perhaps a local version of stone ship settings (Stylegar 2007, 88; Haywood 2000, 172-3). The marking of these and at least two other early graves (Davidson 2009, 195-7, 207) along with the growing mound itself would have ensured the visibility of this community's cemetery to those using the landing place.

4.4.3. Other burial sites with evidence for maritime connections

4.4.3.1. Bangor

At Berllan Bach, under 900m from the Menai Strait and c.50m north-west of Bangor cathedral (fig.24), seventy-six graves of both adults and children were found, the site overlain by a later-eighth- to earlier-eleventh-century ditch (Longley 1995, 61-3;

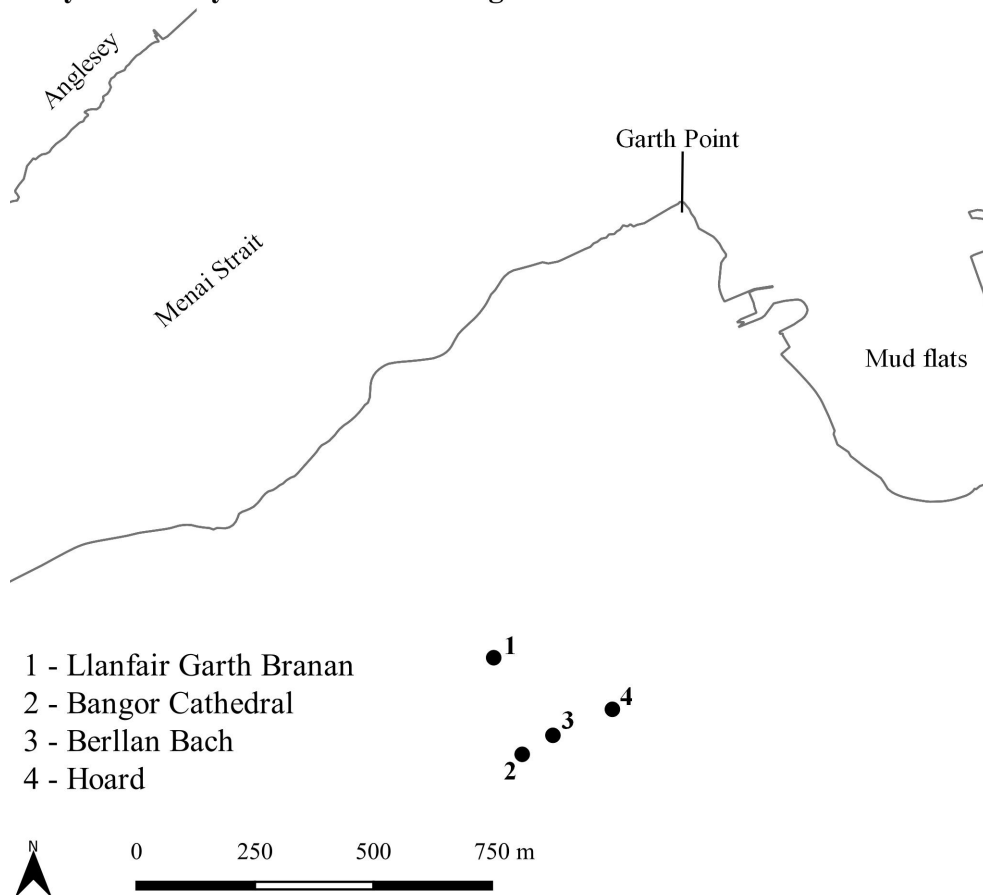
Longley and Richards 2000, 22). At Llanfair Garth Branan, c.200m north-west of Berllan Bach and c.600m from the Menai Strait (fig.24), at least sixteen burials both to the south-west of and associated with a rectangular stone structure, including examples of partial stone cists and two with wooden blocks at the head, and apparently representing men, women and at least one child (Hughes 1924; 1925, 432-5), are undated although it is possible that some are early medieval.

The important ecclesiastical site at Bangor is likely to have had early origins. The burial of St Deiniol of Bangor is recorded in the *Annales Cambriae* as around AD 583 (Gough-Cooper 2012 §163; Longley 1995, 52), and the monastery's fame was such that its burning in AD 632 was recorded in the Annals of Ulster, where it is named 'Bennchor Mór [large/great] in Britain' (*AU* AD 632). Bangor was raided at least once, probably by sea, by 'the Gentiles' in AD 1073 (*Pen.*, *RBH* and *ByS* AD 1073: Jones 1952, 16; 1955, 28-9; 1971, 78-9), and the advantages of its maritime accessibility are likely to have outweighed the dangers.

Two tenth-century coins of Edgar found in the same area as the Berllan Bach burials and a hoard deposited nearby c.AD 925 and including English, Viking York and Samanid coins and a fragment of a Hiberno-Scandinavian armband suggest maritime movement of goods and people (4.3.3, fig.24). Maritime movement is also suggested by the use of Anglesey Grit for six tenth- or eleventh-century carved stones from the vicinity of the cathedral (CN4-9) (Horák in Edwards 2013, 246, 249-52, 255, 308; Horák and Jackson in Edwards 2013, 351-2; Horák 2013, 36). This stone is likely to have come by boat from eastern Anglesey since although there is some Anglesey Grit on the mainland side of the Menai Strait this source does not seem to have seen medieval exploitation (Horák 2013, 37). CN6-9 may have been architectural fittings (Edwards 2013, 250-1; 2006, 107), and if Anglesey Grit was the

preferred architectural carving material at the early medieval cathedral in Bangor it is probable that boatloads of the stone were being specially quarried and imported.

Figure 24
Gwynedd study area: detail of Bangor



Archaeological evidence for either ecclesiastical or secular settlement at Bangor is elusive. At Llanfair Garth Bran, part of a grinding stone found amongst the graves south-west of the structure and a spindle whorl and fragments of a quernstone within the structure could be early but their dates are uncertain (Hughes 1924, 396; 1925, 435; Davidson and Berks 2007, 66 PRN 3182; Evans 2010, 9). A bone comb from the Berllan Bach excavations (GAT 1984) may represent a casual loss rather than settlement activity. Andrew Davidson and Tanya Berks (2007, 6) have suggested that the lack of Roman or earlier settlement finds in the modern town centre suggests the monastery was established on the periphery of a settlement. Early

medieval secular settlement may well also have been situated away from the monastery, perhaps closer to the shore to facilitate maritime activity.

Given the evidence for maritime connections in Bangor, it is likely that at least some of the individuals buried at Berllan Bach and Llanfair Garth Branau were involved in maritime activities.

4.4.3.2.Fron

The exact location of over thirty cist graves found near Fron just south of Llangefni is uncertain (Anon 1829; Flook and Flook 2013, 54-6; Kenney 2017, 68), but may have been less than 500m from the navigable Afon Cefni, c.3km above its tidal limit. Since the find was made whilst removing a field boundary, many more graves can be supposed (Davidson *et al.* 2002, 43). The community buried here may have taken advantage of both riverine and maritime connections.

4.4.3.3.Llangefni (church)

A fifth-century commemorative stone (AN39) found beneath the medieval church at Llangefni (Edwards 2013, 197-200) might indicate an early medieval burial site with the potential for both riverine and maritime connections, situated c.50m from the navigable Cefni just under 4km upstream of its tidal limit (the Cefni was navigable to Llangefni until 1760: Jones and Jones Rowlinson 2015, 54).

4.4.3.4.Llangefni Link Road/Coleg Menai Campus

The cemetery at Llangefni Link Road/Coleg Menai Campus, c.1.2km from the once-navigable Cefni c.3.5km above its tidal limit (Jones and Jones Rowlinson 2015, 54), was excavated in two halves, by Brython Archaeology and Archaeology Wales. Evidence for early medieval settlement in the vicinity has been previously discussed (4.2.2.2). At least eighty-eight individuals (male, female and of all ages) were interred in this cemetery, in both plain-dug and cist graves (Faillace and Madgwick 2019a, 1; Parry *et al.* 2017, 8; Joyce 2019, 12-13, 17-18). A penannular brooch (Dickinson's Type G1.1; Type G1 brooches may date from the fourth to sixth centuries) found on the right breast of a female in the Link Road half of the cemetery may have been a maritime import and is similar to one found near Llangollen, Denbighshire (Edwards 2017, 68; Dickinson 1982, 53-7). Radiocarbon dates for individuals from the Coleg Menai half of the excavation range from the late-fourth to the mid-eighth centuries at 2σ (Joyce 2019, results from CHRONO). Initial data from isotope analysis suggests the presence of individuals with non-local origins in this cemetery, including individuals possibly from warmer climates such as Iberia or the Mediterranean region (Faillace and Madgwick 2019b; Rusu and Madgwick 2019; pers. comm. Richard Madgwick). This suggests that the community had maritime connections, the Afon Cefni providing a direct link to the open sea.

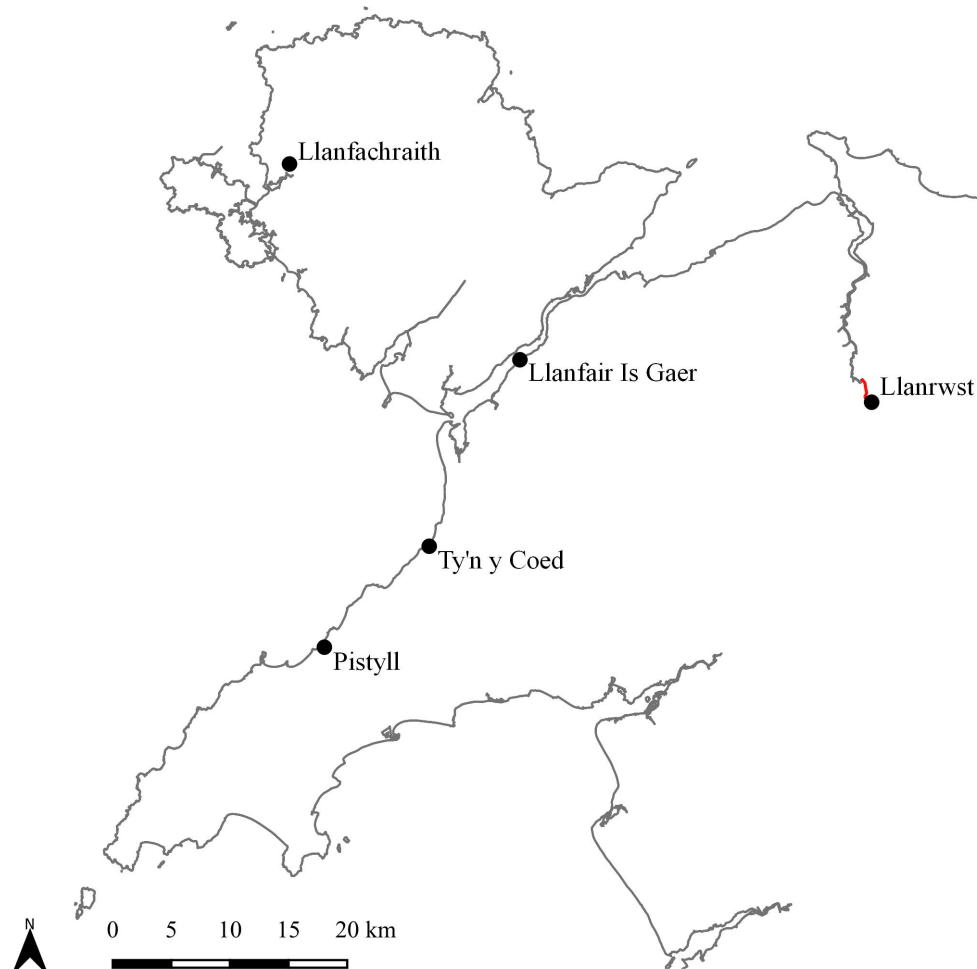
4.4.3.5. Parc Cybi

There is no evidence for maritime connections at Parc Cybi early medieval cemetery, despite the possible maritime connections of the later, potentially also early medieval, metalworking (4.2.2.4).

4.5. Other sites with evidence for maritime connections

Figure 25

Gwynedd study area: other sites with evidence for maritime connections



(red = previously navigable stretch of Afon Conwy above current tidal limit)

4.5.1.Llanfachraith

A second-half of the ninth- or first-half of the tenth-century cross-head (AN11) found just north of Llanfachraith church near the west coast of Anglesey (with mortar suggesting it may have been built into the medieval church) is made of Anglesey Grit from eastern Anglesey and may have been brought here by sea; when complete, the cross would have been large and prestigious (Horák in Edwards 2013, 158; Edwards 2013, 111, 157-9). The findspot is c.1km north of the tidal Afon Alaw and just over 2km east of the shore at Traeth y Gribin. Whilst the representation on the cross-head of Christ crucified is unusual for Wales, with one other example of this scene in this position at Llan-gan, Glamorgan (G43), it is common in Ireland and particularly comparable to examples from Monasterboice, Co. Louth and Clonmacnoise, Co. Offaly (Edwards 2013, 158-9). In stone provenance and decoration this monument hints at both coastal and cross-sea maritime movement.

4.5.2.Llanfair Is Gaer

St Mary's church, Llanfair Is Gaer ('under fort'), on the mainland side of the Menai Strait, has very uncertain early medieval origins. The churchyard is bounded by the shoreline and is partly curvilinear (Davidson *et al.* 2002, 60), which could be due to the shape of the shore rather than early origins. A well dedicated to the saint lies c.450m south-east (PRN 38121). The 'fort' name-element might suggest a link with an unknown site nearby, perhaps one used for early settlement. The site's location on

a rise at the edge of the Strait (RCAHMW 1960, 200) suggests it was located to see and be seen by maritime traffic, hinting at maritime connections.

4.5.3.Llanrwst

Llanrwst church stands on the shore of the navigable Conwy, just over 2km above its tidal limit. Uncertain early medieval origins are suggested by a partly-curvilinear churchyard (Davidson *et al.* 2002, 38) and dedication to a ‘Celtic’ saint, Grwst. Ian Soulsby (1983, 172) suggests there may have been an early settlement here, from the majority of burgesses recorded in AD 1334 being Welsh perhaps suggesting a native vill rather than a new foundation, and the presence of the navigable river and tradition that this was one of the main fording points of the Conwy. There was certainly activity in this area in the mid-tenth century, when a battle between warring Welsh princes seems to have taken place at or near Llanrwst, the location described as '*in loco qui dicitur gurguist*' in *Annales Cambriae* B (Gough-Cooper 2015a, 43 b976.1), '*iuxta nant conuy*' in *Annales Cambriae* C (Gough-Cooper 2015b, 22 c278.1-3), and 'at the place which is called Gwrgystu: the battle of Conwy Hirfawr' in the Peniarth *Brut* (AD 954: Jones 1952, 7), whilst it is named 'the battle of the Conway at Llan-rwst' in the Red Book of Hergest *Brut* (AD 954: Jones 1955, 12-13; see also IHBW 404823). The area of ‘Nantconwy’ is on the other side of the river to Llanrwst.

It seems not unlikely that there was early medieval settlement and ecclesiastical activity of some form in the vicinity of Llanrwst, perhaps taking advantage of riverine links all the way down to the sea.

4.5.4. Pistyll

Pistyll church lies just over 350m from Porth Pistyll beach, immediately north of Porth Nefyn. An eleventh- or earlier-twelfth-century font (CN39) in the church is carved from Anglesey Grit, and Nancy Edwards has suggested that this might relate to Clynnog, of which Pistyll was a possession by the mid-thirteenth century, owning lands in south-west Anglesey (Edwards 2013, 308-9; Horák in Edwards 2013, 308). Whether or not this relationship explains the use of Anglesey Grit at Pistyll, CN39's presence indicates maritime movement of stone that may have been landed at Porth Pistyll or Porth Nefyn.

As well as Welsh comparisons for CN39's Borre-style-derived decoration, it is also comparable to two Romanesque fonts from Sweden and to wire trimming on textiles from Birka, Sweden in the ninth or tenth century (Edwards 2013, 309). The spread of artistic influences need not indicate direct maritime contact, but the textile comparisons are a reminder that the presence of portable, perishable objects in early medieval Wales might be reflected in more durable materials.

4.5.5. Ty'n y Coed Stone

CN16, a lost, possibly seventh- to ninth-century cross-carved stone seen on the road between Clynnog Fawr and Ty'n y Coed farm, may have marked a land boundary for Clynnog Fawr and/or the pilgrimage route to Bardsey (Edwards 2013, 469, 266-7). Wherever its exact findspot on this road it probably stood within 400m of the sea.

As suggested for the Porth Nefyn crosses (4.4.2.10), CN16 may have marked a sea-route as well as a land-route and perhaps signified a place of safe landing and trade.

4.6.Preliminary conclusions

Maritime accessibility seems to have been a highly desirable attribute of early medieval high-status settlement in Gwynedd. None of the lower-status settlement sites have produced direct evidence for maritime connections, although in some instances maritime activity can be inferred from factors such as location, finds, isotope analysis and postulated maritime-linked metalworking production chains.

Imports from both within and outside Wales can be suggestive of maritime movement and contact, with isotope analysis providing more direct evidence for maritime movement of individuals.

A notable number of early medieval burial and ecclesiastical sites are situated overlooking, or close to, potential landing places. It is interesting to note that despite their proximity to tidal waters, the nearest coasts to the burial and ecclesiastical sites on the islands of Bardsey and Ynys Seiriol do not seem to have been landing places (on St Tudwal's Island East, both the burials and the most likely landing places are on the east side of the island; however, it is uncertain whether the nearest coast to the burials would have been used as a landing place).

The Gwynedd data will be discussed with that from Pembrokeshire and Cardigan Bay in chapter 6.

5.Cardigan Bay

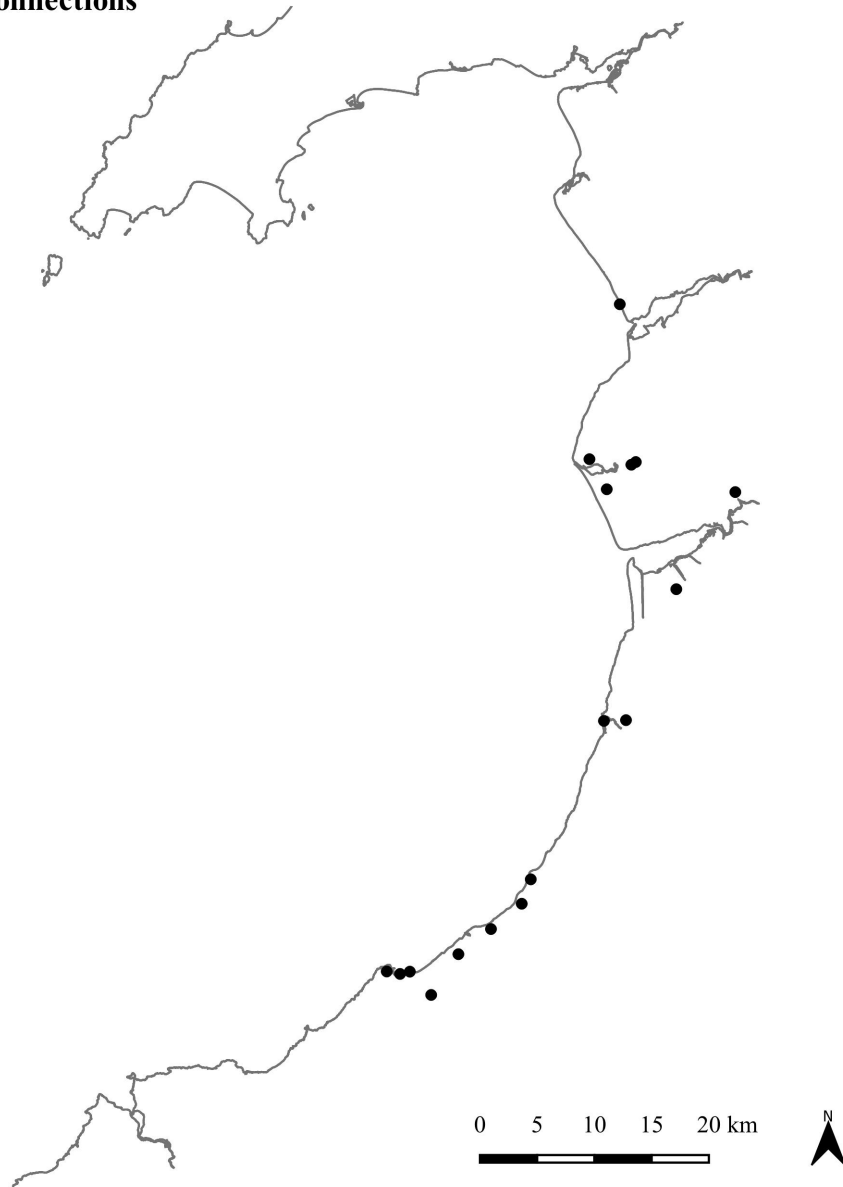
5.1.Introduction

The geographical limits of the Cardigan Bay study area are given in the methodology chapter, section 2.3. There are 40 sites in the data collection for the Cardigan Bay study area. 17 of these sites are considered to have evidence for potential maritime connections (fig.26). These sites are listed in Appendix 4 and detailed in this chapter.

Even allowing for the smaller area of the Cardigan Bay study, there are relatively fewer sites with evidence for early medieval activity here than in the other Welsh study areas. The cause(s) of this are uncertain. Perhaps there really was less early medieval activity in Cardigan Bay, or perhaps activity here was more ephemeral than elsewhere. It is also possible that, over time, persistent agricultural use of the fertile coastal lowland in this narrow area between mountains and sea has resulted in archaeological losses. Cardigan Bay is also less populated than the Pembrokeshire and Gwynedd study areas, perhaps resulting in fewer accidental archaeological discoveries due to development.

Figure 26

Cardigan Bay study area: all sites with evidence for maritime connections



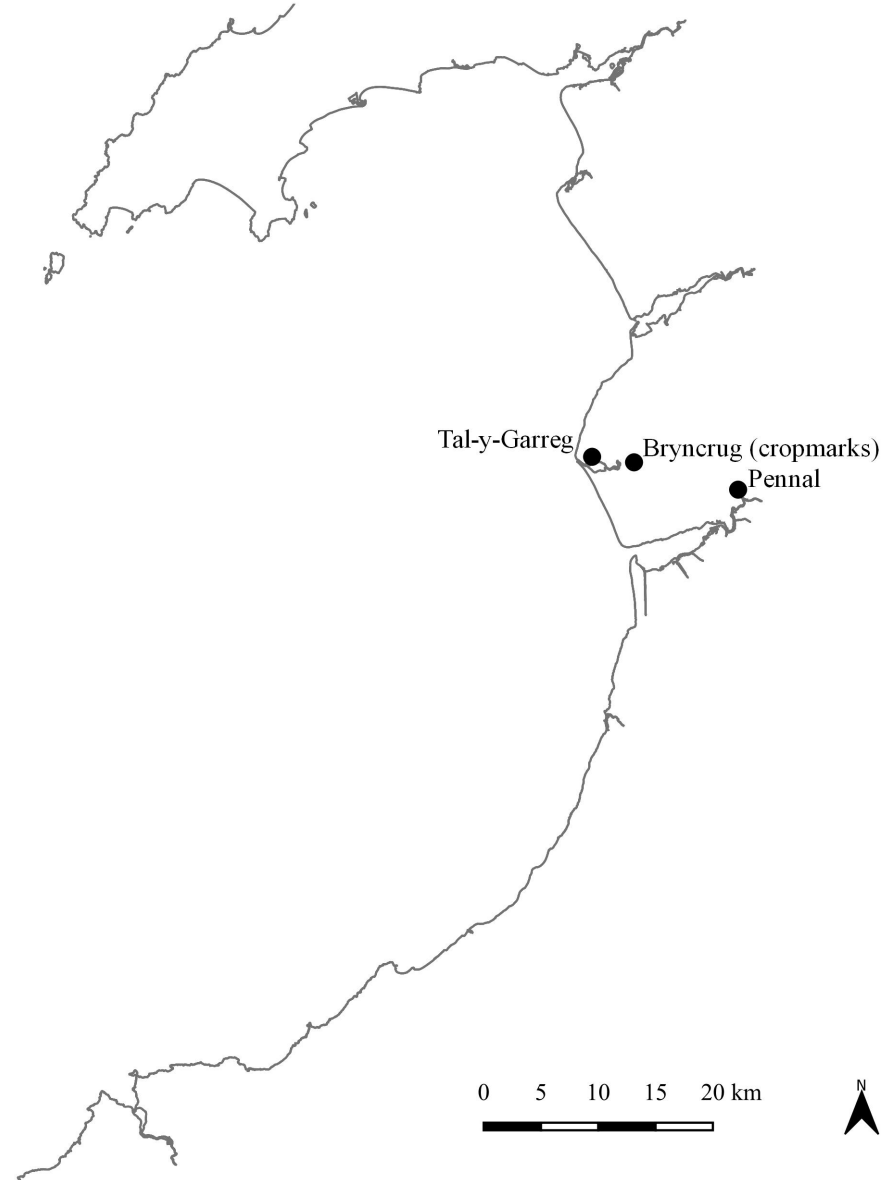
5.2.Settlements

5.2.1.High-status settlements

5.2.1.1.Possibly early medieval high-status settlements

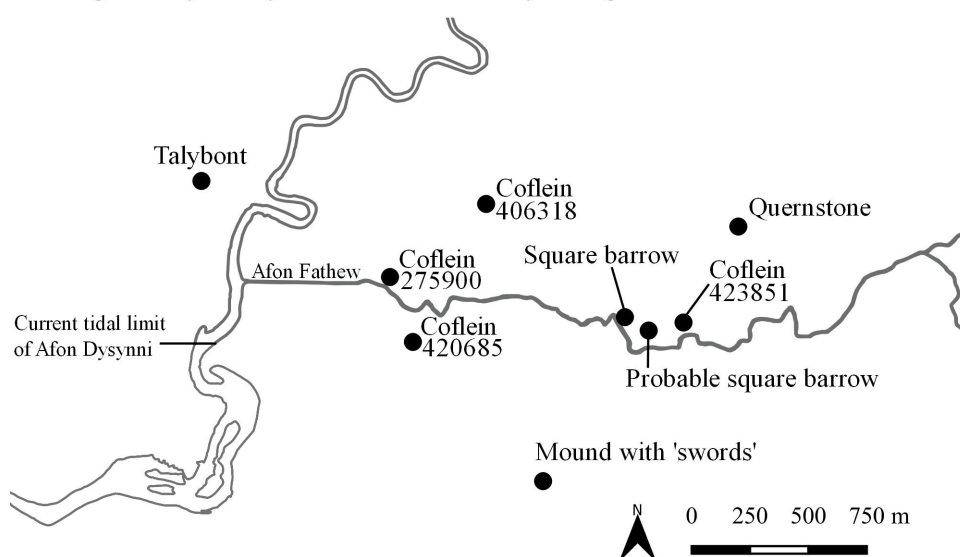
Figure 27

Cardigan Bay study area: secular possibly early medieval high-status settlements with evidence for maritime connections



West of a probable early medieval cemetery at Brynchrug (5.4.2.1) lie several perhaps early medieval or prehistoric cropmark complexes (Coflein 406318, 420685, 275900), whilst to the east a cropmark complex might indicate a perhaps medieval or prehistoric settlement or agricultural complex (T. Driver 2019 in Coflein 423851). An undated quernstone (PRN 3823) was found in loose rubble c.650m north-east of the cemetery. A mound said to have contained 'swords' was located c.800m south-south-west of the cemetery (RCAHMW 1921, 166; PRN 3820). All these sites lie within 2km of the Afon Dysynni, c.5km upriver of the sea, the nearest (Coflein 275900) within 500m. Prior to drainage schemes and silting the river here may have been tidal, perhaps even as far as Craig yr Aderyn, a cliff with a seabird colony some 6km further upstream (Gwyn and Davidson 2009, 69). The cropmarks, some of which may relate to early medieval activity, the probable early medieval cemetery, the potential for both maritime and inland connections and the later *llys* in the vicinity of Talybont on the other side of the river (Longley 2000, 9-10) combine to suggest a potential site of early medieval high-status settlement in the vicinity of Brynchrug (fig.28).

Figure 28
Cardigan Bay study area: detail of Brynchrug



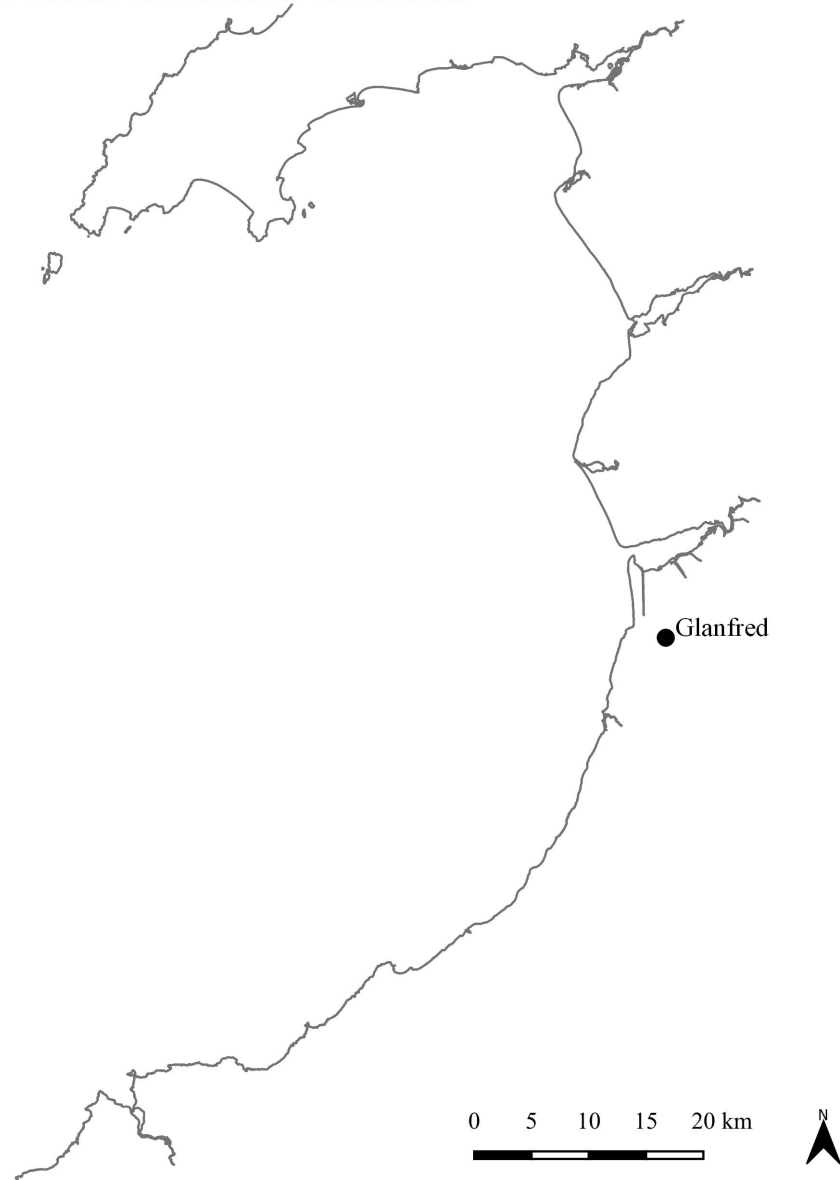
A cluster of sites near Pennal at the head of the tidal waters of the Afon Dyfi probably indicate the location of a medieval *llys*, and there may have been high-status activity in this area from an early date: a Roman fort (PRN 1799) lies 500m south-east of Pennal and an early castle mound (PRN 1744) 250m south-west, whilst c.1km west-south-west is a village named Cwrt ('court') (Johnstone and Riley 1995, 43-5). Pennal church's curvilinear cemetery and proximity to the Roman fort might suggest early medieval origins (Davidson *et al.* 2002, 62). The site's location allows for both inland and maritime connections.

At Tal-y-Garreg bivallate hillfort a second phase of construction resulted in a 'citadel and outwork' form which may be early medieval rather than late prehistoric (Longley 2000, 3-4, 11; Dark 1994, 134-5). Tal-y-Garreg's locality seems to have been important in prehistory, with another hillfort (Llechlwyd, PRN 1777) c.350m south-west, and possible hut-circles recorded between the two (RCAHMW 1921, 131; Longley 2000, 4-5, 9). The site overlooks the Dysynni estuary, which may have been a good natural harbour prior to silting and the formation of a shingle beach (Bowen and Gresham 1967, 61). Tal-y-Garreg may have been an early medieval high-status site with maritime connections preceding the later *llys* 2.5km upriver in the vicinity of Talybont (Longley 2000, 9-10; Bryn-crug is another possible candidate for this, see above).

5.2.1.2. High-status settlements without evidence for maritime connections

Figure 29

Cardigan Bay study area: secular high-status settlements without evidence for maritime connections

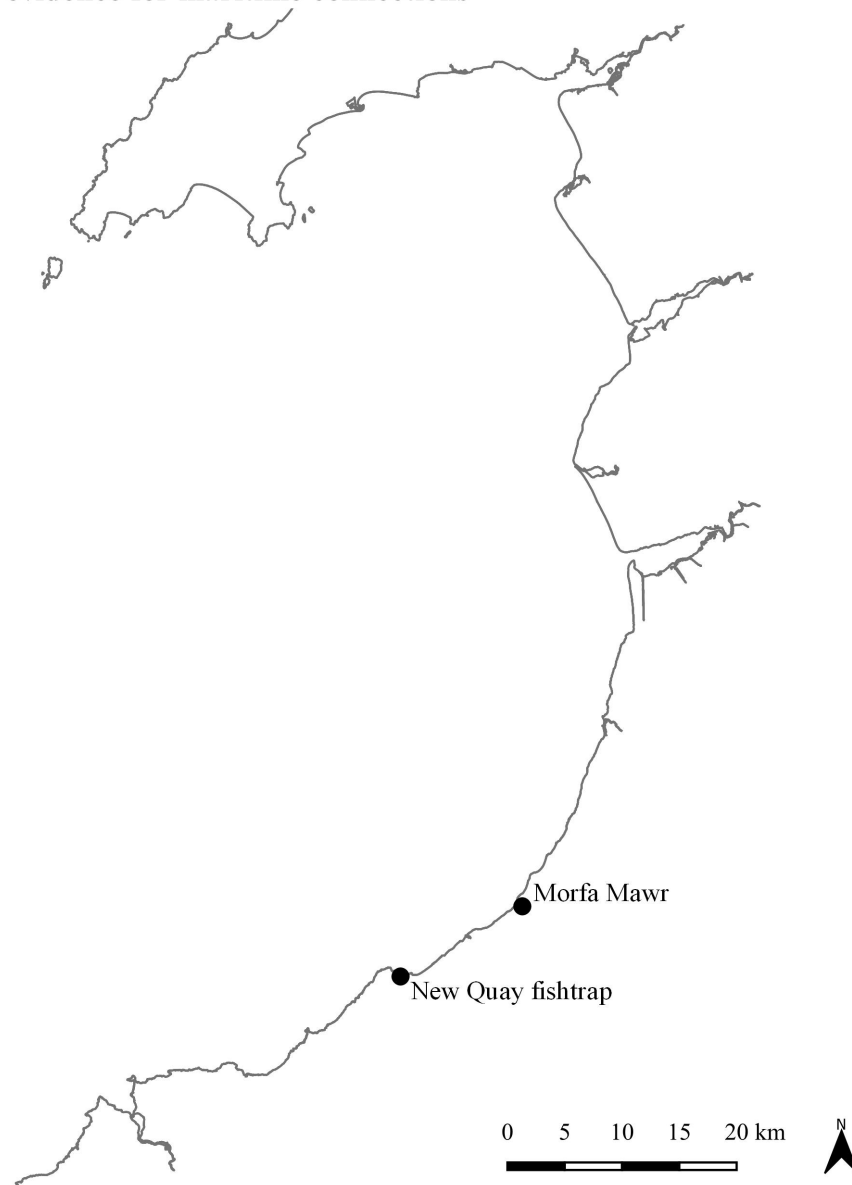


Glanfred is an inland promontory fort with possible Iron Age origins (Williams and Williams 2018, 224), although the only dating evidence is early medieval, with domestic and agricultural activity in the fifth to sixth centuries and metalworking activity (iron smelting and smithing, probably using local upland bog ore) in the seventh to ninth; it is possible that this defended site may have been associated with a *llys* in the vicinity (Jones *et al.* 2018, 227, 229, 239-40; Carruthers 2018, 230-2;

Young 2018, 236-8). However, this is uncertain and the site may simply have been used by a lower-status community. Glanfred lies over 3km from the sea at Borth. If availability of iron ore made this site a centre for production then distribution of finished or part-finished products might have been at least partly by sea, but this is conjectural.

5.2.2.Lower-status settlements

Figure 30
Cardigan Bay study area: secular lower-status settlements with
evidence for maritime connections



5.2.2.1. Morfa Mawr

At Morfa Mawr, three or four burnt mounds, charcoal from one dated seventh to tenth centuries, were found just over 600m from the sea in an area of mainly natural mounds, one of which had undated charcoal without stone fragments associated, suggesting activity here besides the burnt mound technology (Williams 1985, 181, 184, 186; Lane and Edwards 1988). It is uncertain what processes were undertaken here, and although there are no food remains the acidic soil would have dissolved such evidence (Williams 1985, 187). Burnt mounds are usually Bronze Age, but early medieval examples are known. A pit associated with a burnt mound at Holyrood, Anglesey, produced a date of the sixth to eighth centuries (Maynard 2012, 126, 129), burnt-mound-type material at Bangor Cathedral was dated earlier-eleventh to early-thirteenth centuries (Kenney 2012b, 267; Smith 2013, 43), and there are a handful of Irish burnt mound sites with early medieval dates, for example Drombeg, Co. Cork (Williams 1985, 186; Hedges 1974-5, 77) and Ballyman, Co. Dublin (O'Brien 2005, 298-300).

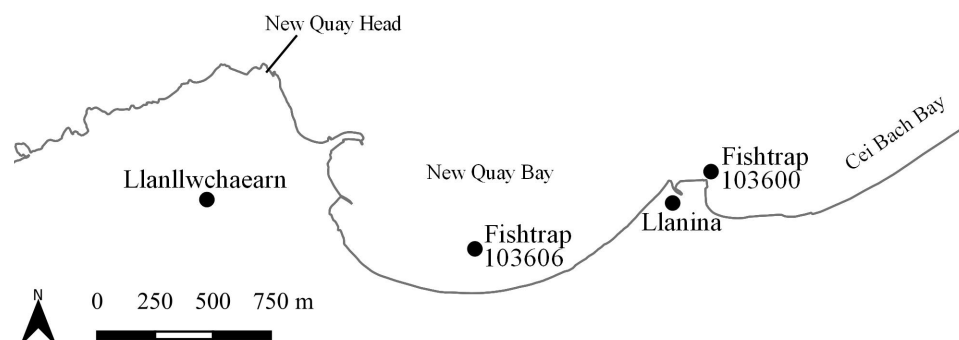
Early medieval activity at Morfa Mawr may have been related to fishing in some way, since this stretch of coast is busy with medieval and post-medieval stone fishtraps associated with those granted to Strata Florida Abbey in AD 1184, which may have had earlier origins (PRNs 103596-8, 103603, 103609; Lewes 1924, 398).

5.2.2.2. New Quay Fishtrap

A probably stone, V-shaped fishtrap in New Quay Bay (a probable landing place) is tentatively dated early medieval due to the depth of water that always covers it (F. Murphy and H. Wilson 2012 in Murphy *et al.* 2013, 96 PRN 103606). In addition, just beyond the east end of New Quay Bay (at the west end of Cei Bach Bay), a stone fishtrap complex thought to be medieval and to have had several phases of construction included a V-shaped trap with its eastern arm underwater at low tide (F. Murphy and H. Wilson 2012 in Murphy *et al.* 2013, 90 PRN 103600). It is possible that the earliest phase(s) of this complex may have been early medieval.

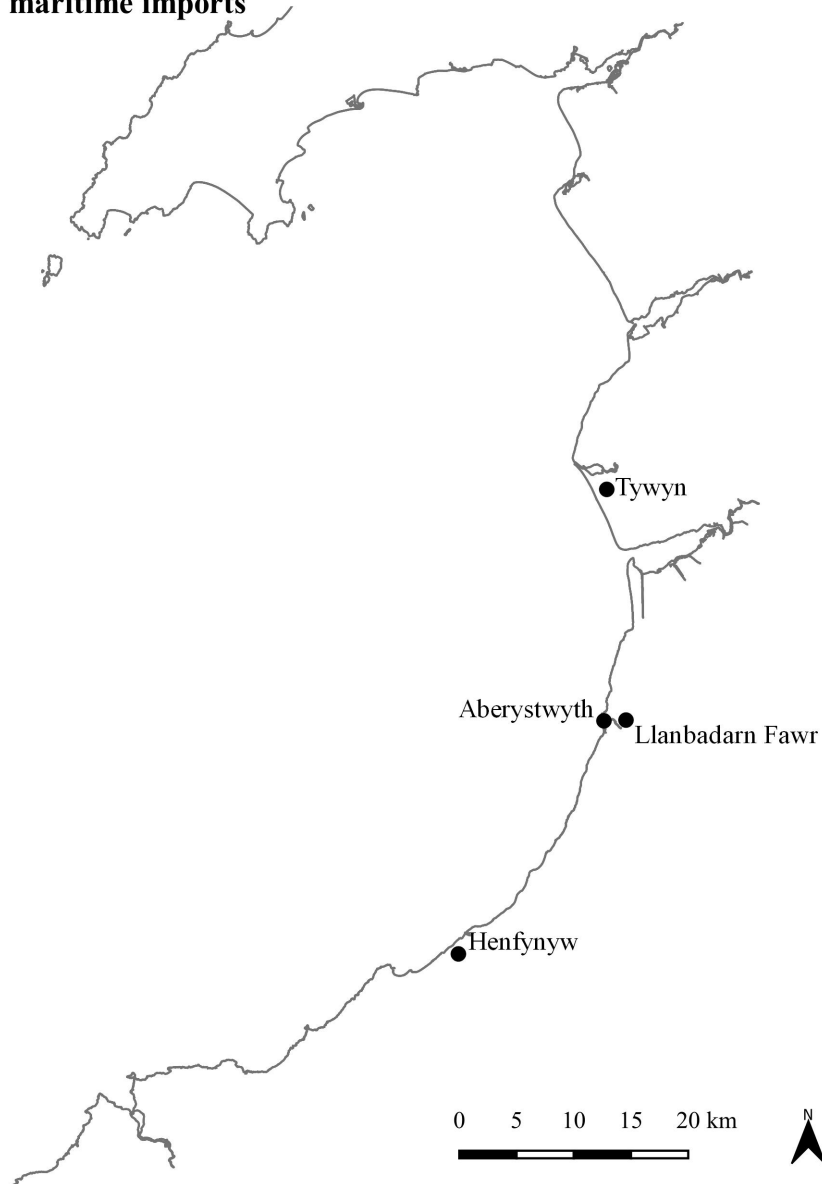
The fishtrap(s) suggest the presence of a nearby early medieval maritime community, with more closely datable early medieval activity in the vicinity suggested by an eighth- or early-ninth-century stone at Llanllwchaearn on the west side of New Quay Bay (5.5.4, fig.31).

Figure 31
Cardigan Bay study area: detail of New Quay Bay



5.3.Imports

Figure 32
Cardigan Bay study area: findspots of probable and possible maritime imports



5.3.1.Coins

A late-seventh- or early-eighth-century English sceatta found ‘near Aberystwyth’ (EMC 2015.0282) probably made at least part of its journey to Cardigan Bay by sea. One potential landing place in the vicinity is the mouth of the Afon Rheidol (cf. the imported stone at Llanbadarn Fawr: 5.5.2).

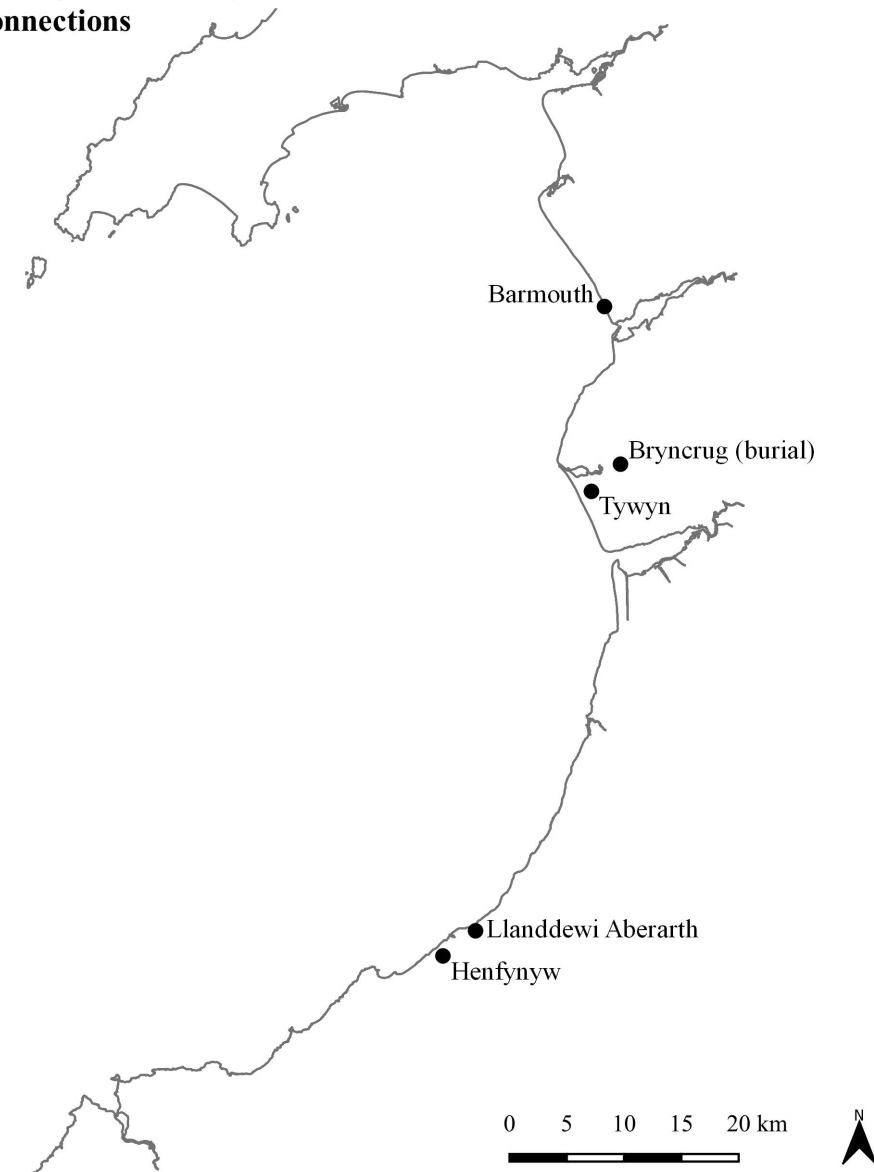
5.3.2.Stone

Sites with possible evidence for maritime movement of stone in the Cardigan Bay study area are Henfynyw (5.4.2.2), Llanbadarn Fawr (5.5.2) and Tywyn (5.4.1.3).

5.4.Burial sites

Figure 33

Cardigan Bay study area: burial sites with evidence for maritime connections



5.4.1.Mainland coast-edge burials

5.4.1.1.Barmouth

In the sandy beach area north of Barmouth two fifth-century inscribed commemorative stones (MR1-2) found c.250m apart (both findspots are

approximate) might indicate a nearby cemetery, now lost due to the shifting coastal landscape (Edwards 2013, 372-6). The high-water mark here is thought to have advanced at least six metres inland in the first thirty years of the twentieth century (O'Neil 1932, 105 n.1). When MR1 was recorded as being 100 yards (c.90m) above high-water in 1736 (Owen 1896b, 137) and just above high-water over 100 years later (Wynne 1853), it was probably the sea rather than the stone that had moved. One of the stones was thought to have originally been found below high-water mark, and although W.W.E. Wynne (1853) believed this to be MR1 it's possible that it was MR2, which was published in 1932 having been found the year before completely buried in sand, six metres below high-water mark (O'Neil 1932, 105). The probable cemetery's location overlooking a potential landing place is reminiscent of sites such as Whitesands, Pembrokeshire and Tywyn y Capel, Ynys Gybi (3.4.2.18, 4.4.2.15). As at those sites, burial here may have taken place over a long period, possibly extending far beyond the fifth-century date of the stones.

5.4.1.2.Llanddewi Aberarth

Llanddewi Aberarth is an isolated parish church c.500m from a potential seashore landing place and c.800m from a potential estuarine landing place. The church has wide views all around and the churchyard may be a re-used Iron Age promontory fort, although it is also possible that it was a Bronze Age monument (Ludlow 2004b, PRN 50134). Either way, prehistoric associations may have led to the re-use of this site, although the proximity of the sea may also have been a deciding factor.

Early medieval burial is suggested by a mid- to late-tenth-century house-type hogback grave cover (CD7), the only definite Viking hogback in Wales (although there is a possible one at Ffriddoedd, Gwynedd, 4.4.2.5) (Edwards 2007, 146-7). The clinker-style decoration of the hogback's roof is reminiscent of a boat, as is the shape of the monument itself (Rhys 1896, 117), although clinker planking was also used in buildings. Nancy Edwards compares Llanddewi Aberarth with the church at Lythe, North Yorkshire, where there are several hogbacks and a possible beach market, and she suggests that CD7 may signify high-status Viking presence in the local population, and could indicate that trade may have been undertaken on the nearby beach or at the mouth of the Afon Arth (Edwards 2007, 146; Lang 2001, 153-67; Stocker 2000, 200). A later-ninth- or early-tenth-century shaft at Llanddewi Aberarth (CD6), once part of a substantial free-standing cross, boasts well-executed ornament and fragmentary Latin inscriptions (Edwards 2007, 141-6), and suggests that ecclesiastical activity was well-established by the time of the burial marked by the hogback, which is likely to have been made into a pre-existing cemetery. CD6's rectangular fret-pattern panels set on the diagonal are only found in Wales at Penally, Pembrokeshire (P84: 3.4.2.7), and are more common in Ireland and Scotland (Edwards 2007, 146).

The hogback is suggestive of a multicultural community, probably maritime given the proximity of the two landing places. Potential early medieval predecessors of medieval fishtraps between the Arth and the Aeron (p.186) may have been used and maintained by this community.

5.4.1.3. Tywyn

Tywyn church lies just over 1.5km south of the tidal Dysynni and c.1.3km east of the sea. It sits on the edge of an area that was once saltmarsh and the water probably once came right up to the church where it stood on slightly higher ground; there was a harbour and a shipbuilding yard at Tywyn in the early nineteenth century (Lewis 1833, Towyn/Tywyn – Meirionydd; Smith 2004, 6; Anon 1886 in Smith 2004, 6; Gover 2015, 29-30; Parry Owen 2018, n.13). In *Canu i Gadvan*, a c.AD 1150 praise-poem to St Cadfan and Tywyn church, the sea's proximity seems an important part of the church's identity and is referenced throughout, including in lists of things for which the church is known and praised (Ins.86, 98-9; Parry Owen 2018). A nearby estuary is suggested in line 161 and in lines 45-6 which say that Cadfan desired to gaze at Aber Menwenfer every morning and evening. Aber Menwenfer might refer to the Dysynni estuary, the name lost as the estuary's location shifted away from Tywyn (Parry Owen 2018, n.27).

In early tradition, Cadfan travels to Wales from Llydaw/Letavia and later ends up on Bardsey (*Life of St Padarn* Ins.65-71, 76-7, 83: Thomas and Howlett 2003, 16-17, 33; *Bonedd y Saint* §19, §20: Bartrum 1966, 57; 1993 (2009), 84). It is uncertain whether Llydaw originally denoted Brittany or perhaps a forgotten British location (Bartrum 1993 (2009), 84), although the 'Letia' in the eleventh-century *Life* of Padarn clearly denotes Brittany (e.g. Ins.248-52: Thomas and Howlett 2003, 22, 39; dating: Thomas and Howlett 2003, 76). Cadfan's arrival by boat to Ceredigion in the *Life* of Padarn and his connection with Bardsey suggest early maritime associations for this saint.

In *Canu i Gadfan*, the church is said to be whitewashed (ln.34: Parry Owen 2018); this bright colour and its situation on a mound would have made it a recognisable marker within the land and seascape. It is uncertain how early the church would have been whitewashed masonry, but an earlier timber church on this spot would still have stood above its surroundings and may have been a navigation marker for those coming to land near Tywyn.

Early medieval burial in this highly coastal landscape is suggested by two commemorative stones, MR24 (fifth- or sixth-century, lost) and MR25 (ninth-century) (Edwards 2013, 421-30), and by a no-longer-standing *capel-y-bedd* structure to Cadfan (Davidson *et al.* 2002, 12; Gough 1789, 541; Davidson 2001, 368-9, 369 n.239).

Tywyn was probably the ‘mother church’ of this region (Edwards 2013, 421-2), with scribal presence suggested by the lettering on MR25 (Edwards 2013, 29-30) and wealth suggested by a Viking (‘Gentiles’) raid in AD 963 (*Pen.*, *RBH* and *ByS* AD 963: Jones 1952, 8; 1955, 14-15; 1971, 38-9). The maritime advantages of this important site’s location presumably outweighed the dangers.

An eighth- or ninth-century sundial (MR27) probably originally from Tywyn, although re-used as an eighteenth-century milestone a mile away, is comparable in form with the sundial at Clynnog Fawr, Gwynedd (4.4.2.4), although Tywyn has six divisions rather than four – there are no direct comparisons for this, but a lost sundial from Saul, Co. Down, had six divisions with different angles to MR27 (Edwards 2013, 431-3). W.G. Thomas (1989, 112) suggests that roundels beneath the Tywyn sundial could be the result of an ‘imperfect recollection’ of an ‘Irish model’, such as the two ring-crosses beneath the dial of the sundial at Monasterboice, Co. Louth. The

roundels on MR27 may then signify direct maritime movement of an individual between Ireland and Wales.

The three extant stones at Tywyn, MR25-7 (MR26 being a seventh- to ninth-century cross-carved stone found c.500m south-south-east of Tywyn and thought to have marked a land boundary and/or pilgrim route: Edwards 2013, 430-1), are all carved from stone that outcrops 4km north of Tywyn, at Tonfanau (Horák in Edwards 2013, 423). The stone may have been brought the short journey down the coast by boat rather than transported overland and across the estuary.

5.4.2. Other burial sites with evidence for maritime connections

5.4.2.1. Brynchrug (burial)

A probable early medieval cemetery at Brynchrug is suggested by at least one small square barrow with a central burial pit, and probably at least one other c.120m south-east, both seen from the air during the 2018 drought (T. Driver 2018 in Coflein 423308). The burials may have belonged to a postulated high-status early medieval settlement in the vicinity (5.2.1.1, fig.28). The burials are c.1.5km from the Afon Dysynni, c.5km upriver of the sea. The river may have been tidal here in the early medieval period and could have provided maritime access (p.182).

5.4.2.2. Henfynyw

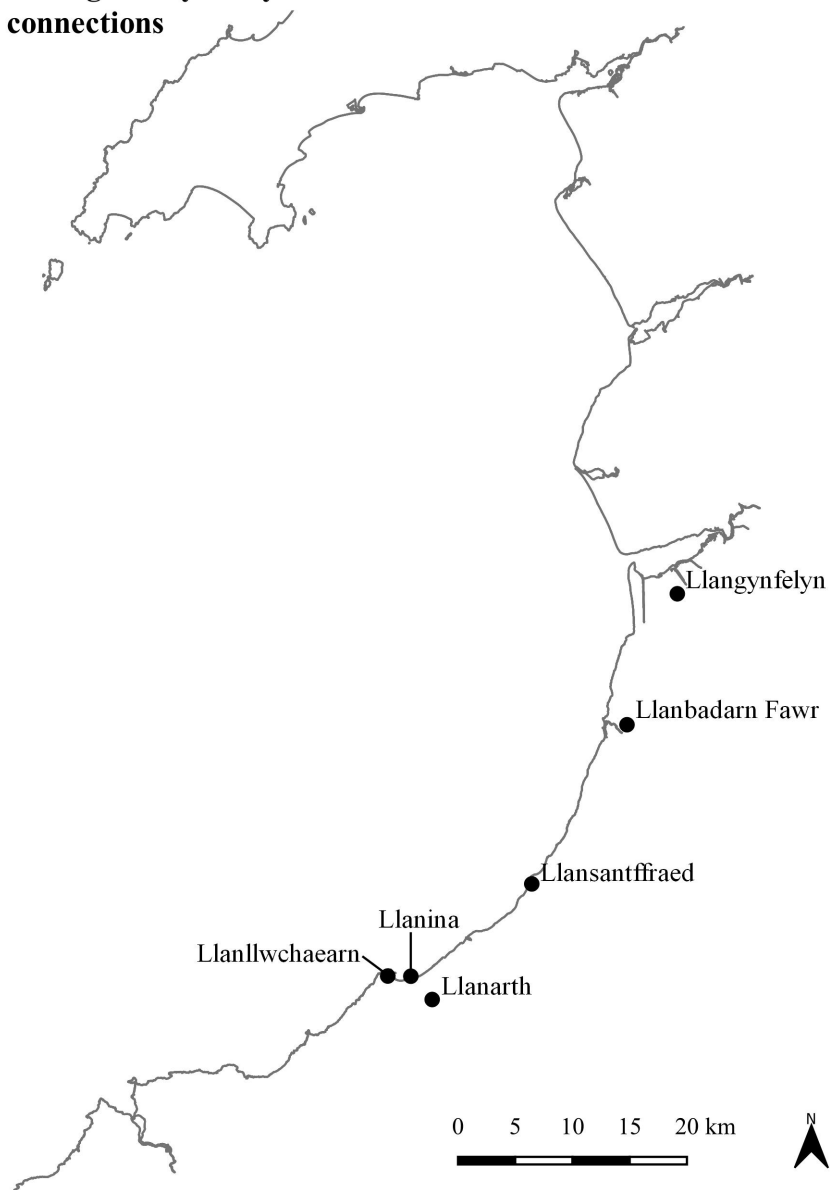
Henfynyw church lies just over 2km south-south-west of the estuary at Aberaeron and c.1km south-east of the sea. The name means ‘old [also ‘former, original’] Mynyw’, Mynyw being an early name for St Davids, Pembrokeshire (Thomas and Howlett 2003, 113). Henfynyw appears to have been an important site for the cult of St David in this area (Dumville 2001, 29; Bowen 1982, 11-14; 1954, 58-60), and *Vetus Rubus*, where David is said to have begun his education (Rhygyfarch’s *Life of St David* §8: Sharpe and Davies 2007, 116-17), has been equated with Henfynyw from at least the late-twelfth century (Giraldus Cambrensis *Vita S. David* §3: Brewer 1863, 384; dating: Richter 1969, 386), an association followed by modern scholars (Thomas and Howlett 2003, 102; Ludlow 2004b, PRN 49326). Manuscript links for the lettering on a seventh- to ninth-century probable grave-marker (CD2) found built into the church fabric (Edwards 2007, 132-4) may suggest a site of early medieval literacy and learning. CD2 is a water-worn boulder of a stone that outcrops north of Aberarth; it may have been transported down the coast to Henfynyw (Jackson in Edwards 2007, 132), perhaps by boat.

Henfynyw may have had mythological maritime associations. Charles Thomas and David Howlett (2003, 101-2) equate Nimannauc, a follower of St Padarn who arrives at Padarn’s ‘*Maritimam ecclesiam*’, ‘Maritime Church’, from ‘*Letia*’ (Brittany) on a floating stone in the eleventh-century *Life* of Padarn (Ins.132-42: Thomas and Howlett 2003, 18-19, 35), with Maucannus of the ‘*Maucanni monasterium*’ in Rhygyfarch’s late-eleventh-century *Life* of St David, the monastery in which Sant, David’s father, is commanded to deposit three heavenly gifts to be kept for his unborn son (§2: Sharpe and Davies 2007, 108-9), and they suggest that

Henfynyw, *Vetus Rubus*, *Maucanni monasterium* and Padarn's 'maritime' church may be one and the same.

5.5. Other sites with evidence for maritime connections

Figure 34
Cardigan Bay study area: other sites with evidence for maritime connections



5.5.1.Llanarth

A ninth- or early-tenth-century inscribed cross-slab (CD25) standing in the churchyard at Llanarth commemorates ‘Gu[rhire]t’, although whether as a patron or a deceased individual is unknown; the only other example of this cross-type in Wales is at Llangernyw in Denbighshire, but it is found in Scotland, Ireland and Mann, with the closest parallels being two recumbent grave-slabs from Iniscealtra, Co. Clare (Edwards 2007, 176-8). The inscription’s ‘T’ is an unusual form that may have been inspired by examples in ninth-century Insular manuscripts, and a possible (although unproved) ogham inscription hints at much earlier links with Ireland (Edwards 2007, 178). Llanarth lies c.2.5km from a potential landing place at Cei Bach beach (just east of New Quay Bay, 5.2.2.2). CD25’s artistic and epigraphic influences suggest links to cross-sea cultural contact.

5.5.2.Llanbadarn Fawr

The early medieval ecclesiastical site at Llanbadarn Fawr seems to have been worth raiding by AD 988 (by ‘Gentiles’ according to the Red Book of Hergest *Brut*) (*Pen.*, *RBH* and *ByS* AD 988: Jones 1952, 10; 1955, 16-17; 1971, 46-7), and was a prominent centre of learning in the second half of the eleventh and first half of the twelfth centuries (Edwards 2007, 136). Two carved stone crosses are known from the churchyard, one of the tenth or early-eleventh century (CD4) and one, unfinished, of the ninth to eleventh century (CD5) (Edwards 2007, 135-41). In addition, a ninth- to eleventh-century shaft fragment of unknown provenance (CD36)

in the National Library of Wales, just up the hill from Llanbadarn Fawr, is of local stone which suggests it has not travelled far, although it is not linked stylistically with the Llanbadarn Fawr monuments (Edwards 2007, 198-9).

The stone CD4 is carved from is exposed just to the south of the Mawddach estuary, 37km away over land, and it was almost certainly moved here by sea (Jackson in Edwards 2007, 136; Edwards 2007, 136-8), and perhaps brought within 1km of Llanbadarn Fawr up the tidal Afon Rheidol. CD4 is over 3m long, its size suggesting it was imported at a patron's request rather than by chance. Whilst CD4's cross-form is comparable to B39 near Builth Wells in mid Wales and crosses in Gaelic-Norse north-west England, its iconography and animal ornament has comparisons with Irish crosses and, to a lesser extent, with Insular metalwork and manuscripts (Edwards 2007, 139).

Sulien, head of Llanbadarn Fawr and later Bishop of St Davids, is recorded by his son Ieuan as having been educated in Wales, Scotland and Ireland (*Poem on the Life and Family of Sulien* lns.86-119: Lapidge 1973-4, 84-7). Sulien's travels may have encouraged a cultural milieu at Llanbadarn Fawr formed of a mix of influences from around the Irish Sea (Conway 1997, 26-7). Ieuan may have written the eleventh-century *Life of St Padarn* (Thomas and Howlett 2003, 76), and it seems highly probable that the third of Padarn's important churches mentioned in the text, '*Magna sua ecclésia*', 'his own Great Church' (ln.264: Thomas and Howlett 2003, 22, 40), is Llanbadarn Fawr ('the great church/enclosure of Padarn') (Thomas and Howlett 2003, 98). We are told that the site on which Padarn's third church stood was previously called '*Campus Héli*' (ln.257: Thomas and Howlett 2003, 22, 39), a combination of Latin 'field' and Welsh 'brine' suggestive of a saltmarsh (Thomas and Howlett 2003, 98). This area may have been more susceptible to sea-inundation

in the early medieval period, giving the church a more maritime location than is now apparent.

5.5.3.Llangynfelyn

Llangynfelyn church has possible early medieval origins, with a ‘Celtic’ dedication and a small oval churchyard containing a well (Ludlow 2004b, PRN 50147; Ings 2012, 12 PRN 102720). The church stands c.1.8km south of the Dyfi estuary, on an island within the raised peat bog of Cors Fochno, the largest lowland bog in the UK (Page *et al.* 2012, 286-7). Its elevated position would have made it a focal point in this watery area. An 800m timber trackway runs from the island down to the south side of Cors Fochno, avoiding a 3-4km journey around the edge of the bog; from radiocarbon dating and dendrochronological analysis this trackway seems to have been constructed in the early- to mid-eleventh century, with its last known repair made not long after AD 1136 (Page *et al.* 2012, 295-6, 306).

There may also have been early medieval activity in this wetland area preceding the creation of the trackway. Palaeoenvironmental analysis suggests mixed farming practices in the area in the early medieval period, with a focus on pastoral farming (Caseldine *et al.* 2012, 330-1), and the bog would almost certainly have been exploited for its peat. The area may also have been used for metalworking. There was certainly Roman lead production (Page *et al.* 2012, 285, 293, 295; Caseldine *et al.* 2012, 332), and although there appears to have been a decline in industry during the early medieval period (Caseldine *et al.* 2012, 330) it is possible that metalworking continued on a smaller scale. The construction of the

trackway may itself be related to an increase in lead mining as there is a short-lived peak in lead palaeopollution cal.AD 1026-1177 (2 σ :Poz-25313) in a sample from the centre of Cors Fochno (Page *et al.* 2012, 306-7; Mighall *et al.* 2009, 1512, 1514).

Llangynfelyn seems to have been a destination within Cors Fochno from at least the end of the early medieval period, perhaps a centre point for those who exploited the bog for peat and ore. The availability of these materials in this area may have led to their export, perhaps by boat from the Dyfi estuary. Whatever the date of the ecclesiastical foundation, it does not seem unlikely that there was a settlement on this island from an early period, a community working the wetland landscape who may also have had maritime connections.

5.5.4.Llanllwchaearn

Llanllwchaearn church lies c.500m from the sea at the west end of New Quay Bay, a likely landing place within which is a potentially early medieval fishtrap (5.2.2.2, fig.31). Its formerly oval churchyard (N. Ludlow 2004 in PRN 35885), its dedication and an eighth- or early-ninth-century fragmentary carved stone including a cruciform design lying loose in the church from the 1930s (CD24) may suggest early origins (Edwards 2007, 174-6). CD24's original findspot is unknown, but it seems to be of local stone (Jackson in Edwards 2007, 175). Comparisons to monuments P112-13 at St Dogmaels in Pembrokeshire, c.28.5km south-west down the coast (Edwards 2007, 176), hint at maritime movement of individuals and/or ideas. The functions of P112-13 are uncertain, but Nancy Edwards (2007, 466) suggests that P112 was perhaps a focus or marker within or around St Dogmaels monastery. CD24 might similarly

have been a focus or marker. It may originally have been located away from the ecclesiastical site, perhaps closer to the sea in order to be seen by those using the bay. It may have denoted ecclesiastical ownership and jurisdiction and/or a site of safe landing and exchange as suggested for the carved stones marking the bay at Porth Nefyn, Gwynedd (4.4.2.10). In this light, it is particularly interesting that another church with possible early medieval origins, Llanina, is situated on the other side of New Quay Bay, c.50m from the sea (Ludlow 2004b, PRN 50150; fig.31). Could this church have had in its vicinity a now-lost early medieval carved stone marking the east side of the bay as CD24 may have marked the west?

5.5.5.Llansantffraed

Llansantffraed is a church with possible early medieval origins and good views out to sea dedicated to the Irish saint Brigid and situated c.300m from a potential beach landing place (Ludlow 2004b, PRN 50152). An undated upper quernstone found within the graveyard (Briggs 1986) may indicate early settlement nearby. This area is busy with medieval and post-medieval stone fishtraps (e.g. PRNs 30939-41, 31429, 49600, 103608), and the group of fishtraps to the north of Llansantffraed may have seen a long period of use and re-use, as the traps were rebuilt further inland as sea levels rose (Murphy *et al.* 2013, 2). Some of these fishtraps may have had early medieval predecessors.

5.6. Preliminary conclusions

Maritime accessibility is a feature of the three possibly early medieval high-status sites in the Cardigan Bay study area, but does not seem to have been so important at Glanfred, a certainly early medieval and potentially high-status site. The New Quay Bay fishtrap is likely to have had an associated maritime community, and if other fishtraps along this coast had early medieval predecessors further maritime communities involved in their use and maintenance can be supposed, with activity at Morfa Mawr perhaps belonging to such a community. The imported coin near Aberystwyth and non-local stones at Henfynyw, Llanbadarn Fawr and Tywyn are suggestive of maritime movement. Burial sites at Barmouth, Llanddewi Aberarth and Tywyn may have overlooked landing places.

The Cardigan Bay data will be discussed with that from Pembrokeshire and Gwynedd in chapter 6.

6.The three Welsh study areas: comparative analysis

6.1.Introduction

The preceding three chapters have detailed the evidence for sites with potential early medieval maritime connections in the three Welsh study areas. This chapter will explore similarities and differences in maritime connections across these study areas, under eight headings: settlements, islands, exploitation of marine resources, imports, burial, ecclesiastical sites, place-names and maritime folklore and belief.

Despite the inland limit of 15km for the study areas (2.3), the vast majority of sites with potential maritime connections lie under 3km from the sea or tidal waters and none are further than 5km. This suggests that maritime communities in early medieval Wales generally lay well within an hour's walk of tidal waters. This is unsurprising in itself, although it is interesting that maritime imports are not found further inland (6.5).

6.2.Settlements

6.2.1.High-status settlements

The prevalence of the sea in the praise-poem *Edmic Dinbych* (Williams 1972; Gruffydd 2005; Russell 2017) suggests not only that the sea's proximity was an important part of the identity of the royal court at Tenby, Pembrokeshire (3.2.1.5), but also that Tenby's highly coastal position was unusual, or even unique, amongst

early medieval high-status sites in Wales. The only other site that might compare is the tidal islet of Gateholm, Pembrokeshire (3.2.1.6.2), where a perhaps fifth- or sixth-century bronze stag, now lost and of uncertain provenance, might indicate high-status ceremonial activity. However, the lack of other evidence for high-status activity on Gateholm might suggest that any high-status activity was short-lived and perhaps ceased before the beginning of this study.

Although Tenby's highly coastal position may have been unusual this does not mean that other early medieval high-status secular settlements in Wales did not have maritime interests. The majority of high-status secular settlement sites in the data collection are close to tidal waters, the furthest distant being Narberth, Pembrokeshire (3.2.1.8), less than 5km from the upper tidal stretches of the Cleddau Ddu. Given the extension of the study areas 15km inland this indicates a particular desire for maritime accessibility.

The following high-status secular settlement sites are considered to have had very good maritime accessibility (see fig.35). Aberffraw in Anglesey (4.2.1.1), Caernarfon on the mainland side of the Menai Strait (4.2.1.2), Deganwy in Conwy (4.2.1.5) and Carew and Lawrenny in Pembrokeshire (3.2.1.1, 3.2.1.2) are all situated on tidal rivers, and Longbury Bank in Pembrokeshire (3.2.1.4) lies not far from the once-navigable River Ritec connecting it to the sea (Campbell and Lane 1993, 18). Possible high-status secular settlement sites on or near tidal rivers are found at Tal-y-Garreg, Pennal and Brynchrug in Cardigan Bay (5.2.1.1), Pembroke in Pembrokeshire (3.2.1.7) and Trefriw in Conwy (p.134). Tenby in Pembrokeshire is highly coastal and Llonion, Pembrokeshire (3.2.1.3) lies on the banks of the Milford Haven Waterway, a large natural harbour, whilst possible high-status settlements at

Llanfaes, Nefyn, Penmon and Aber in the Gwynedd study area (4.2.1.6) and Manorbier in Pembrokeshire (3.2.1.7) are all close to the shore.

Other high-status secular settlement sites less directly accessible by sea, but still with fairly good maritime accessibility (fig.35), are Trefloyne, Brawdy and the possible site of Castlemartin rath in Pembrokeshire (3.2.1.8, 3.2.1.6.1, 3.2.1.7), Cefn Cwmwd in Anglesey (4.2.1.4) and the possible sites of Rhosyr and Neigwl in the Gwynedd study area (4.2.1.6).

Only three high-status or possibly high-status secular settlement sites in the study areas are over 3km from the sea or tidal waters, and none of these have produced evidence for maritime connections. They are Narberth and the possibly high-status sites of Drim in Pembrokeshire (3.2.1.8) and Glanfred in Cardigan Bay (5.2.1.2).

The unusual high-status site at Porth Trefadog, Anglesey (4.2.1.3) also has good maritime accessibility although it was probably the habitation of a wealthy individual rather than a royal centre. Dinas fort on the mainland side of the Menai Strait (p.135) may provide a tentative parallel to Porth Trefadog.

A raid on Aberffraw in AD 968 (*Pen.*, *RBH* and *ByS* AD 968: Jones 1952, 8; 1955, 14-15; 1971, 38-9) may have arrived by sea, a reminder that maritime accessibility had its disadvantages, especially for wealthy high-status sites. Such disadvantages must have been outweighed by the advantages of maritime accessibility, which are likely to have included political, social and economic contacts up and down the coasts of Wales and overseas. Maritime dangers might explain why the majority of these sites are set back a little way from the open sea, perhaps in an attempt to protect themselves from opportunistic raiding and the worst of the sea storms. Tidal rivers could have been blockaded to defend a site from

seaborne attacks, and would have provided an escape route should a threat appear from inland. A location a little way from the open sea would also have given these sites the potential for a dual outlook, allowing them to pursue both inland and maritime interests (see Austin 1993, 5) and making them central places within both the land and seascape.

Figure 35

High-status secular settlements with good maritime accessibility in the three Welsh study areas



It seems, then, that maritime accessibility was an important element in the locations of high-status secular settlement sites in Wales. Imports at some of these sites provide more direct evidence for maritime connections, whether they arrived as traded items or as personal possessions. Rivers are likely to have played a part in the transportation of goods brought overseas to Longbury Bank, Carew, Deganwy, Caernarfon and Cefn Cwmwd, whether such goods travelled upriver in sea-going vessels or were transhipped into river vessels. It is likely that maritime traffic would have been drawn to high-status sites by the promise of wealthy patrons, allies and customers but this does not mean that high-status individuals controlled all maritime traffic on their coasts.

Maritime imports in the early medieval Irish Sea are generally discussed in relation to trade, which is often argued (particularly in the earlier part of the period) to have been under elite control (e.g. Campbell 2007a, 117-18, 122-4; Charles-Edwards 2013, 222-5; Mytum 1992, 262-7; Doyle 2009, 35; O'Sullivan *et al.* 2013, 269). However, whilst the movement of maritime imports subsequent to their arrival on a high-status Welsh site may have been built around gift exchange and high-status control of goods (e.g. see Campbell 2007a, 117 on Dinas Powys, Glamorgan), this does not mean that all maritime trade was under direct elite control. The difficulties of policing even a short stretch of coast in early medieval Wales are unlikely to have been worth the rewards, especially since maritime traffic would have been drawn to wealthy high-status sites anyway. In one interesting episode of the *Life* of St Gwynllyw, compiled c.AD 1130, mid-eleventh-century merchants from England refuse to pay a toll at the mouth of the Usk (near modern-day Newport, Gwent); in retaliation a minor royal cuts away the merchants' anchor, an action which in turn is said to have led to hostilities from Harold Godwinson (§13: Wade-Evans and Lloyd

2013, 184-7; dating: Wade-Evans and Lloyd 2013, xiv). The episode suggests that even when tolls on maritime trade were levied, enforcing them could be difficult.

An episode in the fourth branch of the *Mabinogi*, when a shoemaker (actually the magician Gwydion) arrives by boat to the harbour entrance of *Caer Arianrhod* and is patronised by Arianrhod herself (Davies 2007, 55-6), suggests that not all maritime interactions at high-status sites were planned and that opportunistic maritime traders and craftspeople may have been welcomed at royal courts.

Whether high-status individuals interacted directly with the sea themselves or relied on associated lower-status maritime communities for this, the locations of the majority of the high-status secular settlements in the three Welsh study areas suggest that maritime accessibility was considered an important attribute of these sites. It is likely that they would have been important sites within the maritime cultural landscapes of their localities, something that can also be argued for high-status ecclesiastical sites with good maritime accessibility (6.7).

6.2.2.Lower-status settlements

The bias towards maritime accessibility in the locations of high-status secular settlements in the Welsh study areas is not found amongst the known lower-status secular settlements. However, it is clear that some of these lower-status sites had maritime connections. The lower-status secular settlements in the data collection are diverse, defying attempts at typology, and evidence for maritime connections at these sites is similarly varied.

At Llangefni Coleg Menai campus, Anglesey, isotope analysis suggests the presence of a non-local sheep, representing an organic maritime cargo whether brought by boat or swum to the island; following its arrival on the island, the sheep may have been brought closer to the site by boat up the Afon Cefni (4.2.2.2, 4.3.6). Objects or materials at lower-status settlements that may have been moved by sea are found at Brownslade Barrow, Newton and South Hook in Pembrokeshire (3.2.2.1, 3.2.2.2, 3.2.2.3), and Llangefni Link Road/Coleg Menai Campus and possibly Tre'r Ceiri in Gwynedd (4.4.3.4, 4.2.2.6). Direct maritime connections at the hillfort of Tre'r Ceiri are uncertain, but the bone comb found there and likened to examples from Llanbedrgoch, Anglesey, could suggest maritime movement of ideas or objects. The bone comb from Brownslade comparable to examples at Dinas Powys, Glamorgan and Llanbedrgoch might similarly suggest maritime movement of ideas or objects, and one quernstone at Brownslade is made of stone that probably originated in north Pembrokeshire, and, although it may have been glacially transported (Murphy 2011a, 155), it is possible that it was moved here by boat. Brownslade certainly seems to have had maritime connections, given the diverse origins of the people buried in the cemetery (6.6.2). The stone of the quernstone at Newton may also have arrived by boat, ferried across the Milford Haven Waterway from its probable origins in an outcrop to the south of Milford Haven. The quernstones at Brownslade and Newton may have been transported as ballast, either as raw materials or as finished objects (see section 6.5.6 for further discussion of the maritime movement of stone in Wales). The penannular brooch at Llangefni Link Road/Coleg Menai Campus may also have been an internal maritime import.

Ironworking at South Hook included the use of ore that appears to have either come from the area of the Skomer Volcanic Group to the west of the site, or been

smelted in furnaces made of rocks from that area (Young 2010, 162-3). This raw or smelted ore may have been moved by boat along the Milford Haven Waterway to South Hook to avoid transporting heavy industrial materials overland. A lack of evidence for artefact manufacture at South Hook (Young 2010, 160) may suggest that blooms smithed here were transported elsewhere to be made into artefacts – again, this transportation may have been by boat for a smoother and swifter journey. It is possible that South Hook represents just one staging post in a series of early medieval metalworking sites linked by the sea, and it certainly seems likely that some ore (whether raw or smelted) was arriving at South Hook by boat.

Tentative parallels may be drawn between South Hook and other ironworking sites in the Welsh study areas where raw materials or finished goods may have been moving by sea (see fig.36). The ironworking within the highly coastal promontory fort at Porth Trefadog, Anglesey (4.2.1.3), may have been sited to take advantage of the bay below for bringing materials in and out of the site. Possible ironworking at Llanfairpwllgwyngyll (4.2.2.1), right on the edge of the Anglesey side of the Menai Strait, could also have taken advantage of maritime connections. The sixth- to seventh-century iron-smithing site at Parc Bryn Cegin (4.2.2.3), which lies c.2.5km from the Menai Strait on the route of a predicted Roman road heading for the coast, was probably making use of partly-refined billets or bars of iron imported to the site. This suggests that it was associated with at least one other metalworking site. Maritime as well as land routes may have linked this site with others, a hypothesis supported by the presence of a small piece of coal which, if not intrusive, may have been imported from Anglesey as fuel. The possibly early medieval ironworking at Parc Cybi, Anglesey (4.2.2.4) may have had metalworking links to Irish practice. Ironworking at Glanfred, Cardigan Bay

(5.2.1.2) seems to have made use of local bog ore. Although there is no evidence for direct maritime connections at this site of uncertain status, the availability of bog ore around Borth may have resulted in the ore or finished products made from it being exported from the area, potentially by sea (see also the discussion of Llangynfelyn, Cardigan Bay, 5.5.3). At Gateholm, Pembrokeshire (3.2.1.6.2), another site of uncertain status, undated evidence for iron smelting, including tapped slag, is found near an outcrop of the Skomer Volcanic Group, which has links to South Hook where slag-tapping furnaces are also found. Gateholm may therefore be another example of an early medieval metalworking site with maritime connections.

Although the lower-status sites with fairly certain evidence for maritime movement of goods are few and confined to the Pembrokeshire study area (South Hook, Newton and Brownslade), it seems likely that maritime movement of raw materials and finished goods to and from lower-status settlements took place across early medieval Wales. The evidence is slim for Cardigan Bay, where there is a general paucity of early medieval finds, but the availability of ore in this area makes maritime movement of raw materials and/or finished goods a distinct possibility. The area certainly saw the maritime export of metal ores, particularly lead, in later centuries (Davies n.d.).

Figure 36
Ironworking sites where raw materials or finished goods may have been moving by sea in the three Welsh study areas



The possibly early medieval fishtrap at New Quay, Cardigan Bay, would have needed a nearby maritime community to tend it (5.2.2.2). Elsewhere in the study areas, the locations of some lower-status settlements suggest possible maritime connections but their activities are less certain. At West Angle Bay, Pembrokeshire (3.2.2.4, 3.4.2.17), the settlement and cemetery overlook both the mouth of the

Milford Haven Waterway and a local landing place, a position that would have enabled inhabitants to be forewarned of friendly and hostile traffic to the Waterway and to interact directly with maritime traffic in the bay below, perhaps offering their services as pilots for the next stage of a visiting boat's journey. At Llanfairpwllgwyngyll, Anglesey (4.2.2.1), the construction of a new settlement on the shore of the Menai Strait in the earlier-eleventh century suggests that the inhabitants were involved in maritime activities, possibly including metalworking with maritime connections (see above) and the use and protection of fishtraps (Smith 2012, 36).

Maritime connections at Rhuddgaer, Anglesey (4.2.2.5) are suggested by the proximity of the Afon Braint estuary, which may be the important, documented landing place of Abermenai, and potential material culture links with Ireland. The distance of this important landing place from any known early medieval high-status settlement (the closest possible one being Rhosyr, over 2.5km inland) may have afforded a lower-status community in its vicinity a certain amount of independence, perhaps resulting in what Christopher Loveluck (2017, 316) has termed a 'symbiotic relationship' between landed power and maritime community. The inhabitants of Rhuddgaer may therefore have belonged to a lower-status community enabling the maritime interests of a high-status site (cf. 6.2.1).

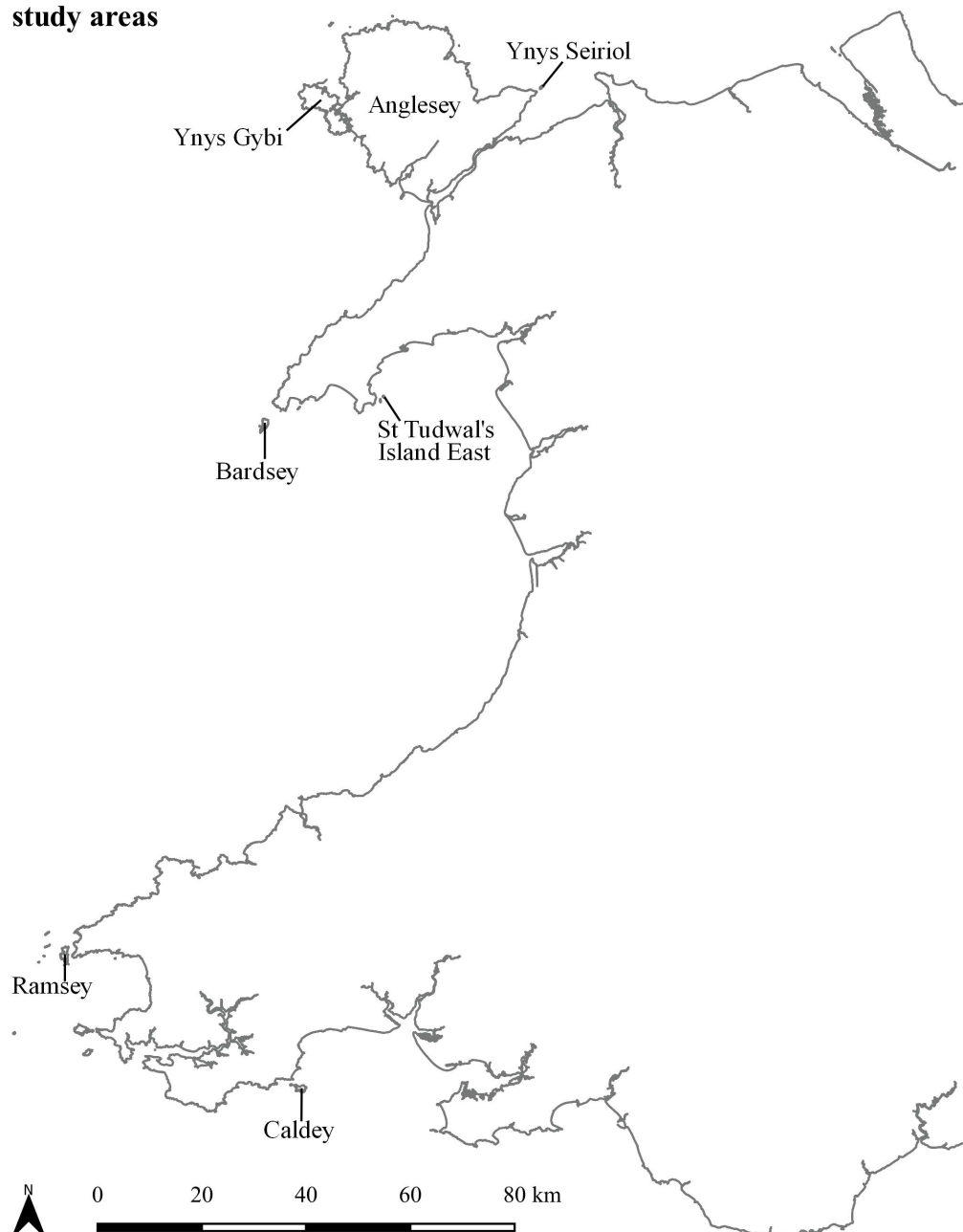
The evidence for lower-status settlement sites with maritime connections in the data collection is so disparate that patterns are difficult to spot, and those that might be noted are on shaky ground – for example, the two quernstones possibly moved on tidal waters are both found in Pembrokeshire, but this statistic is more likely to result from accidents of discovery than a real absence of such activity elsewhere. However, although settlement forms and evidence for maritime

connections are diverse both within and between the three Welsh study areas, it is clear that lower-status settlements in early medieval Wales could have maritime interests, and that these could be pursued away from high-status centres.

6.3. Islands

Figure 37

All islands with evidence for early medieval activity in the three Welsh study areas



Early medieval activity on islands is, by its presence, suggestive of early medieval maritime activity (cf. Greene 2009, 52). The two largest islands in the data collection, Anglesey and Ynys Gybi, could potentially have been self-sufficient (although note the non-local sheep at Llangefni Coleg Menai campus, 4.2.2.2, 4.3.6 – and the narrow stretches of water between Ynys Gybi and Anglesey and Anglesey and mainland Gwynedd make them likely to have been closely connected to activities elsewhere), but activity on smaller islands may well have relied on maritime imports of raw materials, livestock and other goods such as food and clothing. In Adomnán's seventh-century *Life of St Columba* (II §45: Sharpe 1995, 201-2), timbers for building are towed by boat to Iona from the mainland, and similar maritime activities may have enabled the construction and maintenance of Welsh island ecclesiastical sites. Early medieval maritime movement of goods to Welsh coastal islands is represented archaeologically by an imported stone and coin on Bardsey and imported pottery on Caldey (4.4.1.1, 3.3.1.1). Although islands may have benefited from being a first port of call for visiting boats to pick up supplies or local pilots, there is no evidence for their use as major exchange hubs in early medieval Wales (*contra* the islands of Dalkey, Co. Dublin and Dunnyneill, Co. Down, see p.300).

The five smaller island sites in the data collection all have evidence for early medieval ecclesiastical presence. They are Caldey and Ramsey in Pembrokeshire and Bardsey, Ynys Seiriol and St Tudwal's Island East in the Gwynedd study area (Gateholm is excluded from this discussion as being a tidal islet and therefore accessible by land). Ecclesiastical sites on islands would not have been isolated from mainland ecclesiastical activity. Individuals and ideas would have passed across the water, and particularly close relationships may have existed between certain island

and mainland foundations such as Ynys Seiriol and Penmon, Bardsey and Aberdaron and Ramsey and St Davids Cathedral (4.4.1.2, 4.4.2.11, 4.4.1.1, 4.4.2.1, 3.4.1.2, 3.4.3.7). The draw of islands to early medieval ecclesiastics was in a conceptual and physical retreat from society and in a view of islands as places within the biblical Ocean where one might battle demons and be closer to God, a watery interpretation of the ideals of desert hermits and desert monasticism (O'Loughlin 1997, 12-13; Wooding 2007, 204-5; Jankulak and Wooding 2010, 15-16; Ó Carragáin 2013, 22).

Previous sanctity may also have encouraged the establishment of early medieval ecclesiastical sites on islands. Tomás Ó Carragáin (2013, 22) has argued that islands were not 'cultural blank slates' and that pre-Christian perceptions fed into early medieval belief systems, and Jonathan Wooding (2007, 214) has suggested that islands off Britain may have been occupied by pre-Christian religious communities. See pages 265-7 for a discussion of Welsh mythological island associations.

It is probable that early medieval islanders formed distinct identities, seeing themselves as different from neighbouring mainland communities (cf. Greene 2009, 47 concerning the development of a distinct costume amongst the eighteenth-century Inishkea, Co. Mayo, islanders). Despite their ostensible isolation, however, islands were central places within the maritime landscape (cf. Petts 2009) and the advantages of this would have combined with spiritual considerations to recommend them for ecclesiastical use, and for secular activities also. The greater visibility in archaeology and documentary sources for early medieval ecclesiastical activity on islands does not mean that secular activity did not precede it, and/or continue alongside it.

Each of the island ecclesiastical sites in early medieval Wales is likely to have had an associated, probably secular, community who served their maritime needs. Although some ecclesiastics may have been sailors, or at least have had some knowledge of the skill (might this explain the marine shells over the east-west burial under the small structure on Ynys Seiriol? 4.4.1.2), others would have relied wholly on the competency of others. In one episode of Adomnán's *Life* of St Columba (II §45: Sharpe 1995, 200-2), for example, Adomnán shows some knowledge of sailing but the sailors themselves seem to be separate from Adomnán's companions and may have belonged to a local secular maritime community who served the monastery.

It is likely, then, that an island ecclesiastical community would have inhabited a very different maritime cultural landscape, with very different perceptions of maritime spirituality and practicalities, to a secular community on the same island. With the possible exception of St Tudwal's Island East (p.178), none of the early ecclesiastical sites on these Welsh islands seem to have a likely landing place as their nearest coast, perhaps indicating that these establishments were not directly involved in maritime activities. Burial sites on Caldey and Ramsey overlook landing places but both these sites are at a distance from the probable locations of early ecclesiastical foundations (figs.11 and 13). On Caldey, burial at St David's church may have commenced prior to the arrival of ecclesiastical presence here, as argued for sites such as Whitesands, and the burials may belong to a secular maritime community earlier than and/or contemporary with Caldey Monastery (3.3.1.1, 3.4.1.3, 3.4.1.1). On Ramsey, the burial site may have originated as that of a secular maritime community although it was later adopted by ecclesiastics (3.4.1.2).

Islands may also sometimes have been used as places of refuge and defence, as suggested by the record of Cadwallon ap Cadfan, king of Gwynedd, being besieged on Ynys Seiriol c.AD 630 (p.154).

Islands were dual spaces of isolation and connection, and could have differing practical and spiritual significances to different people. All island activity is united by one certainty, however: the presence of nearby maritime communities with suitable skills and local knowledge to ensure that island activity was possible.

6.4. Exploitation of marine resources

The fishtrap at New Quay, Cardigan Bay (5.2.2.2) is the only fishtrap within the Welsh study areas suggested, from its location below the current low-water mark, to be an early medieval structure. Outside the study areas a stone fishtrap at Goodwick, north Pembrokeshire, is also suggested to be early medieval on account of sea level change (F. Murphy and H. Wilson 2012 in Murphy *et al.* 2013, 91 PRN 103601), whilst a probable fishtrap at Redwick, Monmouthshire, is radiocarbon dated cal.AD 425-655 (2 σ :Beta-134641) (Allen and Bell 1999, 58-60), and further east a series of woven timber structures between Sudbrook Point and Caldicot Pill, Monmouthshire, have produced radiocarbon dates spanning the later-eighth to the first half of the thirteenth century, with two probable fish-herding hurdles falling entirely within the time-frame of this thesis at cal.AD 680-1040 (2 σ :Beta-54828) and cal.AD 770-1113 (2 σ :Beta-56188) (Godbold and Turner 1994, 30-1, 36 tbl.1). There was certainly early medieval fishing in the Severn estuary, then, and if it were possible to closely date stone fishtraps in this manner further early medieval fishtraps on the Welsh

coast might well be revealed. Between Aberarth and Aberaeron in Cardigan Bay, for example, a series of medieval stone fishtraps corresponding to documented fishtraps granted to Strata Florida Abbey in AD 1184 (Lewes 1924, 398) may well have earlier predecessors, and the medieval stone fishtrap activity in the Menai Strait led to George Smith's suggestion that the inhabitants of the eleventh- to twelfth-century settlement at Llanfairpwllgwyngyll were involved in fishtrap protection and use (Smith 2012, 36; 4.2.2.1). If a fishtrap was not maintained the sea would quickly tear down wooden structures and redistribute stones. Early medieval fishtraps may therefore be preserved only in difficult-to-interpret echoes, with newer, medieval structures perhaps using the locations and materials of the old.

Within the Welsh study areas Longbury Bank, Pembrokeshire, is the only site with evidence for the consumption of marine resources, boasting a small shellfish assemblage dominated by oyster and with a few fragments of cockles, mussels, limpets and scallops (Campbell 1993, 52). Marine molluscs elsewhere in the study areas are associated with burials (6.6.1.4). In Wales outside the study areas, there is a small number of marine molluscs at Dinas Powys, Glamorgan, although the small quantities of salmon and sea-trout there may have been caught in a river rather than at sea (Alcock 1963b, 39-40), whilst in a tenth- to eleventh-century context at Rhuddlan, Denbighshire, some sea fishing is indicated by the presence of *spurdog* (Levitan 1994, 147, 148 tbl.14.1 n.f). In 'How Culhwch won Olwen', a tale which may have been written at Carmarthen, east of Pembrokeshire, in the first half of the twelfth century (Davies 2007, xxii), a shepherd, inventing a story for his possession of a ring, tells his wife that he found it washed in with its dead owner when he was by the sea, looking for sea-food (Davies 2007, 191). This might suggest that intertidal picking for resources such as marine molluscs was a known activity in

south Wales at an early date. The intertidal zone may also have been used to graze animals on nutrient-rich seaweed, as suggested by the presence of swineherds and their pigs on the Irish seashore in the second branch of the Mabinogi (Davies 2007, 22-3, 27-9 – although the tale places this activity in Ireland, it is likely that it took place on Welsh shores also).

Isotope analysis on individuals from Brownslade Barrow, Porth Clew, West Angle Bay and Whitesands in Pembrokeshire, Bardsey in Gwynedd, and the south-east Wales sites of Llandough (overlooking the tidal River Ely) and the highly coastal Atlantic Trading Estate suggests terrestrial diets for those buried in these early medieval cemeteries (Hemer *et al.* 2017, 434; Richards 1998, 120-1). However, high sulphur values in individuals from Pembrokeshire indicate the influence of seawater on the local biosphere, or possibly the use of seaweed as a fertiliser or as a foodstuff (Hemer *et al.* 2017, 434-5). Seaweed is only found on one of the sites, Brownslade, and here only in a prehistoric context and an undated, but possibly post-medieval, shell-midden (Carruthers 2011, 162-3). The use of seaweed in early medieval Pembrokeshire therefore remains uncertain.

Cetacean exploitation in early medieval Wales is similarly uncertain.

Cetacean stranding occurs in Wales today, and given the great depletion in cetacean populations since the early medieval period it can be expected that strandings were far more common at that time. However, no cetacean bone is known from early medieval contexts in Wales and no written account of their exploitation in this period survives. It would seem that objects of whale bone were known in early medieval Wales, at least in high-status contexts, with the Laws of Court section of the Laws of Hywel Dda, perhaps written or rewritten in the tenth century, listing whale bone as the most expensive of materials for the game-board *tawlbwrdd* and noting that both

the court justice and bard were entitled to a whale bone *tawlbwrdd* from their king (Jenkins 1986, 16, 20, 192; Charles-Edwards 2013, 271). However, it is unknown whether these gaming boards or their materials would have been imported or made from animals exploited on Welsh shores. A whale bone (*‘asgwrn moruil’*) belt clasp and a belt clasp made of the eyelid of a pure black whale (*‘amrant moruarch purdu’*) appear in the twelfth- or thirteenth-century ‘Rhonabwy’s Dream’, probably written in Powys (Davies 2007, xx-xxii, 223-4; Richards 1948, 16-17 lns.31-1, 18 ln.1; whale’s eyelid is probably a variant of the term ‘whale’s eyelash’ to denote baleen, see Kelly 2000, 284-5; Büchner 2001, 67; Raye 2014), and a whale bone (*‘asgurn moruil’*) bridge connects the land to a ship in Maxen Wledig’s dream in the perhaps earlier-thirteenth-century ‘Dream of the Emperor Maxen’ (Davies 2007, 103-4; Roberts 2005, lxxxiv-lxxxv, 2 lns.34-5). However, these references are too late to confidently reconstruct early medieval attitudes towards stranded, or indeed hunted, marine animals.

It is possible that exploitation of stranded marine animals has left no trace in the archaeological record due to acidic soils or to beach processing allowing the sea to perform a clean-up job of the remains (Büchner 2001, 76). However, it is also possible that stranded marine animals were avoided and considered taboo in some way: monstrous beasts from the unknown depths whose character in the *Physiologus*, which influenced medieval bestiaries, was deceitful and dangerous (Szabo 2005, esp. §6-7). Alternatively, a taboo may have existed not against the use of stranded marine animals, but against bringing the carcass inland. In the Norwegian Gulathing law (dating earlier than the twelfth-century earliest surviving copy), the finder of a whale must cut it up in the water and would face a fine if they brought it to the grass or if they cut the whale up on land used for grazing, the owner

of the land benefiting from such activities taking place there (§149: Larson 1935, 126; dating: Larson 1935, 26, 28 n.67). In early medieval Wales, cetaceans may similarly have been cut up in the sea or on the shore, possibly to avoid fines from land-owners but also, perhaps, to avoid fouling fertile land in both a practical and superstitious sense. If whales were considered taboo in some way it is possible that their bone may have been shunned and left to the sea, with only the archaeologically invisible meat and oil taken inland.

If seal hunting was an activity in early medieval Wales, the archaeological evidence might similarly have been washed away by the sea. In the *Life* of Gruffudd ap Cynan the Skerries (in Welsh: Ynysoedd y Moelrhoniaid, Islands of Seals) off the north-west tip of Anglesey are named ‘*Insulam Adron (quae et focarum insula dicitur)*’, ‘island of Adron (which is also called the island of seals)’ (§14: Russell 2005, 64-5, 143), perhaps hinting at seal hunting there, although it could simply be a descriptive name.

There is a definite lack of evidence for the exploitation and consumption of marine resources in early medieval Wales. Acidic soils may have done away with evidence for sea fish consumption but this is not so satisfactory an explanation for the paucity of marine molluscs and cetacean bone. The only dated early medieval fishtraps are found in the Severn estuary and isotope analysis suggests a reliance on terrestrial diets, even for those who lived on the edge of the land. Why might marine resources have been ignored? Some societies across the world and history have avoided eating fish even when its supply is plentiful (Simoons 1994, 253-96; see also Rainsford and Roberts 2013 for potential reasons behind the low occurrence of fish on British sites of the Iron Age). The individuals analysed in Pembrokeshire and Bardsey came from communities that are thought to have had maritime connections

(3.4.3.1, 3.4.2.8, 3.4.2.17, 3.4.2.18, 4.4.1.1), but in their dietary preferences they seem to have chosen not to turn to the sea. Reasons for this are likely to lie within societal expectations and cultural beliefs, although the specifics of these are now unknown.

It would be interesting to see the results of dietary isotope analysis for early medieval individuals buried near the coasts of Cardigan Bay and the Menai Strait, given the prevalence of medieval stone fishtraps in these areas which may have succeeded earlier structures. The shellfish at Longbury Bank and Dinas Powys and the spurdog at Rhuddlan (all of which are high-status sites) and the possibly early medieval fishtrap at New Quay (which has no known high-status associations) show that a lack of marine resource consumption in some areas need not indicate that such cultural preferences were shared by all early medieval communities around the Welsh coast.

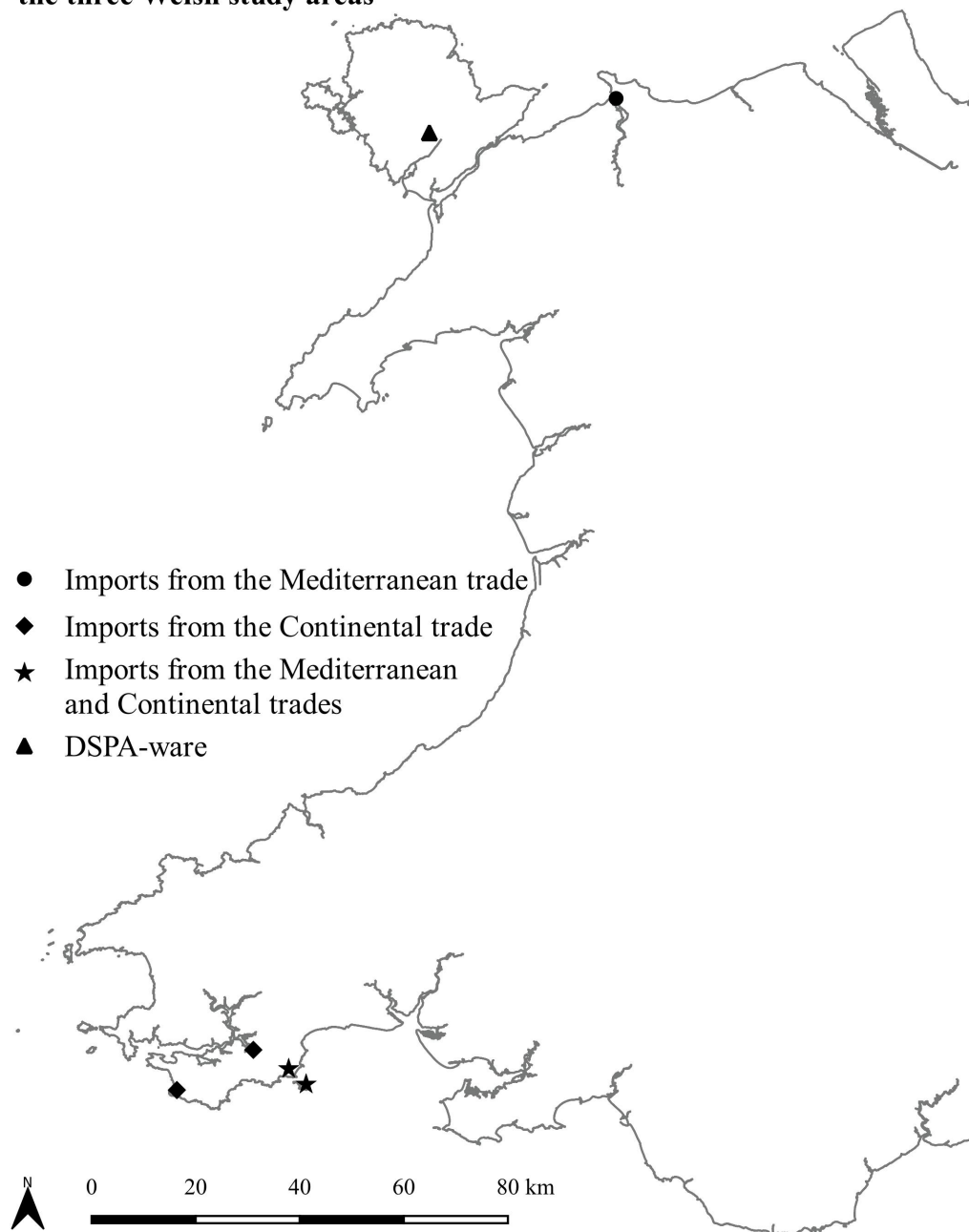
6.5.Imports

Some imports in the Welsh study areas, whether traded or carried as personal possessions, may have made all or part of their journey by sea. It is interesting to note that no import was found further inland than cross-slab P7 at Camrose, Pembrokeshire (3.5.1), almost 5km from the tidal limit of the Cleddau Wen but less than 2km west of the Cleddau Wen above this tidal limit. It would seem, then, that maritime imports did not tend to make their way very far inland, and would therefore have had a greater impact on the culture and society of those who lived closer to the coast than those who lived further from it.

6.5.1.The Mediterranean and Continental trades

Across the three Welsh study areas (fig.38), three sites have produced imports from the fifth- to sixth-century Mediterranean trade (New Orchard near St David's, Caldey and Longbury Bank in Pembrokeshire and Deganwy in Conwy: 3.3.1.1, 3.2.1.4, 4.2.1.5), and four sites have produced imports from the sixth- to seventh- or early-eighth-century Continental trade (New Orchard near St David's, Caldey, Longbury Bank, Carew and Linney Burrows in Pembrokeshire: 3.3.1.1, 3.2.1.4, 3.2.1.1, 3.3.1.3), whilst Cefn Cwmwd in Anglesey has produced both a sherd of fifth- or sixth-century DSPA-ware which originated in western France and may have arrived with either the Mediterranean or Continental trades or in between them (Campbell 2007a, 31), and a sixth- or seventh-century Byzantine intaglio which Ewan Campbell (2007a, 78) has suggested may have come via western France along with the DSPA-ware, although it is also possible that they arrived independently. It is uncertain whether the lack of finds from either the Mediterranean or Continental trades in Cardigan Bay indicates a real absence or whether sites with these imports remain to be found. It certainly seems that E-ware did not make it to north Wales (although note that the glass sherd at Deganwy is of uncertain type and provenance and could conceivably have arrived with the Continental rather than Mediterranean trade).

Figure 38
All sites with imports from the Mediterranean and Continental trades in the three Welsh study areas



Longbury Bank, Deganwy, Carew and Cefn Cwmwd are considered to be high-status sites, and it seems that the Mediterranean and Continental trades were generally focused on high-status consumers in Wales (Campbell 2007a, 122-4). However, this does not preclude exchanges between mariners and lower-status maritime communities who came into contact with them (cf. Loveluck 2017, 307). This might explain the E-ware at Linney Burrows, perhaps indicating a nearby

landing place and exchange site rather than the ‘major settlement’ suggested by Ewan Campbell and Alan Lane (1993, 70; 3.3.1.3), and the single sherds of E-ware and Phocaean Red Slipware on Caldey, in the vicinity of cist burials and a potential landing place and away from the likely site of the early medieval monastery (3.3.1.1).

There has been a particular focus of scholarly interest on the potential mechanisms of the Mediterranean trade, with differing theories on its regularity, how many trips may have been undertaken and whether it was direct or indirect (e.g. Fulford 1989; Bowman 1996; Duggan 2016; Campbell 2007a, 132; Thomas 1988). The large quantity of E-ware imports in Ireland has led to suggestions of a direct trade between Ireland and the Continent (Doyle 2009, 34; Campbell 2007a, 136-8; Loveluck and O’Sullivan 2016), with Christopher Loveluck and Aidan O’Sullivan (2016, 25-6) arguing that the E-ware trade in Ireland was instigated by Irish merchants engaged in salt trade with the region between the Charante and Loire estuaries. The E-ware in Wales may also have come from Irish merchants, or could indicate Welsh boats sailing to the Continent to source their own salt (‘British’ sailors at Noirmoutier in the *Life* of St Filibert (§40, §41: Krusch and Levison 1910, 603) could potentially have been Welsh). The exact routes and mechanisms of trade and exchange of these early imports remain uncertain. However, goods with origins in the eastern Mediterranean and western France were certainly arriving in early medieval Wales, their generally high-status findspots suggesting expected and desirable traders and commodities.

Emphasis of scholarly interest on the Mediterranean and Continental trades has been encouraged by the long distances travelled by the imports and the Irish Sea focus of both trades, the first particularly with south-west Britain and the second

particularly with Ireland. However, there are just six sites in the Welsh study areas with imports from the Mediterranean and/or Continental trades, representing only a small proportion of the sites with imports of early medieval date. Focus on these early trades has tended to draw attention away from other evidence for maritime movement of goods in the early medieval Irish Sea.

6.5.2. Merchants' weights

The three findspots of early medieval merchants' weights in the Welsh study areas, at Freshwater West and Robeston West/Walwyn's Castle in Pembrokeshire, and at Porthamel on the Anglesey side of the Menai Strait (3.3.2, 4.3.2), are all suggestive of exchange sites close to tidal waters, and perhaps therefore close to landing places. Their forms suggest Hiberno-Scandinavian associations, and, in the case of Porthamel, a link with the Scandinavian-influenced settlement at Llanbedrgoch, Anglesey (M. Redknap in Geake 2003, 214-15). The Llanddaniel Fab cast copper-alloy object with decoration typical of eighth- or early-ninth-century fine Irish metalwork found in the vicinity of the Porthamel weight(s) may represent an item of maritime trade (4.3.2). None of these sites have known settlements nearby. This might suggest that trade at these sites was undertaken with relatively low-status maritime communities who may have acted with a certain amount of independence, possibly in exchange for ensuring that local power holders gained what they wanted from transactions (6.2.1).

6.5.3.Coins

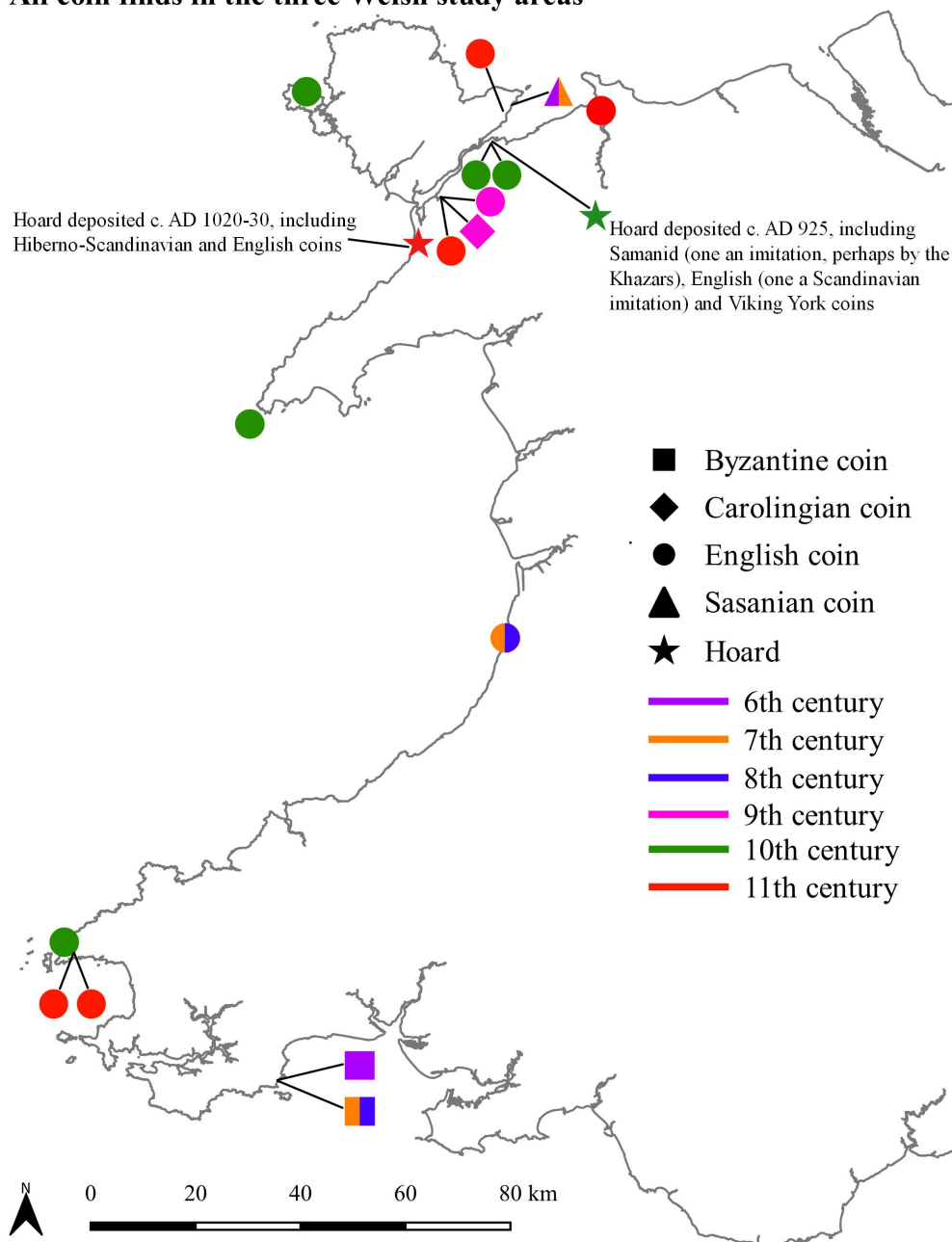
The Llandwrog and Bangor hoards, Gwynedd, included coins and probably represent the personal wealth of individuals engaging with Viking economic routes, perhaps hinting at sites of commercial activity nearby (p.148). Two other hoards are known from only just outside the study area, at Bryn Maelgwn north-east of Deganwy, which was deposited after c.AD 1024 and consists of over 200 silver pennies of Cnut, and the contemporary Pant-yr-eglwys hoard on the Great Orme, perhaps once much larger but now consisting of four Cnut coins, three partially melted and presumably therefore bullion, the fourth an imitation (Boon 1986, 1, 4, 11-14). The confinement of early medieval hoards in the three Welsh study areas to north Wales may suggest that Viking economic activity was greater here than elsewhere, perhaps due to this area being on the route between Scandinavian-influenced trading sites in Ireland and Mann and Chester and York (for other north Wales hoards outside the study areas, see Redknap 2009). Wendy Davies (1990, 52) has pointed out that the practice of burying a hoard suggests familiarity with the area in which it was deposited, and a plan to return. This suggests that at least some of the individuals interacting with maritime Viking economic routes in this area did not simply pass through north Wales, but had more permanent roots there.

Other coins in the Welsh study areas are isolated finds, their distinctly coastal distribution suggesting maritime movement (fig.39). Early medieval Wales did not have a monetary economy and coins were probably used as bullion or in exchanges with travellers who could use them elsewhere; generally, these isolated finds might represent personal possessions or loss during transactions with mariners. Origins and dates are diverse. Two gold coins minted in Constantinople and found at Tenby

South Beach are dated AD 527-65 and AD 698-705, the latter post-dating the Mediterranean trade discussed above, as does an AD 611-12 copper Byzantine coin found at Cosmeston, Glamorgan (pp.82-3; Moorhead 2009, 269 tbl.1 no.11). The silver Sasanian drachm (AD 590-628) found at Penmon beach, Anglesey also hints at direct or indirect maritime connections with lands to the east of the Mediterranean (p.147). These far-flung connections pre-date Viking economic routes in the Irish Sea. With the exception of a ninth-century Carolingian coin found at Caernarfon, Gwynedd (p.128), the remaining isolated coins all had their origins in England. The earliest of these (found near Aberystwyth, Cardigan Bay) is of the late-seventh or early-eighth century (5.3.1), whilst the nine remaining examples fall within the ninth to eleventh centuries (3.3.3, 4.3.3). The majority of the isolated coin finds are in the vicinity of high-status secular and ecclesiastical sites that may have encouraged maritime activity.

Discussion of coin finds on the early medieval Welsh coast tends to focus on Viking contact (e.g. Loyn 1976, 13-15; Dolley and Knight 1970, 80-2; Blackburn and Bonser 1985, 68; Redknap 2007, 89). However, it is noticeable that (in contrast to the hoards, which all contain Hiberno-Scandinavian items or coins) none of the isolated coins are from Viking Ireland or York, and some are far too early to be considered Viking imports. It should not be assumed that all isolated Viking-age coin finds in early medieval Wales arrived through Viking agency.

Figure 39
All coin finds in the three Welsh study areas



6.5.4. Artefacts with origins in, or influence from, Ireland

Items such as the clay bellows protector at Brawdy, Pembrokeshire, the pin on Gateholm, Pembrokeshire and the Llanddaniel Fab, Anglesey cast copper-alloy object (3.2.1.6.1, 3.2.1.6.2, 4.3.2) as well as the early evidence of the ogham stones

(Edwards 2007, 5, 34-41; 2013, 7, 56-7) suggest that Irish artefacts and/or Irish influences on material culture journeyed to Wales in the pre-Viking period. However, the majority of early medieval artefacts in the Welsh study areas which themselves, or the cultural influences behind their manufacture, seem to have originated in Ireland date from the Viking age (3.3.4, 4.3.4). The merchants' weights from Freshwater West and Robeston West/Walwyn's Castle in Pembrokeshire and Porthamel, Anglesey and the tenth-century ingot fragment from Llanfaes, Anglesey hint at commercial transactions within a Hiberno-Scandinavian milieu (3.3.2, 4.3.2, 4.2.1.6), whilst other items might represent traded goods, personal possessions or the work of itinerant craftspeople or those who trained in Hiberno-Scandinavian centres. With the exception of the unparalleled complex and productive site of Llanbedrgoch, on the east coast of Anglesey outside the area of this study (e.g. see Redknap 2005, 18-34), finds of Scandinavian-influenced material culture in Wales (e.g. the hogback at Llanddewi Aberarth, Cardigan Bay, 5.4.1.2) are fairly isolated, suggesting that individuals with Scandinavian cultural backgrounds were generally integrated into pre-existing communities (see 6.6.2 for a discussion of multicultural communities in Wales).

The distribution in the Pembrokeshire and Gwynedd study areas of artefacts with Irish links suggests maritime activity outside high-status localities, with the exception of the Bangor hoard, where the important ecclesiastical foundation may have encouraged commercial activity. This distribution suggests that the goods were not moving at the specific request of elites, but were the products and by-products of a range of voyages undertaken for a variety of purposes such as trade, travel, alliance and immigration.

6.5.5. Other

Imports from England (aside from coins) in the study area may be represented by, in Pembrokeshire, harness fittings near Manorbier, a strap-end and belt fitting from Longbury Bank and the Frankish artefacts at Molleston Back (although these could also have arrived more directly from the Continent) (3.3.6). These imports could have made their way to their findspots overland, although it is possible that some or all of them came at least partly by boat. The Frankish pot and brooch may signify burial of, or by, an individual with non-local origins (see 6.6.2 for a discussion of multicultural communities in Wales).

The hone at Llandudno Junction, Conwy and brooch at Trearddur Bay, Ynys Gybi have comparisons in Scotland as well as Ireland (4.2.1.5, 4.3.4).

The penannular brooches at Porth Dafarch, Ynys Gybi (perhaps made in the West Midlands) and Cefn Cwmwd, Anglesey (best parallel in Cornwall, nearest find of this type in Meols) may represent imports from outside Wales, although both pre-date the period of this study (4.3.6, 4.2.1.4).

The sixth- or seventh-century garnet Byzantine intaglio at Cefn Cwmwd may post-date the visible pottery imports from the Mediterranean, and with the pierced gold coin at Tenby South Beach and copper coin from Cosmeston, Glamorgan (4.2.1.4, 3.3.3), might suggest a continuation of direct or indirect contact with the Byzantine Empire. It is possible that the intaglio arrived with DSPA-ware from western France (Campbell 2007a, 78).

The non-local sheep at Llangefni Coleg Menai campus, Anglesey, is a reminder of the existence of organic maritime cargoes (4.2.2.2, 4.3.6).

6.5.6. Internal maritime imports

Discussion of imports in early medieval Wales tends to be concerned only with imports of external origin, but there were also internal imports moving up and down the coast. Artefacts moved internally can be hard to spot, since the possibility that they can be explained through a general spread of artistic influence rather than direct maritime movement is higher, and further maritime movement of external imports through internal routes is invisible archaeologically. The pin at Penarthur, Pembrokeshire, the bone comb at Tre'r Ceiri, Gwynedd, the whetstone at Newborough near Rhosyr, Anglesey and two of the Porthamel weights, Anglesey are potential internal maritime imports, being comparable to examples at Llanbedrgoch, Anglesey (3.3.4, 4.2.2.6, 4.2.1.6, 4.3.2); the bone comb from Brownslade, Pembrokeshire can be added to this list, being comparable to examples at Llanbedrgoch and Dinas Powys, Glamorgan (3.2.2.1). The pins from the Castlemartin floor, Pembrokeshire, may also be internal maritime imports, being similar to examples from Caerwent, Gwent (3.3.1.3), and it is possible that the Dickinson Type G1.1 penannular brooch at Llangefni Link Road/Coleg Menai Campus, Anglesey may also have been an internal maritime import (4.4.3.4). However, the clearest evidence for internal maritime movement of goods in Wales is found in the movement of stone (fig.40).

The use of Anglesey Grit in several carvings, including architectural fittings, at the high-status ecclesiastical site at Bangor, Gwynedd, may suggest a pre-Norman building programme that required maritime movement of shiploads of stone from eastern Anglesey (4.4.3.1). The size and distance travelled of the stone of prestigious monuments such as P9 at Carew, Pembrokeshire, CD4 at Llanbadarn Fawr, Cardigan

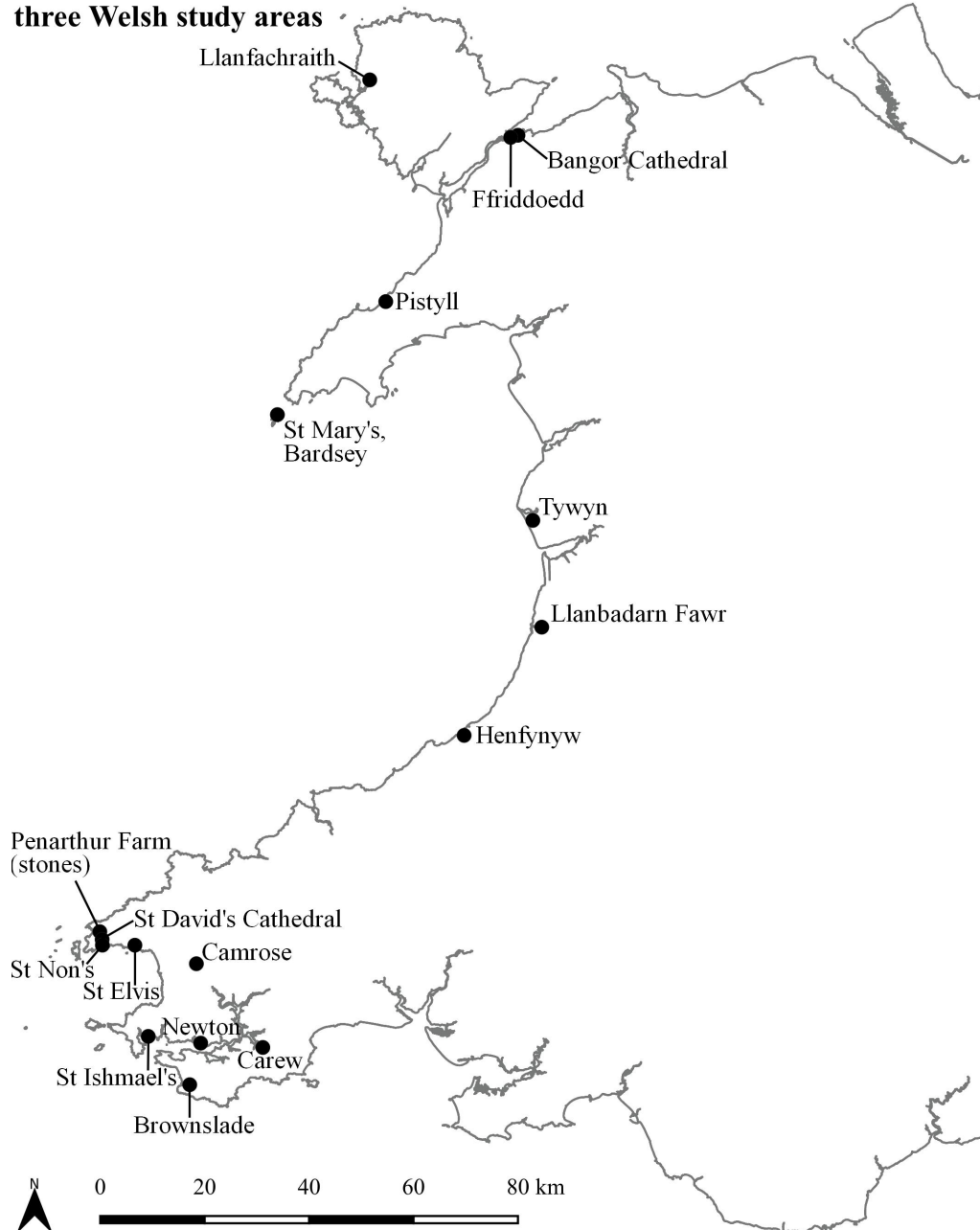
Bay and CN12 on Bardsey, Gwynedd (3.2.1.1, 5.5.2, 4.4.1.1) might suggest that these stones were requested by particular patrons who perhaps had some personal reason to desire stone that was not local to the site they wished to adorn.

Alternatively, large pieces of stone might have been transported as ‘saleable ballast’, fulfilling a practical function in a boat whilst also holding the potential for an advantageous exchange (for discussion of saleable and unsaleable ballast, see McGrail 1989, esp. 356-7; Buckland and Sadler 1990).

Some smaller monuments whose stone seems to have been moved by sea may similarly have been carried as saleable ballast, whether carved or uncarved, and some monuments may have been carved from unsaleable ballast that had simply been abandoned in favour of a more lucrative ballast cargo. Stonemasons may have frequented local landing places to barter for, or hunt through dumps of ballast for, suitably-sized blocks of ballast stone for carving (as has been suggested in relation to the Penarthur stones and the nearby landing place at Whitesands Bay, Pembrokeshire, 3.4.3.5). Ballast movement might explain both shorter journeys of stone from source to findspot, such as those of P100 at St Non’s, Pembrokeshire and CD2 at Henfynyw, Cardigan Bay (3.4.2.14, 5.4.2.2), and much longer journeys such as those of P129 at St Ishmael’s and P7 at Camrose, Pembrokeshire, and CN10 at Ffriddoedd, Gwynedd (3.4.2.12, 3.5.1, 4.4.2.5). Direct maritime contact between a stone’s source and its findspot is not certain, since a stone might have been dumped and retrieved by several boats before ending up re-purposed as a monument (cf. Buckland and Sadler 1990, 116-17).

Figure 40

All sites with evidence for internal maritime movement of stone in the three Welsh study areas



The quernstones of non-local stone at Brownslade Barrow and Newton, Pembrokeshire (3.2.2.1, 3.2.2.2) may also have been carried as saleable ballast or as unsaleable ballast that was opportunistically recycled into usable items. Utilitarian stone commodities were certainly transported by sea elsewhere in early medieval north-west Europe – for example, honestones in a late-tenth-century boat wrecked near Kaupang in Norway may represent saleable ballast, whilst fragments of

quernstones of basalt lava from the Middle Rhine found in the tenth-century Graveney boat (Kent) may be the remains of quernstones carried as cargo and/or saleable ballast (with the fragments themselves perhaps representing unsaleable ballast) (Hodges 1982, 124-6; Bill 2008, 176; Fenwick 1978, 173-5).

Whether transported as raw materials or finished goods, and whether intended for sale or simply dumped and re-used by local masons, stone probably generally constituted only one element of cargo, sharing the boats with a variety of now-invisible, lighter organic goods such as wood, textiles, skins and food. The transportation of people, whether as free travellers or as slaves, is also archaeologically invisible.

Whilst some stones may have been requested, others would have travelled simply as a by-product of other maritime movement. They therefore hint at both pre-arranged and opportunistic maritime movement and contact up and down the early medieval Welsh coast.

6.5.7.Imports: conclusions

Imported goods provide the clearest archaeological evidence for maritime connections in early medieval Wales. They can hint at landing places and places of exchange, and at the maritime interests and accessibility of communities. In their diversity of type and findspots, the imports hint not at pre-determined, strictly controlled trade and travel systems but at a patchwork of maritime connection and involvement. If all maritime movement around the Welsh coasts was strictly controlled, more finds at fewer landing places might be expected. Thomas Kerr *et al.*

(2013, 45-6, 48; cf. Callmer 2007, 240-1) favour an entrepreneurial model of exchange in early medieval Ireland, in which merchants were the active parties although they might have had the co-operation of local power-holders. This could be argued for Wales as well – for example, Whitesands Bay was a key landing place in north Pembrokeshire, but does not appear to have had direct high-status presence, either secular or ecclesiastical. Although high-status individuals might have been interested in maritime activity, they were not necessarily instigating or controlling it.

Whilst it is possible that the majority of exchanges with mariners took place between people who knew one another personally (Sindbæk 2010, 436-8), with boats hopping up and down the coast and across the Irish Sea on fairly regular voyages, it seems likely that strangers might also be welcomed and interacted with (cf. p.209). Settlements with maritime accessibility probably welcomed the unexpected as well as expected advantages of their position.

Whilst there are very few imports in Cardigan Bay, coastal cargoes are indicated by stone internal imports and the coin near Aberystwyth hints at longer-distance movement. Further early medieval imports may yet come to light in this area.

It is important to note that the origin of an import does not necessarily indicate direct maritime contact with the area of its creation, the cultural background of the individual who carried it or owned it, the origins of the boat on which it came, or the cultural backgrounds of its crew. In a purely hypothetical example, an English coin could have been carried from Ireland to Wales by an individual who had grown up in Brittany, in a boat made in Cornwall with crew who had grown up in Wales, Scandinavia and Algeria. Imports could have arrived on the Welsh coast via very roundabout routes, and maritime communities both on land and at sea have always

tended towards being multicultural (see sections 6.6.2 and 7.6 on multicultural maritime communities in the Irish Sea).

Where objects moved, so too could people and ideas. The sculptor who carved the crosses at Carew (P9) and Nevern (P73) in Pembrokeshire (Edwards 2007, 308-9) may have travelled by sea to these commissions, and decorative links with Mercia, Wessex and possibly even the Carolingian continent at Penally, Pembrokeshire (Edwards 2007, 411-14, 416-17), Irish comparisons with the eighth- or ninth-century sundials at Clynnog Fawr, Gwynedd (CN14) and Tywyn, Cardigan Bay (MR27) (Edwards 2013, 266, 431-3; Thomas 1989, 112), and the Anglesey and Pembrokeshire cross-form parallels for a tenth- or eleventh-century cross-carved stone at Llanegryn church, Cardigan Bay, close to the tidal Afon Dysynni (MR17: Edwards 2013, 403-4), are all suggestive of maritime connections, whether direct or indirect.

As well as archaeologically-visible cargoes, there would also have been archaeologically-invisible organic cargoes moving by sea, with the non-local sheep at Llangefni Coleg Menai campus representing, unusually, an archaeologically-visible organic cargo (4.2.2.2, 4.3.6). It seems likely that the majority of exported items from Wales were archaeologically invisible, perhaps consisting of organic materials such as wood, textiles, food and livestock. The movement of slaves into and out of Wales is also invisible archaeologically, although Poul Holm (1986, 342) has argued that Welsh kings were amongst those supplying slaves to the market in Dublin. Horses may have been a staple Welsh export throughout the early medieval period. Early Irish sources refer to the import of British horses (Kelly 1988, 7; 2000, 90), and in the *Annals of the Four Masters* for AD 1029, seven score (140) British horses are specified as part of the ransom for Amlaíb, son of Sigtrygg Silkbeard,

king of Dublin (*AFM* AD 1029). Three items of metalwork found in the Pembrokeshire study area may have been created for export: two similar penannular brooches perhaps of local manufacture and associated with imported items at Longbury Bank and Linney Burrows (3.2.1.4, 3.3.1.3), and an eighth- or ninth-century penannular brooch at Tenby South Beach, possibly a failed casting and unfinished, implying a nearby production site perhaps producing items for maritime export and/or beach market exchange (pp.94-5).

The study of imports touches on many of the main questions of this thesis, from helping to identify sites of landing places and activity of maritime communities, through hinting at those activities (for example, receiving travellers or engaging in exchange with mariners), to questions of jurisdiction, with it seeming that comings and goings on the coast were not strictly controlled, although high-status sites are likely to have ensured that they gained what they wanted from maritime activities in their locality.

6.6.Burial

6.6.1.Burial on the edge of the land

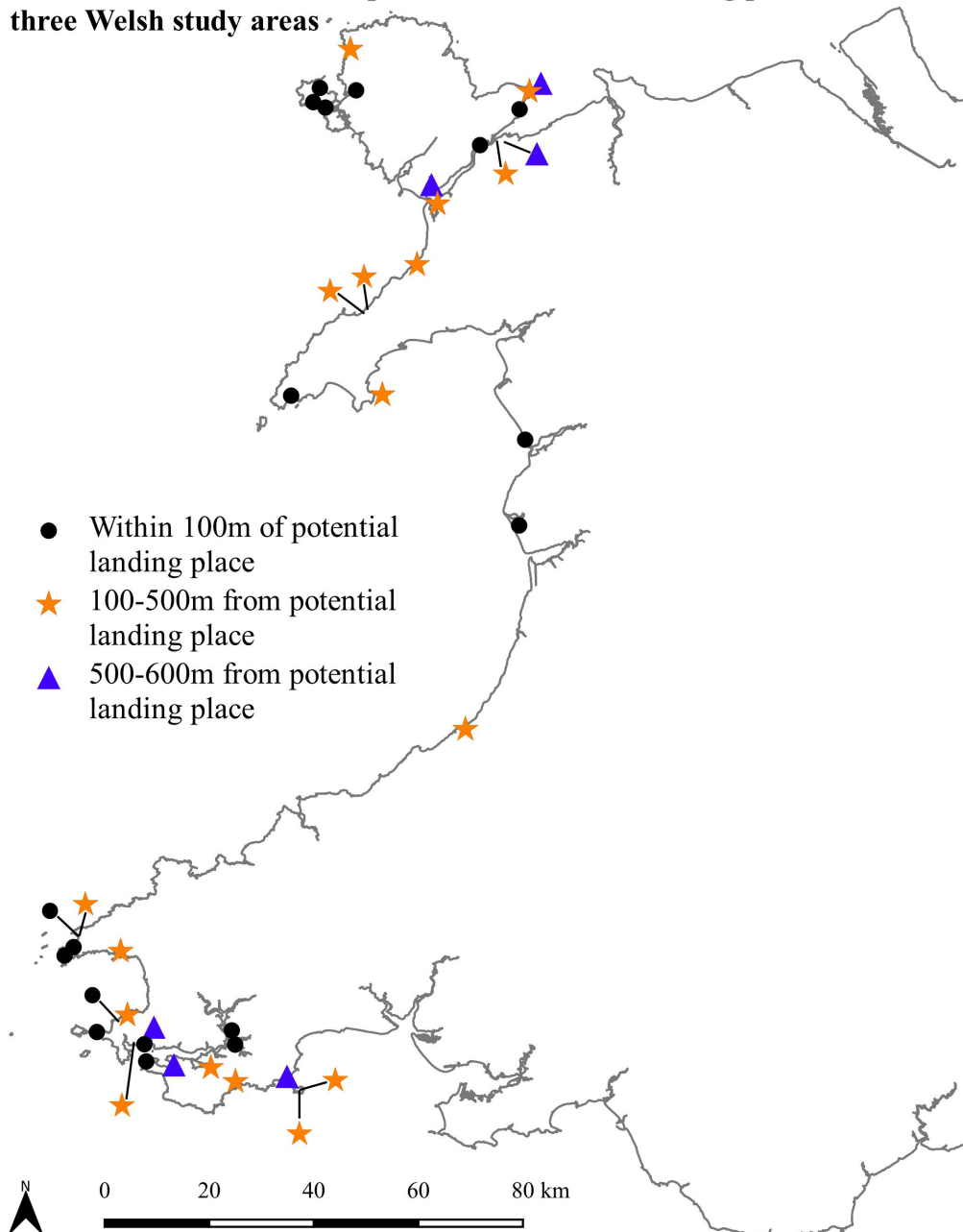
6.6.1.1.Burial on the edge of the land: introduction

It is striking just how many of the certain and possible early medieval burial sites in all three Welsh study areas are close to tidal waters, with the majority of these overlooking, or near, potential landing places (fig.41). Some of these burials may

have been sited due to the presence of an early ecclesiastical site with maritime connections, for example those at St Ishmael's, Pembrokeshire and Penmon, Anglesey (3.4.2.12, 4.4.2.11), but in many instances burial is likely to have pre-dated the arrival of ecclesiastical presence, for example at Whitesands Bay, Pembrokeshire and Tywyn y Capel, Ynys Gybi (3.4.2.18, 4.4.2.15), or to have never attracted ecclesiastical presence, as at Longoar Bay or Lower Broad Moor in Pembrokeshire (3.4.2.3, 3.4.2.4).

Figure 41

Burial sites within 600m of potential tidal water landing places in the three Welsh study areas



Although there would appear to be a link between Scandinavian-influenced burials and maritime proximity in Wales there are also many early medieval burial sites in Wales close to tidal waters with pre-Viking origins and/or no evidence for Scandinavian influence, demonstrating that maritime proximity in death was desirable outside a Scandinavian milieu (4.4.2.5; Edwards 2007, 146; 2013, 257; cf. Harrison 2007, 175-6).

There is very little evidence for early medieval burial close to tidal waters in the Cardigan Bay study area compared to the Gwynedd and Pembrokeshire study areas. It is uncertain what the cause(s) of this might be; whether such sites exist but have yet to be revealed through chance discovery or erosion, or whether burials were generally placed further inland, perhaps so that fertile land right up to the water's edge could be utilised, or burial in waterlogged areas in a boggy landscape could be avoided. However, early medieval burial sites at Barmouth, Llanddewi Aberarth and Tywyn (5.4.1) suggest that at least some communities in Cardigan Bay desired burial close to tidal waters and potential landing places.

Although a glance at the distribution map (fig.41) might suggest a bias towards more coastal locations for early medieval burial within the 15km limits of this study, this may be due to accidents of discovery stemming from coastal erosion and more intensive human activity in the more coastal, lowland areas of Wales than in the inland uplands. It is not, therefore, argued that burial in highly coastal situations was generally favoured against burial further inland. However, it is clear that for some communities highly coastal burial, often overlooking or close to potential landing places, was a deliberate choice. Possible explanations for such a choice are explored in the following discussion.

6.6.1.2.Shipwreck cemeteries?

The sad task of burying the sea's victims has fallen to coastal communities throughout history. In recent tragedies, victims of the foundering of the *Royal Charter* off the east coast of Anglesey in 1859 and of the torpedoing of the *Hirano Maru* in the Irish Sea in 1918 were buried in local churchyards near where they came ashore (Holden and Holden 2009, 143, 174-5; RCAHMW 2018b). Late-sixteenth- or early-seventeenth-century burials at Cwm Nash, Glamorgan have been interpreted as victims of a wreck (Cardiff University 2019), and isolated burials in highly coastal situations around the Irish Sea are generally considered to be unknown shipwreck victims, such as the mid-seventeenth- to mid-twentieth-century interment at the entrance to Waterford harbour (HEV WX054-015----), and the medieval or later burial on the edge of Wingletang Down, St Agnes, Isles of Scilly (Historic England 1009282). Perhaps the seventeenth-century radiocarbon date from the otherwise early medieval burial site at St Brides, Pembrokeshire (3.4.2.10) might represent an unknown, shipwrecked individual buried outside the churchyard.

Possibly early medieval isolated burials in Capeston Tumulus and Kilpaison Burrows, Pembrokeshire are likely to have been important local figures rather than shipwreck victims (3.4.2.1, 3.4.3.3), and there do not appear to be any other instances of isolated early medieval burial in the Welsh study areas. Although at first glance some sites may seem to represent small isolated groups of burials, this can generally be explained through erosion losses e.g. Longoar Bay, Pembrokeshire (3.4.2.3), or a limited area of excavation e.g. Pen-y-Graig, Anglesey (4.4.2.12). This might suggest that shipwreck victims in early medieval Wales were buried within community cemeteries, rather than kept separate from them.

The longevity of use at burial sites with a large number of graves, such as Whitesands, Pembrokeshire and Tywyn y Capel, Ynys Gybi, precludes interpretations of mass burial from a maritime disaster, and the presence of inscribed stones at some sites, for example Whitesands and Longoar Bay, Pembrokeshire, suggests that at least some of the individuals interred were known to the local communities (3.4.2.18, 4.4.2.15, 3.4.2.3). It seems unlikely, then, that whole burial sites were devoted to unidentified shipwreck victims, and more likely that these burial sites were community cemeteries that may have included such unidentified individuals.

6.6.1.3. Practical considerations

Burial on the edge of the land need not have a specifically maritime explanation behind it – for example, an agricultural community might never interact with the sea but choose to bury their dead on the seashore due to this being marginal land that they could spare from agricultural use. This might explain burial in highly coastal positions where the sea does not seem to have been immediately accessible, such as at St Non's, Pembrokeshire (although it is also possible that other, spiritual considerations might explain St Non's positioning, such as possible prehistoric associations, and/or Christian concepts of the sea: 3.4.2.14). The majority of highly coastal certain and possible early medieval burial sites, however, overlook or are close to landing places, suggesting specifically maritime considerations in their siting.

Burial sites on the edge of the land may have been used as navigation markers. The mound and chapel at Tywyn y Capel, Ynys Gybi was used as a navigation marker in post-medieval times, and the artificial mound formed of successive burials in accumulating sand may well have been used by early medieval navigators also (4.4.2.15). At Porth Nefyn, Gwynedd, three seventh- to ninth-century cross-carved stones outlining the bay may have acted as markers of ecclesiastical jurisdiction either inland or seaward of their positions, as navigation markers, as markers of a safe landing place, and/or as markers of a safe maritime trading place (4.4.2.10). Whatever their purpose it seems likely that they were designed to be seen by those using the bay, and were therefore key features in the maritime landscape. If early medieval, the burials associated with two of the Porth Nefyn stones may have been interred because of the stones' presence, rather than the stones being raised above pre-existing early medieval burial grounds.

It is possible that other highly coastal burial sites – particularly those in raised positions, such as West Angle Bay and Longoar Bay, Pembrokeshire (3.4.2.17, 3.4.2.3) – may have been on sites of early medieval navigation markers, whether such markers attracted burial through their prominent position in the landscape, or were raised on account of the burials and were subsequently used opportunistically by mariners as navigational aids. This, however, is conjectural.

Whether a burial site was visible from the sea or not, its visibility once a vessel had made land and its occupants disembarked would have acted as a clear ownership claim by the local community, letting newcomers know whose territory they were entering and in whose hands the power lay in interactions at that landing place (cf. Ingold 1987, 146-7 on marking landscapes to advertise territorial claims). A strong outward face of ownership and authority at landing places would have been

a maritime community's first line of defence against potentially hostile or duplicitous strangers, and visible burial sites near landing places would have had an important role to play in this.

6.6.1.4.Spiritual connections

Of the dated early medieval burial sites in the three Welsh study areas it would seem that the vast majority were new to the early medieval period, rather than being drawn to a site due to previous use or sanctity. Brownslade Barrow, Pembrokeshire, is a notable exception to this, and possibly also St Non's and St Elvis, Pembrokeshire and the Ty'n y Cae cross-carved stone at Nefyn, Gwynedd (3.4.3.1, 3.4.2.14, 3.4.2.11, 4.4.2.10). Spiritual reasoning behind burial sites close to tidal waters should therefore be looked for in early medieval belief systems rather than seen as a continuation or revival of earlier spiritual associations.

Marine molluscs associated with burials at Ffriddoedd, Porth Dafarch and Tŷ Mawr in the Gwynedd study area, as well as some of the graves on Ynys Seiriol off Anglesey and three of the graves at Whitesands, Pembrokeshire, may have been accidental inclusions (4.4.2.5, 4.4.2.13, 4.4.1.2, 3.4.2.18; Kenney and Longley 2012, 118). However, deliberate deposition might be argued for the layer of beach pebbles and marine shells over the adult burial under the small structure on Ynys Seiriol, and for the limpet shells between covering slabs and skeleton in an infant grave and spread in a layer between the upright side slabs of another grave, possibly a child's, at Whitesands (4.4.1.2, 3.4.2.18). The small number of graves with marine shell association in the study areas suggests that rites involving marine shells were an

individual response to grief, rather than the visible remnants of a widely-held spiritual belief. On Ynys Seiriol, the individual may have been considered to be a founder who was celebrated for their maritime connections in life and was perhaps credited with bringing the ecclesiastical site to its island location (4.4.1.2). At Whitesands, the limpet shells may have been a mark of identity, indicating that the families of the deceased undertook intertidal activities (see pp.219-21), or perhaps the limpet shells were used in the graves of these two children because they were playthings that were readily available to the children of maritime communities.

At Tywyn y Capel, Ynys Gybi, the rings of stones surrounding the mounds raised over six of the adult cists may be a local version of stone ship settings found in Scandinavia and the Baltic area (4.4.2.15; Stylegar 2007, 88; Haywood 2000, 172-3). If so, this could potentially indicate Scandinavian influence at Tywyn y Capel preceding the documented arrival of the Vikings in north Wales by some two centuries. The community burying these individuals may have placed symbolic importance on boats and on the maritime connections of the deceased. However, this interpretation is highly tentative and the rings of stones at Tywyn y Capel may not have been intended to represent boats at all.

The clearest evidence for spiritual maritime connections in burials in the three Welsh study areas comes from the sheer number of early medieval burial sites close to landing places. Members of maritime communities may have desired burial near the landing places on which their lives had centred, and those left behind may have wished the deceased to remain at the heart of the maritime community and its landscape. Such personal, emotional reasons as these, linked to the importance of place and space to human societies and perhaps also a desire to retain an 'other' identity distinct from nearby communities who did not undertake maritime activities,

may have encouraged burial close to landing places and/or in positions from which maritime traffic could be viewed.

Some burial sites would have had an ecclesiastical presence from an early date, whether preceding or succeeding the start of burial, whilst others might never have seen ecclesiastical presence. Early medieval ecclesiastical sites near landing places may have been frequented by those using the landing places, to pray for or give thanks for a safe voyage, and they may also have been considered to bless maritime activity simply by their presence. It is possible that burial sites without ecclesiastical presence were also thought to bestow luck and blessings on those using a landing place and engaging in maritime activities, the dead watching over the living.

In early medieval Irish Sea Christian symbolism islands could be sacred spaces within the desert of the biblical Ocean, where people could retreat from society to be closer to God and fight against the demons and chaos of the Ocean (p.217). Burial on islands might therefore have been especially desirable from a Christian perspective, and it may have been frequent requests for island interment that led to the legend of Bardsey island's 20,000 saints, first mentioned in the *Life of St Elgar* in the early- to mid-twelfth-century Book of Llandaff (*Life of St Elgar* §2: Jankulak and Wooding 2010, 16, 39, 43; Wooding 2007, 223-4). Highly coastal mainland ecclesiastical sites with burials could have been sited for similar Christian conceptual reasons (cf. Wooding 2007, 220), as might highly coastal mainland burial sites without apparent ecclesiastical presence.

Christian thought would have been just one element within the belief systems of early medieval maritime communities in Wales, particularly secular communities (see 6.9). Special emphasis is likely to have been placed on the liminal spaces at the

edge of the land and the dichotomous land/sea divide. In his exploration of maritime ritual landscapes, Christer Westerdahl (2005, 11-12) argues that the border between land and sea was inanimate, with 'liminal agents' (items associated with one element transferred to another, for example, a seal head on land: Westerdahl 2005, 9-10) accruing power not by simply crossing this border but by being used in a particular ritualised way. John Mack (2011, 165) has similarly argued that the shore is in itself a neutral space. Burials near the boundary between sea and land might therefore have been seen as inhabiting an inanimate, neutral space. However, it could also be argued that they were seen as animating that space, breaking down the barriers between the living and the dead and the land and the sea, smoothing the waters for the living maritime community who interacted with the sea whilst being watched over by ancestors who in life had themselves crossed that same land/sea divide.

6.6.1.5. Burial on the edge of the land: conclusions

The majority of early medieval burial sites close to tidal waters in the three Welsh study areas seem likely to have belonged to local maritime communities. Myriad factors may have led to the use of such locations, but key amongst them may have been the burial sites being symbols of ownership and power to newcomers arriving by sea, and spiritual explanations including an individual's attachment to their place of life, and perhaps a belief that the dead were watching over the activities of the living and giving luck to maritime ventures.

The lack of known early medieval isolated burials in the data collection may suggest that strangers who died at sea or who died whilst passing through a landing

place on their way elsewhere were afforded burial in community cemeteries. This apparent openness to newcomers on the part of early medieval Welsh maritime communities is discussed further below (6.6.2).

6.6.2. Isotope analysis and multicultural communities

Isotope analysis on individuals from early medieval cemeteries in Wales suggests movement of people within and into Wales at this time (fig.42). A 13-17 year old dated cal.AD 540-650 (2σ) and an adult female dated cal.AD 650-780 (2σ) at Porth Clew, Pembrokeshire, may have grown up in east Wales or the borders, and at Whitesands, Pembrokeshire, one adult female may have grown up in south-east Wales, whilst several individuals (mainly female) in the south-east Wales cemeteries of Atlantic Trading Estate and Llandough may have grown up in south-west Wales (3.4.2.8, 3.4.2.18; Hemer *et al.* 2017, 436-7; Hemer *et al.* 2013, 2354 tbl.1, 2356; Schlee 2009b, 7-8). An adult male dated cal.AD 590-670 (2σ) at Porth Clew and an adult male dated cal.AD 650-810 (2σ :Beta-228424) at Brownslade, Pembrokeshire, as well as two adult males from Llandough, Glamorgan, may have grown up near the extreme western coast of Britain or Ireland or possibly in the coastal regions of Europe (3.4.3.1; Hemer *et al.* 2013, 2354 tbl.1, 2356; Groom, Hughes and Crane 2011, 146). A 7-12 year old from Porth Clew dated cal.AD 680-900 (2σ) and a male and female from Brownslade, both aged 18-25, the female dated cal.AD 610-770 (2σ :Beta-228425), as well as a 35-45 year old male and an 18-25 year old female from Llandough, Glamorgan, may have originated somewhere in the Mediterranean Sea region (Hemer *et al.* 2013, 2354 tbl.1, 2356; Groom, Hughes and Crane 2011,

146). Additionally, a 13-17 year old, a male aged over 45 and a female aged 25-35 at Brownslade may also have grown up in the Mediterranean region or continental Europe (Hemer et al 2013, 2354 tbl.1, 2356; Groom, Hughes and Crane 2011, 144; Coard 2011, 152). Initial data from isotope analysis at the Llangefni Link Road/Coleg Menai Campus cemetery, Anglesey, suggests the presence of individuals with non-local origins, including individuals possibly from warmer climates such as Iberia or the Mediterranean region (4.4.3.4). Two individuals buried at Tywyn y Capel, Ynys Gybi may have grown up in Norway and another in Iceland (Davidson 2009, 209), although the method of these findings has been questioned (pers. comm. Andrew Davidson 2019). At Llanbedrgoch, Anglesey, outside the study area, a 17-20 year old male dated cal.AD 680-880 (2σ :Beta-316627) in an isolated burial within the settlement enclosure has oxygen isotope values compatible with the western seaboard of France and Spain, with parts of Brittany, northern Spain and Portugal reflected in the strontium values (Redknap 2016, 161-2, 162 tbl.1). Also at Llanbedrgoch are six burials outside the rampart; radiocarbon dates range within the later-eighth to early-thirteenth centuries, and isotope analysis on five individuals suggests that two may have grown up in the Herefordshire area, and three had strontium signatures suggestive of parts of Scotland, Denmark and south-west Norway (Redknap 2016, 161-2, 162 tbl.1).

Figure 42
Sites with isotope evidence for possible movement of individuals



The number of individuals found to have non-local origins in these early medieval cemeteries in Wales is a reminder that maritime movement and activities can lead to diverse communities. Whilst it is possible that some of these individuals died at sea or whilst passing through local landing places (6.6.1.2), the number of individuals with non-local origins buried at these sites suggests that at least some of them were members of the communities at their deaths. A variety of reasons might

have led these individuals to end their lives away from where they spent their early years, including their movement as traders, travellers, migrants, pilgrims or slaves.

Llanbedrgoch is the most unusual of the sites listed above, since none of the burials are within a cemetery setting, and all the individuals analysed would seem to have had non-local origins. The individual buried within the enclosure may have had an important place in the community, whilst the individuals buried outside the enclosure were buried in unusual ways for this period in Wales and were perhaps treated in death as outcasts (Redknap 2016, 163). It is uncertain whether the origins of these individuals directly relate to their treatment in death. Without data from a cemetery used by the inhabitants of Llanbedrgoch, it is unknown whether such a cemetery would have included only individuals with local origins, or (more likely, given the evidence from the other cemetery sites discussed here, and the maritime connections of Llanbedrgoch) individuals with local and non-local origins.

The Llangefni Link Road/Coleg Menai Campus cemetery is also unusual in that it is much further from the sea-coast than the other sites in the dataset. However, it lies only c.1.2km from the navigable river Cefni which would have provided a direct link with the sea, making this a more maritime-connected location than it at first appears.

In the cemeteries discussed here, individuals with non-local origins were buried in the same cemeteries and generally in the same ways as those with local origins, suggesting that maritime communities in early medieval Wales were open to newcomers, willing to integrate them into the community rather than ostracise them or treat them as ‘other’, at least in death. Indeed, a non-local origin does not seem to have adversely affected the apparently important status of one adult male at Brownslade who may have grown up in the Mediterranean region or continental

Europe (p.109). Generally, the status of individuals with non-local origins would not seem to be higher than those with local origins, suggesting that maritime movement was not restricted to those of high status.

As Katie A. Hemer *et al.* (2013, 2357) have noted, it is interesting to see that women and non-adults are represented amongst the individuals with non-local origins in this dataset. Women and children tend to be excluded from discussions of early medieval maritime sailing, implicit assumptions peopling boats only with grown men. These results show that women and children were certainly present at sea, and it must not be assumed that they were present only as passengers. Women and children – both those with non-local and local origins – may have been as involved in maritime sailing as the adult male members of their communities.

Whilst the cultural backgrounds of individuals who lost items such as the Dublin-paralleled ringed pin at Whitesands, Pembrokeshire or the Sasanian coin at Penmon beach, Anglesey are unknown (pp.84, 147), burial rites might reflect the cultural background of an individual, whether that individual was the deceased or the mourner of the deceased. The hogback grave cover at Llanddewi Aberarth, Cardigan Bay, the possible hogback at Ffriddoedd, Gwynedd and the coin within the mouth of an individual on Bardsey, Gwynedd suggest the presence of individuals with a Scandinavian cultural background or origin in these communities (5.4.1.2, 4.4.2.5, 4.4.1.1). The Frankish pot and brooch found at Molleston Back, Pembrokeshire might similarly reflect the presence of an individual with a Frankish cultural background or origin (p.86). It is uncertain whether the possible grave at Molleston Back was part of a larger cemetery. However, at Llanddewi Aberarth, Bardsey and probably also Ffriddoedd the burials with Scandinavian associations were single

interments within larger cemeteries, suggesting that these cemeteries belonged to multicultural maritime communities open to newcomers and their burial rites.

Although the isotope evidence for multicultural maritime communities in early medieval Wales is focussed on south Wales and Anglesey, the hogback at Llanddewi Aberarth, the possible hogback at Ffriddoedd and the coin burial on Bardsey along with the apparent absence of isolated shipwreck burials (6.6.1.2) suggests that isotope analysis in early medieval cemeteries around the coasts of mid and north Wales outside Anglesey might well produce a similar picture of multiculturalism and integration of newcomers. This propensity towards multiculturalism and integration may have faded further inland. Isotope analysis on early medieval individuals buried in more inland areas of Wales as well as in further cemeteries around the coasts would provide fascinating additions to an understanding of diversity in early medieval communities in Wales.

6.7.Ecclesiastical sites

As previously argued for the high-status secular settlements (6.2.1), high-status ecclesiastical sites close to the sea and tidal waters are likely to have been located to take advantage of maritime accessibility, the benefits of this including political, social and economic contacts. It seems unlikely that such foundations as Penmon and Bangor in the Gwynedd study area and St Davids in Pembrokeshire, all of which are recorded as suffering early medieval raids that are likely to have come from the sea (4.4.2.11, 4.4.3.1, 3.4.3.7), would have flourished in these positions had the advantages of maritime accessibility not outweighed the disadvantages.

Imported objects and ideas can hint at maritime movement to and from high-status ecclesiastical sites, such as stones used for monuments at Bardsey, Gwynedd and Llanbadarn Fawr, Cardigan Bay, the tenth-century English coin at Caergybi, Ynys Gybi, and decorative links with Mercia, Wessex and perhaps the Carolingian continent at Penally, Pembrokeshire (4.4.1.1, 5.5.2, 4.4.2.2, 3.4.2.7). The late-eleventh-century ecclesiastical community at Aberdaron, Llŷn, seem to have owned at least one boat, in which Gruffudd ap Cynan escaped to Ireland (4.4.2.1). The lure of wealth, patronage and a pilgrimage destination would have encouraged maritime movement to high-status ecclesiastical sites, and ecclesiastics would themselves have undertaken maritime voyages for reasons including retreat (e.g. Ramsey island may have been a retreat for St Davids: 3.4.1.2) and education (e.g. Sulien, head of Llanbadarn Fawr and later Bishop of St Davids, was educated in Wales, Scotland and Ireland: 5.5.2). As argued for high-status secular sites (6.2.1), it is probable that high-status ecclesiastical sites were served in their maritime interests by lower-status, possibly secular, maritime communities nearby.

Lower-status ecclesiastical sites with good maritime accessibility may also have benefited from the potential political, social and economic links of such positions, including receiving offerings from those who were thankful for, or hoping for, safe maritime passage to or from a nearby landing place. Such foundations are harder to spot than their higher-status counterparts due to their general absence from early documentation, but the presence of early medieval carved monuments can indicate potential sites. When the stone of such monuments is found to have originated elsewhere (for example, P7 at Camrose or P100 at St Non's, Pembrokeshire: 3.5.1, 3.4.2.14), their presence may hint at maritime activities of some kind on the part of the ecclesiastical site or a nearby secular community.

Proximity to potential landing places might also indicate maritime connections, for example at the possible lower-status early medieval ecclesiastical sites of Pwllcrochan, Pembrokeshire, Llanfaglan, Gwynedd and Llansantffraed, Cardigan Bay (3.5.8, 4.4.2.7, 5.5.5). The tenth-century ringed pin closely paralleled to examples from Dublin found whilst grave digging at St Mary's church, Llanfairpwllgwyngyll (4.3.4), may hint at a lower-status ecclesiastical site with maritime connections here, but without further evidence this is highly uncertain. The place of the pin's loss and the location of a later church may be entirely coincidental, or the pin may have been associated with early medieval burials that preceded the arrival of ecclesiastical presence.

The example of Llanfairpwllgwyngyll highlights a difficulty in reconstructing the chronology of early medieval burial and ecclesiastical sites in Wales. Burials close to tidal waters at high-status ecclesiastical sites such as St Ishmael's, Pembrokeshire, Caergybi, Ynys Gybi and Tywyn, Cardigan Bay (3.4.2.12, 4.4.2.2, 5.4.1.3) may have been located due to the presence of these ecclesiastical foundations rather than a desire for maritime proximity. However, these locations may have been chosen for ecclesiastical foundations because there was already advantageous maritime activity in these areas, and perhaps cemeteries of maritime communities. It is clear that at some lower-status sites, such as Whitesands, Pembrokeshire and Tywyn y Capel, Ynys Gybi, burial activity preceded the arrival of ecclesiastical presence (3.4.2.18, 4.4.2.15). It is therefore possible that some early medieval ecclesiastical foundations overlooking or close to potential landing places (e.g. Llanstadwell, Pembrokeshire, Pistyll, Gwynedd and Llanddewi Aberarth, Cardigan Bay: 3.5.5, 4.5.4, 5.4.1.2) may have been additions to sites already in use as the cemeteries of maritime communities using those landing places. However, at

least some ecclesiastical sites with good maritime accessibility may have been foundations on virgin ground, given the attraction of both practical and spiritual maritime factors.

At the western extremity of the known medieval European world the lands bordering the Irish Sea inhabited the fringes of the biblical Ocean, a place of danger and chaos where demons dwelt and in which ecclesiastical foundations on islands could be considered the equivalent of holy sites within the desert (see 6.3 for discussion of islands, also note the location of Llangynfelyn church, Cardigan Bay, on an ‘island’ in a bog: 5.5.3). Pre-Christian beliefs, some of which probably continued throughout the early medieval period, may also have encouraged ecclesiastical foundations on islands (pp.217, 267-9). Mainland ecclesiastical sites on the very edge of the land may have shared some of these island associations.

Jonathan Wooding (2007, 220) highlights the potential importance of views out to sea for ecclesiastics, allowing them to ‘contemplate the wonders of creation’. An early indication of the potential importance of sea-related aesthetic considerations is found in the mid-twelfth-century poem *Canu i Gadfan* (concerning Tywyn church, Cardigan Bay, 5.4.1.3), which states that St Cadfan desired to gaze at Aber Menwenfer every morning and evening (Ins.45-6: Parry Owen 2018). The awe-inspiring nature of the sea might in itself have encouraged early medieval ecclesiastical foundations in sight of it.

A combination of practical and spiritual factors, then, can explain the presence of ecclesiastical sites close to tidal waters in the Welsh study areas. Some members of ecclesiastical sites may have undertaken maritime activities themselves, but on the whole such activities are likely to have been left to a local, probably secular, maritime community (cf. pp.217-18). Some of these maritime communities

would have pre-dated ecclesiastical presence in the area, whilst others would have formed in response to an ecclesiastical site's maritime needs.

6.8.Place-names

A study of Welsh early medieval place-names would be a thesis in itself, and this project is unable to do more than touch on the subject. Whilst names have been discussed in relation to individual sites (e.g. 3.4.2.11, 4.4.1.1), it has not been possible to conduct a full survey of place-names around the Welsh coast. However, it is important to note that place-names would have played an essential role in the construction of the maritime cultural landscapes of early medieval communities (see Westerdahl 1992, 9; Tilley 1994, 19).

Names with mythological links are touched on below in relation to maritime folklore and belief (p.269). Place-names that referenced mythology would have come with a host of associations – for example, the name Ynys Glannauc (Ynys Seiriol) may have put an early medieval individual in mind of disastrous sea inundations and drowned lands (4.4.1.2), whilst saints with non-local origins (e.g. Brigid, an Irish saint) who lent their names to bays or chapels in Wales may have put an early medieval individual in mind of sea-travelling saints and miracles on the waves. Names referencing mythology would have been intelligible both to those who were involved in maritime activities and those who were not, holding varied levels of meaning to different groups and individuals.

Other names were more practical and descriptive. The name Ynys Enlli (Bardsey) refers to the dangerous currents between island and mainland in Bardsey

Sound, a warning to landlubbers and mariners alike. Rock names such as ‘Careg y Trai’ (‘Rock of the Ebb’) off Porth Oer on Llŷn (OS 6” 1888 Caernarvonshire XLIII.NE) and off the coast south-west of Aberffraw (OS 6” 1888 Anglesey XXI.NW) could also have served as warnings and navigational aids. Other names may hint at human exploitation of natural resources, such as the Skerries being known as the ‘island of seals’ (p.223), a name that might be purely descriptive but could also indicate that seal hunting took place here.

Discussion of early medieval place-names around the Welsh coast has tended to focus on Scandinavian elements and the evidence this provides for the maritime orientation of Scandinavians in the Irish Sea (e.g. Charles 1934, 137-8; Richards 1975, 55, 58-9; Redknap 2004, 143). It is clear, however, that earlier names for Welsh coastal features hint at the maritime orientation of local communities prior to the Scandinavian influence of the Viking age (with many of these names continuing in use even after Scandinavian names had been acquired). A full study of these would add greatly to an understanding of early medieval maritime cultural landscapes in Wales, especially in the ways in which the inhabitants of those coasts perceived and interacted with the spaces around them.

6.9. Maritime folklore and belief

An exploration of the beliefs, myths, legends, folklore and superstitions associated with the sea in early medieval Wales relies heavily on written sources, although archaeological remains can hint at beliefs such as the possible reasons behind burial close to tidal waters, or behind marine shells being associated with some graves

(6.6.1.4). On the whole, references to the sea in early Welsh literature are practical, the sea a necessary routeway but not a space of action, supernatural or otherwise – see, for example, Matholwch king of Ireland’s movements by sea at the beginning of the second branch of the Mabinogi (Davies 2007, 22-4, 27), Arthur and his band’s to-ing and fro-ing from Ireland in the tale of Culhwch and Olwen (perhaps dating to the first half of the twelfth century: Davies 2007, xxii, 179-213) and the majority of sea-related activity in the eleventh-century *Lives* of St David and St Padarn (see below). Although action does take place at sea in the tale of Lludd and Llefelys, with the two brothers meeting by boat in the middle of the Channel (Davies 2007, 112-14; oral versions of this tale may have been known from at least the late-eleventh century: Roberts 1975, xx), there are no apparent maritime mythological associations to this meeting, and it may represent a real-life, practical use of the sea as a neutral theatre of negotiation.⁴

Although the sea is an important backdrop to the court at Tenby in the ninth- or tenth-century praise poem *Edmic Dinbych* and to the church at Tywyn in the mid-twelfth-century poem *Canu i Gadfan*, neither poem concerns itself with maritime activities despite the fact that both sites are likely to have overlooked landing places (3.2.1.5, 5.4.1.3). This may suggest that maritime activities were seen as commonplace and undertaken by communities separate to the high-status court and ecclesiastical site, with the result that such activities were not considered worthy of note by the authors of the poems. This highlights a problem in reconstructing the maritime belief systems of early medieval communities: those who were most likely

⁴ In respect of neutrality, however, note that these brothers were already allies despite Llefelys being initially uncertain of Lludd’s intentions, so it is not clear whether their sea meeting is a reflection of early medieval political practice or just a plot device to get Lludd away from the plagues in Wales to seek their cure – although if this was the case he might be expected to have simply gone to France to meet his brother. For further discussion of neutrality at sea, see pp.301-2.

to have formed and followed maritime beliefs are the least likely to have written them down, or to have had the ear of literate authors. Having said this, there are hints of maritime folklore and belief in these poems and in other early literature, including the stories of the Mabinogion which are likely to incorporate earlier traditions although they were not written down until the medieval period (Davies 2007, xii, xvii-xxvii).

In line 19 of *Edmic Dinbych*, Tenby is said to be ‘*ar ton nawuet*’, on or upon the ninth wave (Williams 1972, 163; Russell 2017, 29). In early Irish law the ninth wave is a measurement of distance from the land, with things found beyond that distance the property of the finder rather than the landowner (Kelly 1988, 107-8; *ALI* iii, 422-3), and in a story recorded in the eleventh-century *Lebor Gabála Éirenn* (Book of Invasions) the Milesians retreat beyond nine waves from Ireland’s shores before beginning their invasion (Section VIII (The Sons of Mil) §393-4 (first redaction), §415 (second redaction), §440-1 (third redaction): Macalister 1956, 36-9, 54-5, 78-81; dating: Carey 2005, 44-5). It would appear that in early Ireland the ninth wave marked the limit of the land’s jurisdiction.⁵ If similar associations attended the term ‘ninth wave’ in early medieval Wales (whether due to similar usage in lost Welsh laws or knowledge of the Irish meaning), its appearance in *Edmic Dinbych* may have been a poetic device to place the fort on the very boundary between the laws of the land and the lawless sea, perhaps representing a claim by Tenby *llys* to power over both land and sea (3.2.1.5.1). In more recent folklore, the ninth wave is one of those waves believed to be more powerful than those around it (Kingshill and Westwood 2012, 224-5), and it is possible that this belief has early origins. The use of the term ‘*ton nawuet*’ in *Edmic Dinbych* and its links to Irish law

⁵ See also Pamela O’Neill (2017, 9) on the Irish term *muirchrech*, which she argues means the territorial waters and sea-boundary of territories.

and mythology suggest that the ninth wave was an important practical and symbolic concept in the Irish Sea. It may have had jurisdictional and folkloric associations amongst lower-status maritime communities as well as amongst the literate few.

Canu i Gadfan contains examples of the use of the common noun ‘dylan’, meaning ‘ocean, sea, wave’ (Ins.20, 98, 170: Parry Owen 2018; Haycock 2015, 478). Whether dylan as a word for the sea was given to a mythological figure, or whether a mythological figure’s name became synonymous with the sea, in the fourth branch of the Mabinogi a character called Dylan, the first-born son of the enchantress Arianrhod, is closely associated with the sea. After his baptism, Dylan goes straight to the sea where he takes on its nature and swims like a fish, thereby earning his name Dylan Eil Ton, Dylan Son of Wave; we are told that ‘*Ny thorres tonn adanaw eiryoet*’, ‘no wave ever broke beneath him’, and that he was eventually killed by a blow from his uncle, ‘one of the Three Unfortunate Blows’ (Davies 2007, 54, 242 n.54; Hughes 2013, 9 ln.251, 70 n.250). The triad this references is unknown, and Ian Hughes (2013, lxxv-lxxvi, 72 n.253) has suggested this could be because traditions concerning Dylan and his uncle Gofannon were ‘already archaic’ by the time the Mabinogi were written down and the Triads collected. The few, intriguing, lines on Dylan and his attributes in the fourth branch and his occasional appearances in poetry (see below) suggest that even if only fragments of his tradition made it into writing he was an important sea-associated figure in early Welsh mythology.

Sarah Larratt Keefer (1989-90) has argued that Dylan transformed into a seal, a selkie such as those found in Irish and Scottish folklore, with no wave breaking under him because he swam beneath the breaking waves and with his accidental death at the hands of his uncle perhaps as a result of seal hunting. It is notable, however, that although there are human to animal transformations elsewhere in the

fourth branch of the Mabinogi these animals are named (Math turns Gilfaethwy and Gwydion into deer, then wild pigs, then wolves, Lleu transforms into an eagle and Blodeuedd is turned from her human form into an owl: Davies 2007, 52-4, 61, 63). It therefore seems strange that if a particular animal was meant in the description of Dylan it should not have been named. It is possible that no specific animal was named because Dylan was a unique creature of the sea, that had no name but Dylan Eil Ton. Dylan may originally have been a sea-god (MacCulloch 1911, 110), and might still have been turned to by those involved in maritime activities in early medieval Wales.

The phrase '*Ny thorres tonn adanaw eiryoet*' (Hughes 2013, 9 ln.251), 'no wave ever broke beneath him' (Davies 2007, 54) seems to describe smooth passage over the sea, the sea being with Dylan rather than against him. The rhythm and succinctness of the phrase give it the air of a saying. The phrase may be an echo of a traditional blessing wished on those who put out to sea, perhaps used in maritime communities long before the Mabinogi were written down. The use of the phrase in the fourth branch's potted version of Dylan's legend may indicate a perceived link between him and safety at sea, perhaps because maritime communities would call on Dylan for luck in their ventures and, if danger threatened, deliverance from the merciless waves.

The majority of occurrences of the word 'dylan' in poetry are as a common noun, as in *Canu i Gadfan* (Haycock 2015, 479; see above). However, there are a few notable exceptions that refer directly to Dylan Eil Ton. In lines 3-4 of stanza four of the *Englynion y Beddau* in the Black Book of Carmarthen (these *englynion* being perhaps originally of ninth- or tenth-century date: Jones 1967, 100), Dylan's grave is described as being at Llanfeuno, probably Clynnog Fawr on Llŷn: '*yn yd*

vna ton tolo, / Bet Dilan Llan Bevno – ‘where the wave makes a noise, / the grave of Dylan is at Llanfeuno’ (Jones 1967, 118-19; 4.4.2.4). Dylan is also referred to directly in three twelfth- or early-thirteenth-century poems (potentially drawing on earlier material) in the Book of Taliesin (dating: Haycock 2015, 30-1, 36). In *Kat Godeu*, the poet has Taliesin state that ‘I was in the citadel / with Dylan Son of the Sea’ (*‘Neu bum yn yscor / gan Dylan Eil Mor’*) (lms.183-4: Haycock 2015, 183); this may refer to Kaer Sidi, an Otherworldly fortress with watery associations (see below; Haycock 2015, 229 n.183). In *Mabgyfreu Taliessin* the noisy waves against the shore are avenging Dylan (lms.19-22: Haycock 2015, 242-3). Dylan’s death is the subject of *Marwnat Dylan Eil Ton*: ‘The groom watches intently – he wrought harm, a deed of violence: / the striking of Dylan on the deadly shore, violence in the current. / The wave of Ireland, and the wave of Man, and the wave of the North / and the fourth, the wave of Britain of the splendid hosts’ (*‘Gwrthgrif gwastrawt gwenwyn a wnaeth gweith gwythloned: / gwanu Dylan, adwythic lann, treis yn hytyruer. / Ton Iwerdon, a thon Vanaw, a thon Ogled, / a thon Prydein, toruoed virein, yn petwared’*) (lms.4-7: Haycock 2015, 483). In playing on the second part of Dylan Eil Ton’s name (Haycock 2015, 487 n.6), the poet seems to associate Dylan, whose death has just been described, with the undying waves. It is possible that, as a mythological figure, Dylan could be at once both dead and alive, at once both mortal human and immortal sea. Perhaps the legendary Dylan represented two faces of the sea: one that brought death and destruction and one that offered safe passage and rewards. In more recently recorded traditions, a large stone on the foreshore at Aberdesach, c.3km north of Clynnog, is associated with Dylan, and the sound of the sea coming into the Conwy estuary is Dylan’s dying groan (MacCulloch 1911, 110; Haycock 2015, 480 n.20).

In the second branch of the Mabinogi multiple drowned kingdoms in the Irish Sea are intimated when we are told that the giant Bendigeidfran wades to Ireland through water that was not as wide as it would become, as this was before the sea ‘flooded the kingdoms’ (*‘oreskynwys y weilgi y tyrnassoed’*) (Davies 2007, 28; Hughes 2017, 7 lns.233-6). A triad preserved in the thirteenth-century Exeter *Chronica de Wallia* records three kingdoms which the sea destroyed: that of Teithi Hen ap Gwynnan, called ‘Ynys Teithi Hen’ (island of Teithi Hen) and located between St Davids and Ireland, that of Helig ap Glannog, between Ceredigion and Bardsey and as far as St Davids, and that of Rhedfoe ap Rheged (Bromwich 2014, lxxiv-lxxv). Teithi Hen ap Gwynnan and his inundated lands also receive a mention in the tale of Culhwch and Olwen which may have been first written down in the first half of the twelfth century (Davies 2007, xxii, 185), and reference to Helig ap Glannog’s sunken kingdom is also found in the thirteenth-century *Bonedd y Saint* (Bromwich 1950, 230-1; dating: Charles-Edwards 2013, 616). In the triad it would seem that Helig ap Glannog’s lands were thought to have been within Cardigan Bay but he has also been associated with north Wales (Bartrum 1993 (2009), 412-13), and it is possible that the earlier name of Ynys Seiriol off the south-east tip of Anglesey, ‘Ynys Glannauc’, refers to Helig’s father (4.4.1.2). Ynys Glannauc may therefore have been associated with the inundation legend, the island perhaps imagined to have been a hill that stood in Helig ap Glannog’s now-drowned kingdom. Another sunken kingdom story is associated with the ruler Seithennin and lands named Maes Gwyddneu/Gwyddno, which would seem to have been inundated as a punishment for the sin of presumption. This story is found in a poem in the mid-thirteenth-century Black Book of Carmarthen (the poem’s theme, style and construction may point towards a much earlier date, perhaps even the ninth century,

although it could be a later imitation of early poetry: Bromwich 1950, 228-9) and is alluded to in the thirteenth-century *Bonedd y Saint* (Bromwich 1950, 217-18, 222, 222 n.1, 228).

Legends of drowned kingdoms in Wales may have very early origins, fuelled by the presence of preserved prehistoric forests around the coasts (such as at Whitesands, Pembrokeshire, Borth, Cardigan Bay and Tywyn y Capel, Ynys Gybi). Such tales probably appealed to a wide audience, leading to their preservation in writing, but to a maritime community dealing closely with the sea they may have held particular significance. A fear of natural (or deity-sent) disasters would have encouraged adherence to tradition and ritual in an attempt to gain some control over the uncontrollable.

Islands could be important spaces in early medieval Irish Sea Christian thought and are also likely to have had non-Christian supernatural associations (p.217). The possible association of Ynys Glannauc (Ynys Seiriol) with Helig ap Glannog's sea-inundated kingdom and the term 'Ynys', 'Island', being used for Teithi Hen ap Gwynnau's sea-lost kingdom in the *Chronica de Wallia* triad suggests that both real and legendary islands could have a place in maritime myth. In the second branch of the Mabinogi, the followers of Bendigeidfran and his decapitated, but still alive, head enjoy eighty years of enchantment on Gwales (the island of Grassholm, Pembrokeshire), not remembering their sorrow and not growing older (Davies 2007, 32-3; 236). This suggests a connection between islands and otherworldly happiness and immortality, a connection also found in early Irish legends (see pp.338-9).

John Carey (2000 (1982-3), 118-19, 119 n.39) has pointed to three poems in the Book of Taliesin that hint at island, or cross-sea, locations for the Welsh

Otherworld Annwn. It is ‘*Annwfyn llifereint*’, ‘Annwfn of floods’ (Haycock 2015, 183: ‘streams of Annwfn’) in line 189 of *Kat Godeu*, and in line 49 of *Golychaf-i Gulwyd*, ‘*ffrydyeu gweilgi*’, ‘the streams of the sea’ (Haycock 2015, 277: ‘wellsprings of the sea’) are described as being around the corners (Haycock 2015, 277: ‘turrets’) of Kaer Sidi, an otherworld fortress (although line 50 of this poem also seems to suggest that Kaer Sidi is at the bottom of a spring), whilst in the third poem, *Preiddeu Annwfn*, Kaer Sidi is attacked by three shiploads of Arthur’s men (Carey 2000 (1982-3), 118-19, 119 n.39). *Preiddeu Annwfn* may be pre-1100 (Bromwich 2014, 373), and as with the other poems could well be drawing on much earlier tradition. Line 3 of *Preiddeu Annwfn* references a prisoner named Gwair within Kaer Sidi, suggesting possible associations with the Isle of Wight off the south coast of England and/or Lundy in the Bristol Channel, since both these islands have previously been named Ynys Wair (Bromwich 2014, 147, 246-7, 249, 373-4; Rhys 1901, 679). Amongst the alternative names for Kaer Sidi in *Preiddeu Annwfn* is Caer Wydyr (Glass Fort) (ln.30: Haycock 2015, 436). This name and the fact that it is difficult to speak to its sentinel may be story elements derived from a tale recorded in the ninth-century *Historia Brittonum* involving a glass tower with silent occupants in the middle of the sea encountered by the ancestors of the Irish (Loomis 1963, 127; *Historia Brittonum* §13: Morris 1980, 20, 61). This is a version of an Irish tale appearing in the second and third redactions of the eleventh-century *Lebor Gabála Éirenn* (Book of Invasions) but presumably already in existence in the early medieval period; in the *Lebor Gabála Éirenn*, the people who encounter the tower are the Nemedians and the tower is gold (Section V (Nemed) §248: Macalister 1940, 128-31; dating: Carey 2005, 44-5).

Although what was written down may reflect literary tradition rather than the beliefs and folklore of largely illiterate maritime communities, written hints of otherworldly and supernatural spaces found across the sea and on islands are supported by occasions when island names might link to these stories (e.g. Ynys Glannauc, Ynys Wair), since mythological associations in place-names may reflect a knowledge of these tales in wider society, rather than simply amongst the literate few. If otherworldly spaces were to be found across the sea, this might provide a further explanation for burial sites situated on the edge of the land, and for the description of Tenby *llys* being upon the ninth wave. These liminal locations may have been thought to connect the mortal world with the powerful supernatural otherworld of heroes and immortals.

The importance of the shore as a liminal space, where the barriers between the dichotomous sea and land might be broken down, has been explored above in relation to land-edge burials (6.6.1.4). In the perhaps ninth-century Irish *Colloquy of the Two Sages* in the Book of Leinster the brink of the sea (and, more generally, the brink of water) is said to be a place of revelation (§2: Stokes 1905a, 8-9; dating: Carey 2014, 629-30), and the magician Gwydion conjuring a ship and Cordovan leather from seashore seaweed in the fourth branch of the Mabinogi (Davies 2007, 55) might imply a similar concept of the seashore as a place of magic and possibility (although Gwydion also performs magic in other spaces). Christer Westerdahl (2005) has discussed the importance of the dichotomy between sea and land in early maritime belief systems, where names and objects that traditionally belong to either sea or land might be avoided or deliberately used in the other space. Whilst not all Westerdahl's points are directly relatable to early medieval Wales, his arguments that maritime superstitions are a 'coherent system of cosmology', and that people on

board boats are likely to have followed different forms of behaviour to when they were on land (Westerdahl 2005, 2-3), have relevance to the study of maritime communities and their belief systems across history. It is highly likely that ‘superstition’ played a part in the belief systems of early medieval maritime communities in Wales, both at sea and on shore. Although ‘superstitious’ thoughts and actions are generally invisible in the archaeological record the location of burial sites close to landing places may have had a ‘superstitious’ element, the dead thought to bring luck to the maritime activities of the living (6.6.1.4).

Maritime belief systems in early medieval Wales would have been influenced by Christian concepts of the sea, including those discussed previously in relation to ecclesiastical sites on islands and land-edge locations (pp.217, 258). Specific stories from the Bible would also have influenced maritime belief systems, such as that of Jonah and the great fish (Jonah: I-II) and Jesus calming the storm (Matthew 8: 23-27). Tales of the sea acting on behalf of saints are found in early Irish literature (pp.337-8), but such supernatural maritime episodes are generally absent in early medieval saints’ lives in Wales. Unusual exceptions are St Padarn’s follower Nimannauc’s sea-journey on a floating stone to Padarn’s ‘maritime’ church in Wales in the eleventh-century *Life* of Padarn (5.4.2.2), Scutinus being carried by a sea-beast from Ireland to Wales to warn St David of a poison plot in Rhygyfarch’s late-eleventh-century *Life* of David (§37: Sharpe and Davies 2007, 132-3) and, in the same *Life*, the Irish abbot Barre using David’s horse to ride across the Irish Sea from Wales to Ireland, bumping into St Brendan (who is ‘*super marinum cetum miram ducebat uitam*’, ‘leading a wonderful life on the back of a whale’) on the way (§39-40: Sharpe and Davies 2007, 134-7). It is notable that Scutinus (Scothíne), Barre and Brendan are all Irish saints associated with early medieval supernatural maritime

stories (see pp.338, 342), so although Rhygyfarch incorporates them into his late-eleventh-century *Life of St David* their supernatural maritime associations have Irish origins. Similarly, although St Ailfwy/Ailbe has maritime associations and was known in Wales, his maritime associations have Irish origins (see St Elvis, Pembrokeshire, 3.4.2.11).

The lack of supernatural maritime episodes in saints' lives of early medieval Wales may be due to accidents of preservation. However it is also possible that, as with other early literature referencing the sea or sailing in Wales, the sea in early medieval saints' lives and stories was generally considered an unremarkable space that was simply crossed when necessary (e.g. *Life of St Padarn* lns.32, 83, 93, 130: Thomas and Howlett 2003, 15, 17-18, 32-5; Rhygyfarch's *Life of St David* §3, §43, §45, §48: Sharpe and Davies 2007, 112-13, 136-9, 140-1).

If it were possible to travel round early medieval Welsh coastal communities recording stories in the way of a nineteenth century folklorist a complex picture of both shared and locally specific beliefs, legends and traditions would be revealed, of which we can now only hope to catch a glimpse. Hints of early maritime folklore and belief can be found in the written evidence, such as in the figure of Dylan who might well have been called on by early medieval mariners for safety at sea, and in the archaeological evidence, such as in the number of burial sites overlooking or close to potential landing places. On the whole, early medieval literature in Wales does not seem particularly interested in supernatural maritime stories, in contrast to early medieval literature in Ireland. This is likely to have more to do with what the literate authors in Wales chose to write about than an actual absence of maritime folklore and belief amongst the general populace, particularly those who lived near the sea.

This discussion has focussed on what Welsh sources can tell us about maritime folklore and belief in early medieval Wales, but it must be remembered that borrowings in folklore and belief between different areas would have been constant and fluid and stories can have importance outside their place of origin. For example, inhabitants of Wales may have told ‘Irish’ myths and inhabitants of Ireland ‘Welsh’ myths, perhaps changing details to make stories locally relevant. The discussion of maritime folklore and belief in a wider Irish Sea context in the following chapter (7.7) is therefore also of importance to reconstructing potential elements of maritime folklore and belief in Wales. However, maritime folklore and belief around the Irish Sea was certainly not homogeneous - see, for example, the differences between the key maritime mythological characters Dylan Eil Ton (Wales) and Manannán mac Lir (Ireland and Mann) (pp.344-5).

6.10.Conclusion: the three Welsh study areas

The three Welsh study areas contain a considerable number of sites with probable and possible early medieval maritime connections around the coasts of Wales. Consideration of geography, artefacts, settlements, burial, literature and folklore has thrown light on maritime communities who might at first glance appear invisible, or even non-existent, given the lack of interest in maritime activity in the written sources and the absence in the study areas of more obviously maritime archaeological evidence such as boats or harbour structures.

Maritime accessibility seems to have been an important attribute of early medieval high-status secular settlements in the study areas. The majority are set

slightly back from the open sea, often near tidal rivers, perhaps as a protection against natural and human-brought maritime dangers and to command both an inland and maritime landscape. Benefits of maritime accessibility for high-status secular settlements included access to imports, knowledge, travelling craftspeople and political allies, and this is also true of high-status ecclesiastical sites with good maritime accessibility. The status and wealth of these sites would have attracted maritime traffic, which in turn would have enriched the inhabitants. It is likely that all high-status sites, both secular and ecclesiastical, would have been served in their maritime interests by lower-status maritime communities nearby.

There is no recognisable site-type amongst the lower-status settlements with probable or possible maritime connections in the Welsh study areas, these settlements being disparate in form and finds. They hint at individual approaches to maritime connections and activities in different communities, some of which would have been associated with high-status sites whilst others may have been more independent.

Early medieval activity on islands is one of the most obvious indicators of maritime activity in Wales. Boats would have been necessary for external contacts and importing materials and goods that were not otherwise available, and islands might also have been used as stopping-off points for passing vessels. Ecclesiastical sites on islands may have been drawn to their apparent isolation, as hermitage/monastery sites in the desert of the sea, but in practice islands were closely connected with maritime and mainland activity. Some island ecclesiastics could potentially have been mariners, but it is likely that maritime activities were generally left to local secular communities.

Evidence for the exploitation of marine resources in early medieval Wales is slim, and isotope analysis in Pembrokeshire, south-east Wales and Bardsey suggest terrestrial rather than marine diets (Hemer *et al.* 2017, 434; Richards 1998, 120-1). However, dated fishtraps in the Severn estuary, submerged stone traps in Cardigan Bay and the marine molluscs at Longbury Bank, Pembrokeshire and Dinas Powys, Glamorgan and spurdog at Rhuddlan, Denbighshire, as well as the potential use of seaweed as a fertiliser or a foodstuff as one explanation for high sulphur values in individuals from Pembrokeshire (Hemer *et al.* 2017, 434-5), suggest that exploitation of marine resources was not unknown in early medieval Wales. It would be interesting to analyse dietary isotopes of individuals buried near the coasts of Cardigan Bay and the Menai Strait, where there are a high number of stone fishtraps which may have had early medieval predecessors. There is no evidence for cetacean exploitation in early medieval Wales, although it is unknown whether this reflects invisibility of processing or a taboo on their use.

Imports (both external, originating outside Wales, and internal, originating within Wales) in the three Welsh study areas hint at the locations of landing places and areas of activity of maritime communities, and sometimes at what those activities might have been – for example, the merchants' weights may have been lost in the vicinity of exchange sites. The diversity of imports and their findspots suggests a diversity of routes, individuals and interactions, rather than maritime movement being strictly controlled and channelled through only a few landing places. High-status centres may have attracted maritime traffic through their wealth and prestige but they do not seem to have held a monopoly on where boats put ashore, and therefore where exchange or loss of an import might occur. Imports in the three Welsh study areas were never found far from tidal waters. Access to

maritime imports may have helped form a distinct sense of cultural identity amongst those who lived close to the sea or tidal waters, against those who lived further inland.

A distinct sense of identity may also have been encouraged by a tendency towards multicultural communities at sites close to the sea or tidal waters. Data from isotope analysis suggests that individuals with a diversity of non-local origins, some from as far afield as the Mediterranean Sea region, were buried in the same cemeteries and generally in the same ways as local individuals, in locations close to, or with good access to, maritime routes, suggesting that at least some maritime communities in early medieval Wales were willing to integrate newcomers into their communities. This might also be seen in the apparent absence of early medieval isolated burials of shipwreck victims in the study areas, the unknown drowned perhaps granted burial in community cemeteries rather than ostracised due to their non-local origins. Artefacts, too, can hint at diverse backgrounds within communities, such as the hogback at Llanddewi Aberarth, Cardigan Bay.

Early medieval burial sites near landing places in the Welsh study areas (of which there are a striking number, particularly in Pembrokeshire and Gwynedd) seem likely to have belonged to maritime communities who used those landing places. These locations may have been chosen for a myriad of practical and spiritual reasons, including displays of land ownership and power in the locality of the landing places and a desire to retain a distinct maritime identity in death, as well as a possible belief that the dead were watching over the maritime activities of the living and bringing them luck. On some sites burial began before the arrival of ecclesiastical presence, whilst on others the presence of an ecclesiastical foundation would have attracted burial rather than necessarily any particular desire for maritime

proximity in death. Having said this, the maritime accessibility of ecclesiastical sites close to landing places would have been important to these sites' identities and may have encouraged a desire to be buried at them. Ecclesiastical sites close to tidal waters may have been sited for both practical and spiritual reasons, with the sea playing an important role in Christian symbolism.

The maritime folklore and beliefs of early medieval communities in Wales would have been influenced by pre-Christian and Christian symbolism, stories and traditions, some passed down through generations and some introduced more recently via maritime movement, some shared between communities and some specific to a single community or individual. Place-names could be descriptive, with practical uses in navigation or as warnings, but some hint at mythological associations. Place-names and early literature may preserve elements of oral maritime folklore and beliefs. Perhaps the most intriguing of these elements is the character of Dylan Eil Ton, a probable sea deity who may still have been called on by early medieval maritime communities.

It must be recognised that whilst there are some general points that can be drawn from the evidence concerning maritime communities and connections across the three Welsh study areas, none of the sites in the data collection are directly comparable. For example, all three study areas have evidence for both external and internal imports, but the origins, types and findspots of these imports vary considerably both within and between the study areas. It is clear that there was no one maritime cultural landscape encompassing every maritime community in early medieval Wales. Each maritime community would have existed within its own maritime cultural landscape formed of geography, knowledge, interactions, activities

and belief, overlapping and interacting with the maritime cultural landscapes of other communities.

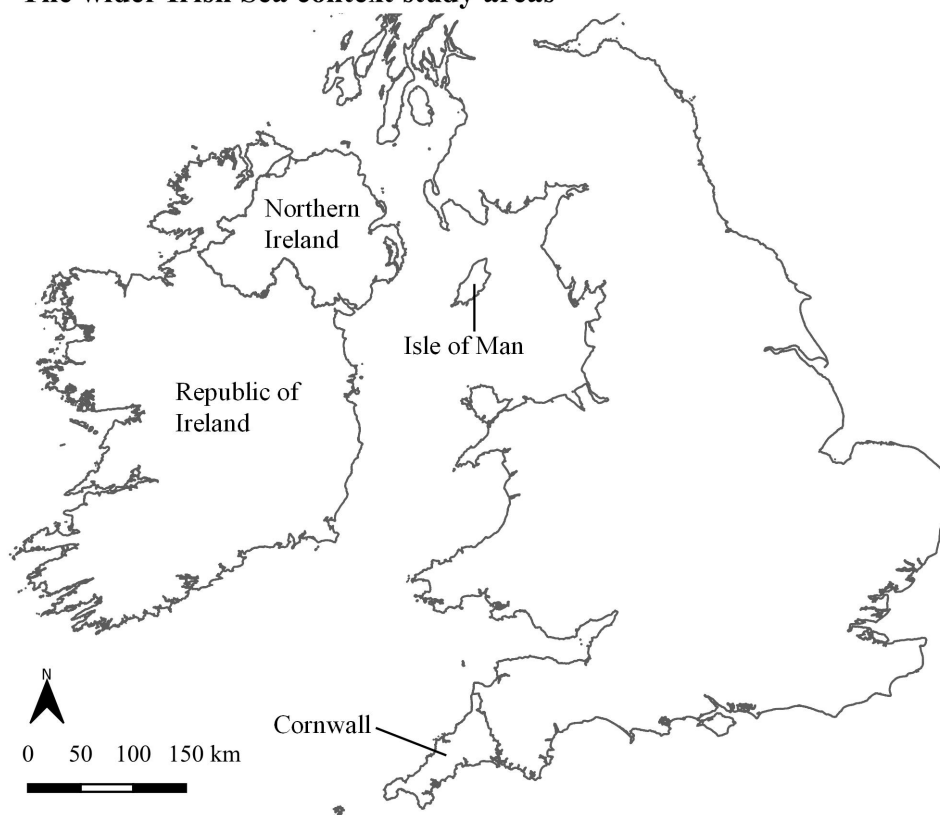
Considering the little that remains in archaeological or written sources for any aspect of early medieval Wales, the amount of evidence gathered during this project for maritime connections in the three Welsh study areas was unexpected and exciting. It has enabled a complex and diverse picture of the maritime aspects of early medieval Wales to be constructed and discussed. The following chapter will place the maritime communities of Wales within their wider Irish Sea context.

7.The wider Irish Sea context

7.1.Introduction

This chapter explores the maritime communities of early medieval Wales within their wider Irish Sea context, with a particular focus on the east coast of Ireland, the north coast of Cornwall and Mann (fig.43). A thematic approach is taken to explore similarities and differences in the experiences of maritime communities around the Irish Sea. These themes are: the location of settlements with evidence for maritime connections, exploitation of marine resources, imports, burial and ecclesiastical sites, multicultural communities and maritime folklore and belief.

Figure 43
The wider Irish Sea context study areas



7.2.Settlement location

The majority of high-status secular settlement sites in the three Welsh study areas had good maritime accessibility whilst generally being set back a little from the open sea (6.2.1). None of the lower-status settlements with evidence for maritime connections aside from location are far from tidal waters (6.2.2), and maritime imports do not seem to have made their way far inland (6.5). Similarly, in Cornwall and Mann high- and lower-status sites with evidence for early medieval maritime connections are generally within easy reach of tidal waters. In Ireland, however, as well as sites with evidence for maritime connections close to tidal waters there are sites with evidence for maritime connections much further inland (fig.44).

Imports on high-status inland sites on the east coast of Ireland include E-ware, glass and an English coin at Lagore crannog, Co. Meath, c.20km inland (Hencken 1950-1; Doyle 2009, 61; Bourke 1994, 173, 179; Hall 1973-4, 82), E-ware and glass at Moynagh Lough crannog, Co. Meath, over 30km from open sea and just under half that distance from the river Blackwater (Bradley 1989:072; Bourke 1994, 170, 205; Doyle 2009, 61), E-ware, glass and an amber bead at Garryduff ringfort, Co. Cork, some 14km north-north-east of Cork Harbour (O'Kelly 1963, 77; Doyle 2009, 60; Bourke 1994, 168, 172, 173) and E-ware and English coins (two tenth-century and one earlier-eleventh-century) at Knowth, Co. Meath, c.23km up the River Boyne from the sea (Eogan 2012, 45-170; Doyle 2009, 60; Hall 1973-4, 74-5; Dolley 1969; Kenny 2012, 518). E-ware and a small, unworked piece of amber found 40km north-west of Cork Harbour at Lisduggan ringfort 1, which is thought to have belonged to a self-supporting farming community (Twohig 1990, 19, 29; Doyle 2009, 61), suggests that maritime imports inland were not confined to high-status

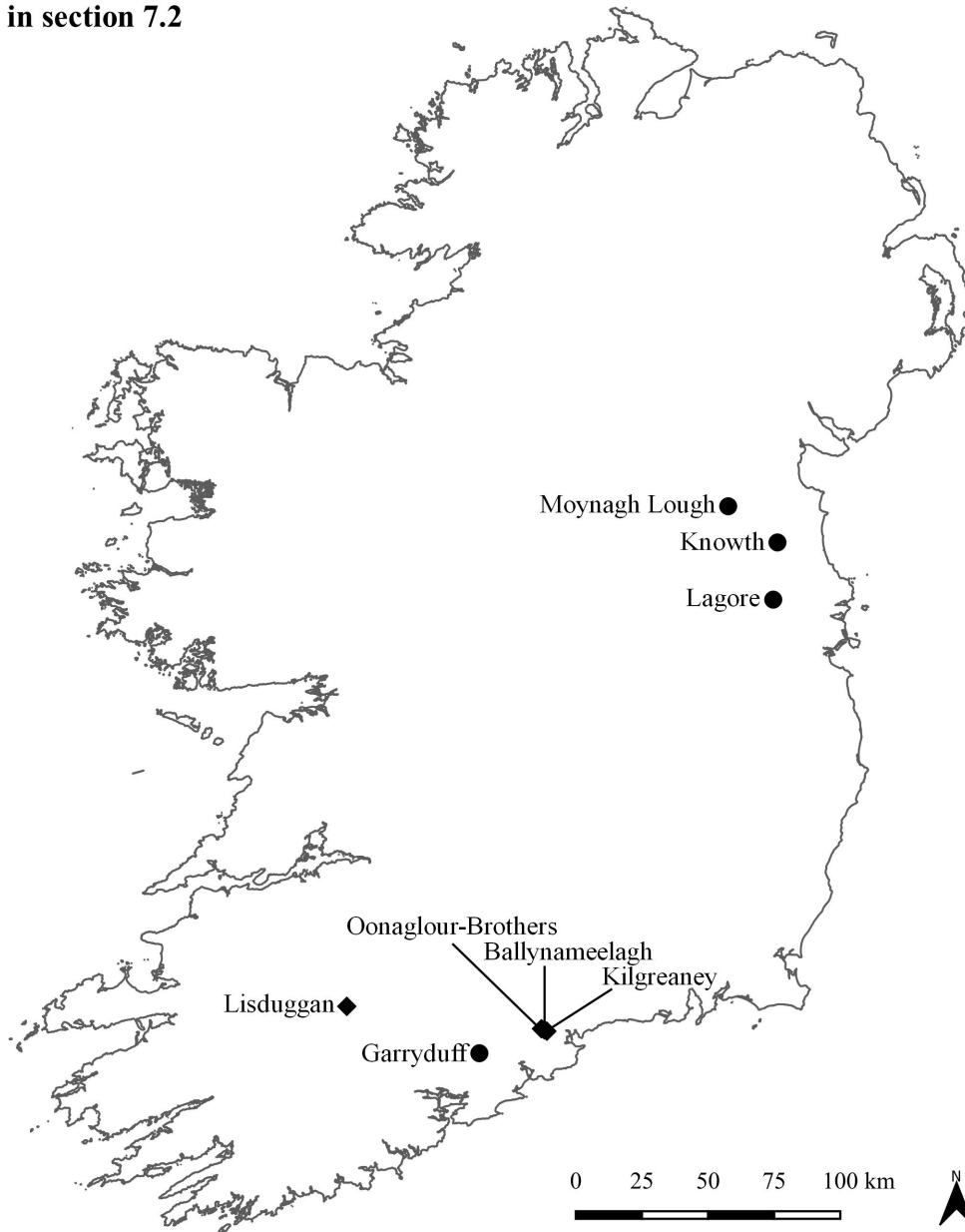
sites. However, it seems probable that high-status inland sites were requesting and receiving imports directly from the coast, whereas lower-status sites may have come by them through less formal internal exchange. For example, it has been suggested that the imports at Lisduggan were due to its being near a trade route running from Cork Harbour to Limerick (Twohig 1990, 29).

Two of the Co. Meath inland high-status sites with imports mentioned above, Knowth and Lagore, have also produced evidence for the exploitation of marine resources. At Knowth, salmon (at least eighteen specimens), cod (at least two specimens), haddock (at least one specimen) and marine molluscs were found in the final stage of early medieval activity, which ran from the early-tenth century to the beginning of the twelfth (Eogan 2012, 85, 701; Hamilton-Dyer 2007, 73; McCormick and Murray 2007, 39-40). The salmon might indicate freshwater river fishing and could explain the presence of fishhooks and possible net weights, whilst the marine molluscs, cod and haddock may have been imported to the site rather than fished for at the coast by the site's inhabitants (McCormick and Murray 2007, 75; Wallace 2012, 732, 735; Sandes 2012a; 2012b; Sandes and Johnson 2012). A Manx shearwater from a context of uncertain date might also have been imported (unless it was a storm-blown individual) as this seabird would not normally venture this far inland (McCormick and Murray 2007, 37, 74; Hamilton-Dyer 2007, 72-3). At Lagore, three fish bones not identified to species might be freshwater but marine mussels were found below a hearth assigned to Period II, making their deposition possibly prior to, or around, the mid-ninth century (McCormick and Murray 2007, 77; Hencken 1950-1, 7, 51, 226). The evidence from Knowth and Lagore suggests that marine foodstuffs could be desirable enough to warrant transportation over some distance from the coast, despite their potential to quickly deteriorate from fresh to

dangerous. It seems unlikely that inhabitants of these high-status sites were travelling to the coast to do their own fishing, and more likely that maritime communities living and working on the edge of the land collected the products, which then travelled inland as food renders, gifts or traded goods.

Marine resources transported some way inland are not only found on high-status sites. Kilgreaney Cave, Co. Waterford is a fifth- to tenth-century occupation site (with later intermittent use) of no apparent status c.8km from tidal waters at Dungarvan Harbour to the east and the River Blackwater to the west (c.25km upriver of the sea); there were many periwinkle, cockle, mussel, oyster and scallop shells at this site, marginal damage on some of the periwinkle shells suggesting consumption (Dowd 2002, 87-8, 90). c.1.2km and c.2.3km west-north-west of Kilgreaney are two other early medieval cave sites with seashells that do not seem to have been of high status: Ballynameelagh and the Oonaglour-Brothers cave system (Ussher 1881, 219; Dowd 2002, 87; 2015, 195; Forsayeth 1931). Direct importation of shellfish to these lower-status sites seems a little unlikely. The inhabitants probably collected the shellfish themselves, or perhaps bartered for them from a maritime community located nearer the coast, or from boats travelling up the River Blackwater. Either way, this is evidence for maritime connections in lower-status settlements situated further from tidal waters than those known in early medieval Wales.

Figure 44
Inland sites in Ireland with evidence for maritime connections discussed
in section 7.2



Edward Bourke (1994, 180) has suggested that the distribution of imported glass in Ireland may indicate sites that were wealthy enough to take part in exchange, rather than sites lying on a particular trade route. However, Amanda Kelly (2010, 64) argues that whilst certain important sites might have managed to uphold trade connections despite their distance from water routes, accessibility and wealth are generally ‘closely correlated’ – i.e. sites located on watery trade routes were in a prime position to foster their own wealth and prestige. This is likely to be one of the

reasons for many early medieval secular high-status sites in Wales being located at sites with direct maritime accessibility (6.2.1), and it suggests that, although direct maritime accessibility does not generally seem to have been so important to high-status secular sites in Ireland, they are likely to have enjoyed good routes of communication with the coast.

Journeys inland to these sites would have been via rivers (the Boyne in Counties Louth and Meath would seem to have been particularly important) and overland (Doyle 2009, 25-32). The use of riverine networks would have been enabled by local maritime communities providing incoming ships with inland pilots or transferring their cargoes to smaller river boats. Such communities would probably have been located at river mouths, the better to take advantage of new arrivals from both river and sea. Some maritime imports would also have travelled overland for all or part of their inland journeys. Not all sites with maritime imports on the east coast of Ireland are close to major waterways (e.g. Moynagh Lough and Lagore, Co. Meath).

The distances travelled inland by maritime imports and marine resources on the east coast of Ireland imply a more comprehensive system of land and river trade and travel routes than in Wales, making an inland power centre with access to maritime imports and produce a more viable option than it was on the other side of the Irish Sea. In a clear difference to the Welsh material, inland locations seem to have been more important than direct and swift maritime access to high-status sites on the east coast of Ireland.

Ewan Campbell (2007a, 109) has suggested that imports are found further inland in Ireland due to good arable land being more widespread than in Wales where it is generally coastal. It is also notable that the Welsh mountains quickly

cause rivers to become impassable and overland journeys to become arduous, whilst the east coast of Ireland has wider stretches of relatively flat river-threaded landscape that allow riverine and overland routes to penetrate deeper into the hinterland. High-status settlements on the east coast of Ireland could therefore remain in contact with maritime activity whilst sitting deep within an inland landscape.

The inland high-status secular settlements with evidence for maritime connections in Ireland are unlikely to have had as close a relationship with the lower-status communities who actually undertook maritime activities as their counterparts in Wales, where the inhabitants of high-status sites would have been able to see the maritime activity as it happened, even if they took no part in it themselves (6.2.1). Lower-status inland sites with imports may not have had direct maritime connections. However, lower-status inland sites with marine produce are likely to have had more direct maritime connections.

7.3. Exploitation of marine resources

See figures 45-8 for key sites discussed in this section.

There are no certain early medieval fishtraps within the three Welsh study areas, although one stone trap at New Quay may be early medieval given the depth of water covering it and other stone fishtraps, particularly in Cardigan Bay and the Menai Strait, may also have had early medieval origins (pp.219-20, 224). In south-east Wales, the presence of early medieval wooden fishtrap structures in the Severn

estuary suggests that fishtraps may have been used elsewhere around the Welsh coast in the early medieval period (pp.219-20).

Potentially early medieval fishtraps are unknown in Cornwall and Mann, but fishtraps dated to the early medieval period are found on the east coast of Ireland in Strangford Lough, Co. Down. Here, a wooden fishtrap at Chapel Island East returned dates of cal.AD 685-773 (GrN-22592) and cal.AD 711-889 (UB-3034), and the nearby trap at Chapel Island West was dated cal.AD 783-979 (GrN-22954) (McErlean *et al.* 2002, 158 tbl.6.3). Both of these traps are in the Greyabbey Bay area, which also has a concentration of later wooden traps (McErlean 2002, 151 tbl.6.1), leading Thomas McErlean *et al.* (2002, 182-3) to suggest that this was the site of an ‘extensive foreshore fishery’ from the late-seventh to late-twelfth centuries. It is unknown who owned this fishery – perhaps one of the nearby monasteries such as Nendrum or Movilla, or perhaps the occupants of Rosemarket rath which overlooked the bay and boasted a natural landing place and a situation almost entirely surrounded by water (McErlean *et al.* 2002, 69, 78, 183). Whoever actually owned the traps, their presence points toward the existence of a local fishing community whose livelihood was linked to their maintenance and use. Another early medieval fishtrap on the east coast of Ireland is recorded on a tidal river near Dublin in reports of the AD 1014 Battle of Clontarf (Todd 1867, xxv, clxxxiv, clxxxiv n.3; *War of the Gaedhil with the Gaill* §110: Todd 1867, 192-3, 257; Book of Leinster list of the Kings of Munster §21: Todd 1867, 237-8). Fishtraps figure in early Irish law, suggesting that they were relatively common, and it seems they could be owned both by lords and kin-groups (Kelly 2000, 286-8; *O’Davoren’s Glossary* §60: Stokes 1904a, 206; *ALI* i, 130-1), with the everyday use and maintenance of them presumably undertaken by specialised fishing communities.

Some marine fishing was certainly taking place in both Cornwall and Mann (see below). The absence of early medieval fishtraps in these places may be due to a loss of early fishing structures, or simply because other fishing technologies were used. Other fishing technologies would also seem to have been used in Ireland.

The Irish term for fish-spear is noted in the ninth-century St. Gall Glosses, and a fish-spear presumably used in freshwater fishing has been found in an inland early medieval crannóg context at Strokestown, Co. Roscommon (Stokes and Strachan 1903, 91 lns.17, 33; Kelly 2000, 290). Angling, too, is known from freshwater contexts – for example, fishhooks at Knowth, Co. Meath, may be from freshwater river fishing (p.280). Viking-age marine angling may be indicated by fishhooks at the possibly Hiberno-Scandinavian late-eleventh- to thirteenth-century site of Shandon, Co. Waterford on the shores of the estuary of the Colligan River (Elder *et al.* 2007, 4, 7-8; Elder 2002:1790), whilst the dedication to Dubhán of an early church near the end of the Hook Peninsula, Co. Wexford may hint at pre-Viking marine angling on the east coast of Ireland. *Dubán* is Irish for fishing hook, and this saint is said to have been the son of the Welsh/Irish saint Brychan Brycheiniog and Díona, an English princess; nearby churches are dedicated to Brecaun, perhaps Brychan, and Allóc/Ellóc, another son of Brychan and Díona (Ó Riain 2011, 274, 279-80; Colfer 2004, 25; Kelly 2000, 290; Culleton 1999, 128-9; *The Mothers of Irish Saints*: Bartrum 1966, 32-3; *Corpus Genealogiarum Sanctorum Hiberniae* §722.89: Ó Riain 1985, 178-9). It is possible that early medieval marine angling was undertaken by a nearby maritime community with links (real or imagined) to Wales.

Fishing with nets is found in the Irish ninth-century *Epistil Ísu*, in which the punishment for casting nets on a Sunday includes the burning of the basket and hide

of the perpetrators (§29: O’Keeffe 1905, 208-9; dating: O’Keeffe 1905, 190-1; Boyle 2018, 126, 130-1). Fergus Kelly (2000, 290) takes this to indicate that net-casting was done from wickerwork and skin coracles. Whilst this could indicate both fresh and saltwater fishing, boats being put out on the sea is specifically forbidden in an earlier section of this law (§24: O’Keeffe 1905, 204-7), and sea-going boats used in fishing may be indicated in the Irish archaeological record by the presence of fish more likely to be found in deeper water, such as cod (O’Sullivan and Breen 2007, 113-14). Net weights are difficult to identify, although there may be examples at Knowth, where they were perhaps used for freshwater fishing (p.280), and at Marshes Upper Site 4, Co. Louth, where there is evidence for both freshwater and marine fishing (Gowen 1992, 102, 109).

The *Epistil Ísu* also forbids ‘sea-picking’ or ‘gleaning’ on a Sunday (§24: O’Keeffe 1905, 204-7; Kelly 2000, 298). This refers to intertidal activities such as shellfish and seaweed collection. Such intertidal activities may also have taken place in some areas of Wales (pp.220-1). There seems to have been a general entitlement to seaweed in Ireland unless land was in private ownership (Kelly 2000, 304-5; *ALI* v 482-5). Seaweed may have been used for food, fertiliser or animal fodder, and was perhaps also burnt to produce salt, a technique which may explain the use of the term *murlúaith*, ‘sea-ash’ for salt in early Irish texts (Kelly 2000, 43, 312-13; 341; 525-6). In a story in *Sanas Chormaic*, Cormac’s Glossary (which may be associated with Cormac ua Cuilennáin, d. AD 908), a female poet cutting seaweed and other sea-produce on Mann exchanges poetry with travellers from Ireland that suggests a link between seaweed and salt (§Prúll: Stokes 1862, 37; O’Donovan and Stokes 1868, 136-7; dating: Russell 2006). The story’s setting may suggest seaweed exploitation on Mann as well as in Ireland.

Fishermen have a low honour-price in early Irish law, indicating low social standing (Kelly 2000, 286; *ALI* v, 106-7). Perhaps their liminal place of work and living marked them out as different. Aidan O'Sullivan (2003, 465-6) has made a convincing argument that fishing communities were separated from inland communities by their deep knowledge and understanding of tides and fish movements and through the fact that the sea, not the sun, governed their lives. This argument can be extended to all maritime activities that relied on the state of the tides, the shared experience of those working to the sea's rhythms forging a sense of identity and community.

There are very few sites with marine fish or mollusc remains in early medieval Wales. Longbury Bank, Pembrokeshire is the only site in the three Welsh study areas with evidence for the early medieval consumption of shellfish, although apparently deliberate deposition of marine shells in burial rites is found at Ynys Seiriol off the coast of Anglesey and Whitesands, Pembrokeshire (3.2.1.4, 4.4.1.2, 3.4.2.18). Outside the study areas, marine molluscs were found at Dinas Powys, Glamorgan and spurdog was found in a tenth- to eleventh-century context at Rhuddlan, Denbighshire (p.220). Marine shellfish and fish remains turn up far more frequently in early medieval contexts in Ireland, and are also found in Cornwall and Mann.

Longbury Bank, Dinas Powys and Rhuddlan were all high-status sites, but whilst marine resource remains are known from the inland high-status sites of Lagore and Knowth, Co. Meath (p.280), the majority of early medieval sites on the east coast of Ireland with evidence for marine resource exploitation are of a lower status.

Marine resource exploitation in early medieval Ireland may have increased with the arrival of Scandinavian influence, prior to the c.AD 1000 increase of the ‘fish event horizon’ (see Barrett *et al.* 2004). For example, marine resource exploitation at Lagore and Knowth may have been related to a new Scandinavian-influenced fashion for marine produce (this may also explain the spurdog at Rhuddlan, but Longbury Bank and Dinas Powys pre-date the Viking age). Dietary isotopes point towards more marine protein in Dublin diets than other areas (see below) and Dublin has produced more evidence for fishing equipment than have other sites on the east coast (McCormick and Murray 2007, 76-7; Wallace 1998a; 1998b, 207-9). Marine shells, fish bone, fishhooks and whale bone have been found at the possibly Hiberno-Scandinavian site at Shandon, Co. Waterford (Elder *et al.* 2007, 3-8; Elder 2002:1790), and four shell middens in Cork Harbour with radiocarbon dates spanning the eighth to eleventh centuries suggest a significant amount of marine mollusc exploitation in this Scandinavian-influenced area (Milner and Woodman 2007, 103 tbl.10.1).

However, exploitation of marine resources in Ireland also took place prior to the arrival of Scandinavian influence, as suggested by the fishtrap at Chapel Island East, laws related to fishing and sites with marine mollusc remains that may pre-date Scandinavian influence. Donnybrook, Co. Dublin is one such site, where midden material covering early medieval burials contained shellfish as well as a spindle whorl comparable to one from a seventh- or eighth-century context at Lagore, with a bone comb from prior to the ninth to tenth centuries also found here (Frazer 1879-88a, 38-9, 51-2; 1879-88b, 118; O'Brien 1992, 171-2). At Maynetown, Co. Dublin, ditches contained butchered animal bone and shellfish and the primary fill of the enclosure ditch was radiocarbon dated cal.AD 687-887 (2 σ) (Moriarty 2008:477),

and a ditched enclosure at Area 6 at Portmarnock near the Maynetown enclosure had ditch fills containing frequent seashell, with a barrel hoop from a low level in the ditch dated cal.AD 686-876 (2 σ) (McLoughlin 2016:394).

In Cornwall, a fragment of oyster shell in a midden that may date to the sixth to early-seventh century is the clearest evidence to date for marine resource exploitation at Tintagel (Nowakowski and Gossip 2017, 16-17; Robinson 2007; Barrowman *et al.* 2007, 184-5). Later marine resource exploitation in north Cornwall is suggested at the ninth- to eleventh-century settlement of Mawgan Porth where a large number of mussel shells (it is not noted whether these were freshwater or saltwater mussels), a bone implement to scoop mussels out, some limpet shells and perforated stones that may have been net weights or sinkers have been found (Bruce-Mitford and Taylor 1997, 16-17, 81, 86, 88). At Winnianton on the west coast of the Lizard peninsula, midden material dated by pottery to the eighth to ninth centuries produced limpets, mussels, cockles, winkles, crab and coastal marine fish as well as land animal remains (Wood 2011, 206, 210-11, 213-15). An eleventh-century midden with marine remains at Winnianton may represent seasonal, specialised activity rather than domestic refuse (perhaps related to the increase in fishing of the fish event horizon c.AD 1000: Barrett *et al.* 2004); limpets in this midden may have been used to hold soft bait such as crab (also present in the midden), with wrasse perhaps caught from the shore but boats probably needed for hake and cod (Wood 2015, 86). Hake is most common in the midden and may represent elite consumption, whilst the absence of hake in a roughly contemporary house nearby where pollack and wrasse were processed may indicate a lower-status household (Wood 2015, 86-7), perhaps individuals who fished hake and cod for others but ate shoreline fish themselves.

On Mann, middens containing limpet and winkle shells found at Ronaldsway (see p.305 for trading connections) are undated but may belong to early medieval activity here (Cubbon 1935-7, 157-8; Neely 1940, 72-4, 77, 81-5; note that they might also be Iron Age: Higgins 1999, 149). A lead fishing weight found in the Knock y Doonee boat burial might indicate Scandinavian-influenced fishing interests (Kermode 1927-8, 242). At the cemetery and ecclesiastical site on St Patrick's Isle off the west coast, marine fish bone was found in both pre-Scandinavian and Scandinavian contexts and included herring, cod and gurnard (Hutchinson and Jones 2002, 259 tbl.2), whilst all contexts from the site produced marine shells including limpets, winkles, dogwhelks and oysters, all of which may represent food debris with the dogwhelks perhaps also used as bait (McMillan 2002, 262). On some west-coast sites in early medieval Ireland such as Iniskea North, Co. Mayo and Doonloughan, Co. Galway, dogwhelk shells fractured in such a way as to access the hypobranchial gland may have been used in purple dye production (Stelfox 1945, 154; Murray 2007, 131), an activity also suggested at the Romano-British site of Duckpool in north Cornwall (Ratcliffe 1995, 113). However, dogwhelks apparently used in dye production are not known from early medieval Cornwall, Mann, Wales or the east coast of Ireland, and the activity may have been confined in the early medieval period to specialists on the west coast of Ireland.

As in Wales (p.221), analysis of early medieval diet on Mann at St Patrick's Isle, Balladoole and Cronk keillane suggests that diets were terrestrial (Hemer *et al.* 2017, 434), which is particularly interesting considering the fish and marine mollusc remains on St Patrick's Isle. It suggests that only some (or conceivably none) of those buried on St Patrick's Isle consumed marine products, perhaps hinting at societal differences in diet. For example, marine produce for ecclesiastical

consumption may have been caught, but not consumed, by a secular maritime community granted burial at this ecclesiastical site, or perhaps the individuals analysed were of a low status within the ecclesiastical hierarchy and therefore did not consume fish. As in Pembrokeshire, the high sulphur values for individuals on Mann may indicate the influence of seawater on the local biosphere, or possibly the use of seaweed as a fertiliser or foodstuff (Hemer *et al.* 2017, 434-5; see p.287 for an early Irish reference to seaweed collection on Mann).

At Padstow, north Cornwall, the diet of individuals in a cemetery where radiocarbon dates range from the mid-seventh to later-tenth centuries would appear to have been largely terrestrial, with a marine element ‘relatively insignificant’ (Bayliss 2002-3, 96, 96 tbl.1). Terrestrial diets have also been suggested for early medieval individuals at Raystown, Collierstown and Johnstown, Co. Meath, although after c.AD 1000 more marine resources came into the diet of individuals at Johnstown (Ryan *et al.* 2018, 63, 65), perhaps reflecting the increase in fishing of the fish event horizon (see Barrett *et al.* 2004). The clearest isotope evidence for the consumption of some marine protein alongside terrestrial protein is found in individuals from ninth- to eleventh-century contexts in Dublin (Knudson *et al.* 2012, 317).

Cetacean remains are unknown from early medieval contexts in Wales, Cornwall and Mann but have been found on the east coast of Ireland. Sites 3 and 4 at Marshes Upper, Co. Louth have produced cetacean remains from at least two individuals, with one vertebra bearing butchering marks; activity at these sites spans the date range of this thesis, and herring, cod and shellfish also found here suggest active exploitation of marine resources (Gowen 1992, 109, 111; McCormick 1992, 115). Cetacean bone in the enclosure ditch of enclosure DU015-014001 at

Portmarnock, Co. Dublin (c.130m north-east of the enclosure in Area 6, p.290) shared the ditch with finds including Bii-ware (LRA1), possible E-ware, and a wooden hoop close to the bottom of the ditch dated cal.AD 641-763 (2σ) (McLoughlin 2016:396). At Knowth Site M, Co. Meath, wear patterns on a perforated sperm whale tooth suggest it was once attached to clothing (Stout and Stout 2008, 64, 76). Another perforated sperm whale tooth was found at Lough Faughan crannog, Co. Down (Collins 1955, 63).

Early Irish law covers the response to stranded whales, the distribution of baleen (*'fabra mīl mōir'*, eyelash of a whale), including a gloss stating that baleen should be distributed for hoop making in areas without wood, and a restriction on feeding whale meat to a sick person, whilst baleen and a 'beautiful tooth' – specified in a ninth-century gloss as a whale's tooth – are included in a list of things that cannot be given in pledge due to their uncertain value (Kelly 2000, 284-5; Büchner 2001, 86-7 Text 2; *ALI* i, 124-5, 134-5; v, 250-1). The laws surrounding stranding suggest that it was a fairly common event (cf. Büchner 2001, 76). The restriction on feeding whale meat to a sick person shows that whale meat was eaten, which is also implied by the *Canones Adomnani* where reference is made to eating washed-up marine animals, although this does not explicitly refer to cetaceans (§1: Bieler 1963, 176-7; Büchner 2001, 67-8). From the list of things that cannot be given in pledge it would seem that although cetacean bones and teeth might hold personal value for some people, they were not in themselves valuable commodities.

Cetacean exploitation may have increased with the arrival of Scandinavian influence in Ireland. Whalebone plaques found in female graves in Norway and Scotland (Ritchie 1993, 46-7) are also found in Ireland, for example at the ninth-century Scandinavian-influenced settlement at Cherrywood, Co. Dublin (Ó Néill

1999) and in the cemetery at Kilmainham, Co. Dublin (National Museum of Ireland 2019). In the *Annals of Ulster* for AD 827/8 it is ‘foreigners’ who are recorded as undertaking a ‘great slaughter’ of porpoise (sea-hogs/sea-pigs) on the east coast of Ireland (*AU* AD 828; Büchner 2001, 65; O’Sullivan and Breen 2007, 132), and the eleventh-century description of hunting whale calves in Ireland by the geographer Al-’Udhri (who considers the inhabitants of Ireland to be culturally Scandinavian) in a thirteenth-century text of Al-Qazwini (James 1978, 7-8) may indicate an increase in cetacean exploitation following the arrival of Scandinavian influence. Prior to active hunting strandings were exploited, and it is possible that maritime communities might have also ensured such strandings by herding already-distressed animals towards the shore.

Although seal remains are found on some early medieval west-coast sites in Ireland (for example Church Island, Co. Kerry: O’Kelly 1958, 130), Daniel Büchner (2001, 77) has suggested that seals were not generally exploited in early medieval Ireland. Seal remains are unknown in Wales (although see p.223), Mann and Cornwall.

It would seem that cetacean exploitation was more culturally likely in early medieval Ireland than in Wales, Cornwall or Mann, whilst exploitation of marine fish and shellfish was found throughout the Irish Sea. Ireland provides the most evidence for such exploitation, with its dated fishtraps, fish and shellfish remains and laws concerning fishing. However, marine exploitation of both fish and shellfish was clearly taking place in Cornwall and Mann, and the evidence from Wales suggests at least a limited use of marine resources. In none of these areas was marine resource exploitation universal; it seems that only some maritime communities chose to make use of tidal waters in this way.

Tide mills at Nendrum in Strangford Lough, Co. Down and Little Island, Co. Cork represent another form of early medieval marine exploitation (McErlean and Crothers 2007; Rynne 1992, 23-4), but such structures are unknown elsewhere in the Irish Sea.

Figure 45
Distribution of key sites in Ireland, Cornwall and the Isle of Man
discussed in section 7.3 (on the exploitation of marine resources)

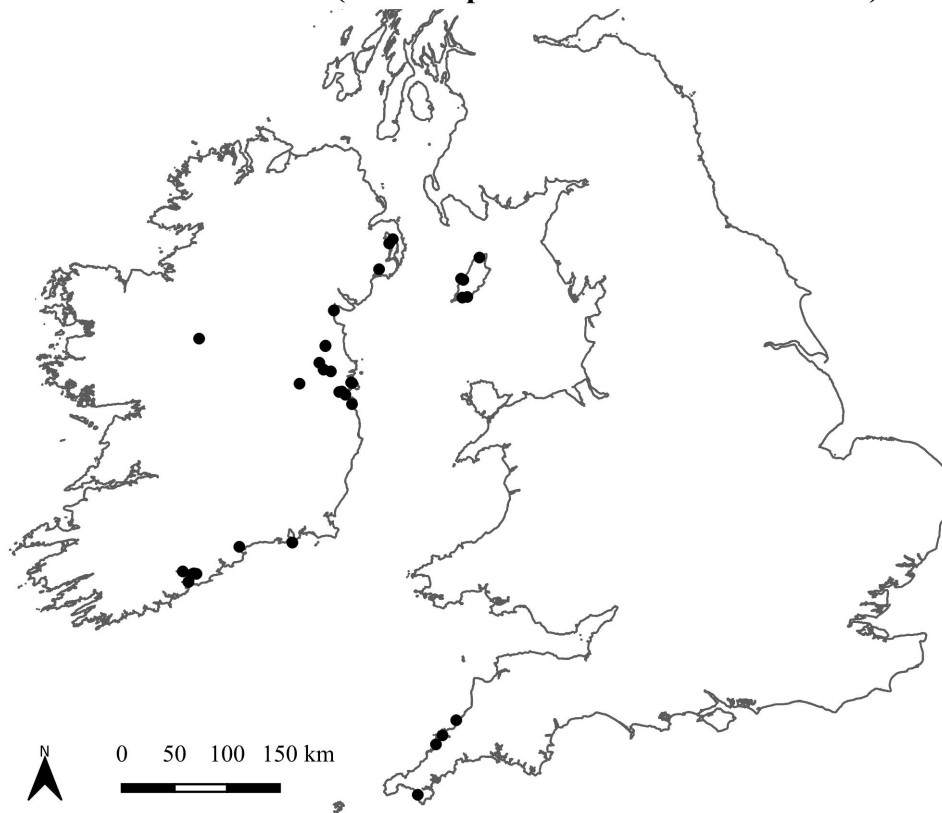


Figure 46
Key sites in Ireland discussed in section 7.3 (on the exploitation of marine resources)

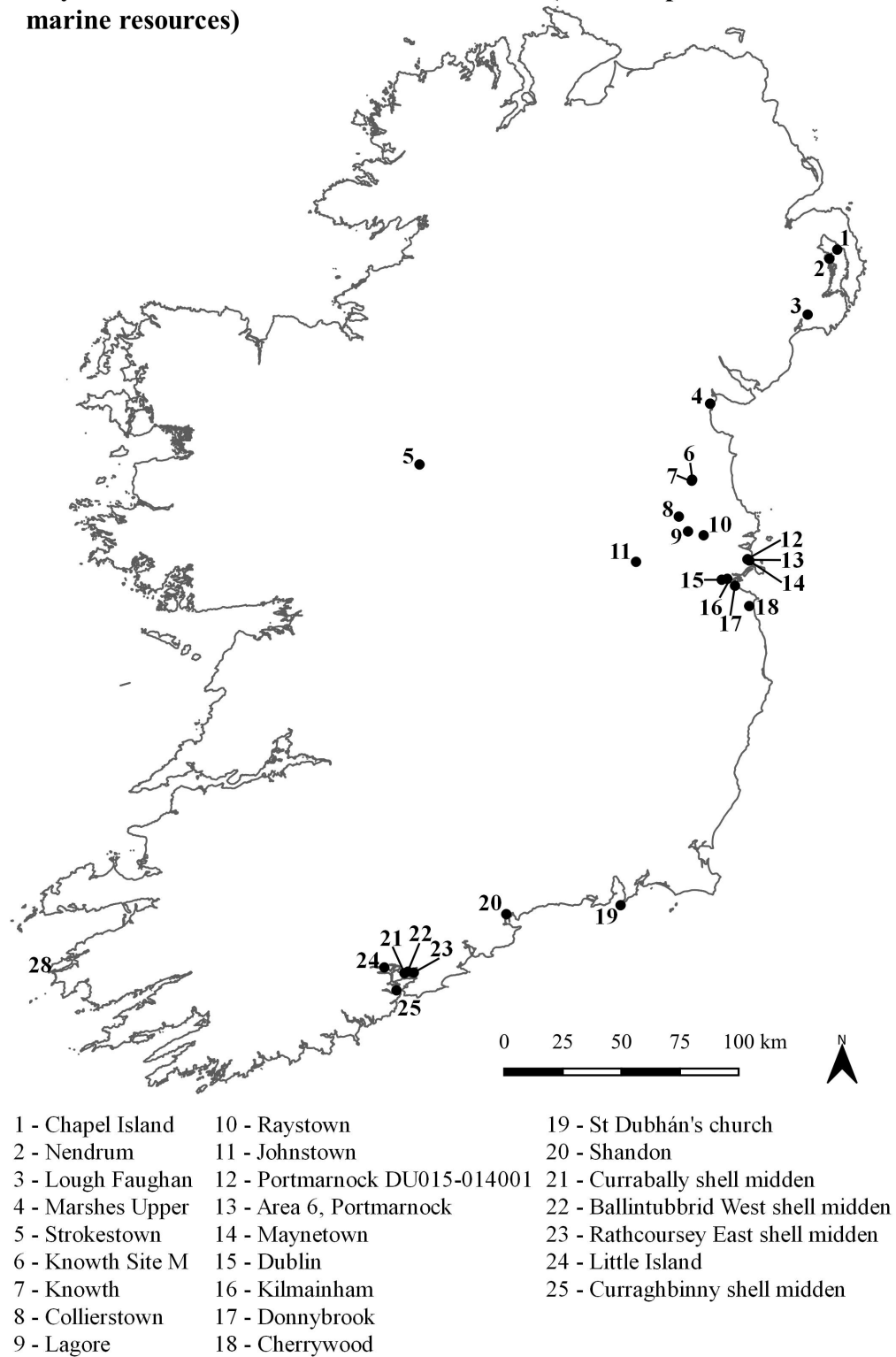


Figure 47
Key sites in Cornwall discussed in section 7.3 (on the exploitation of marine resources)

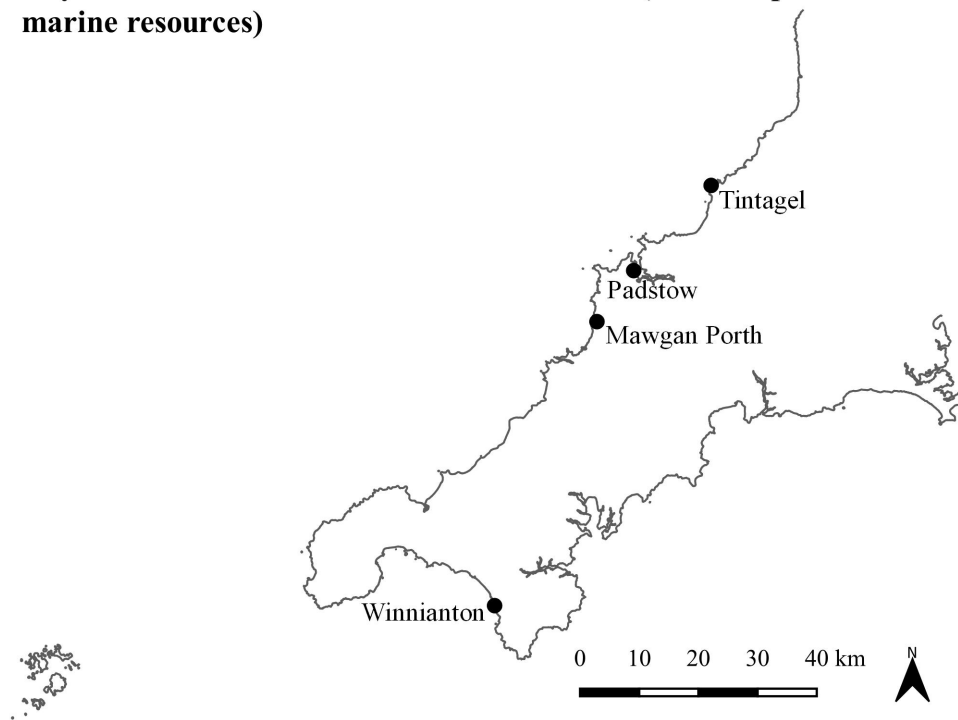
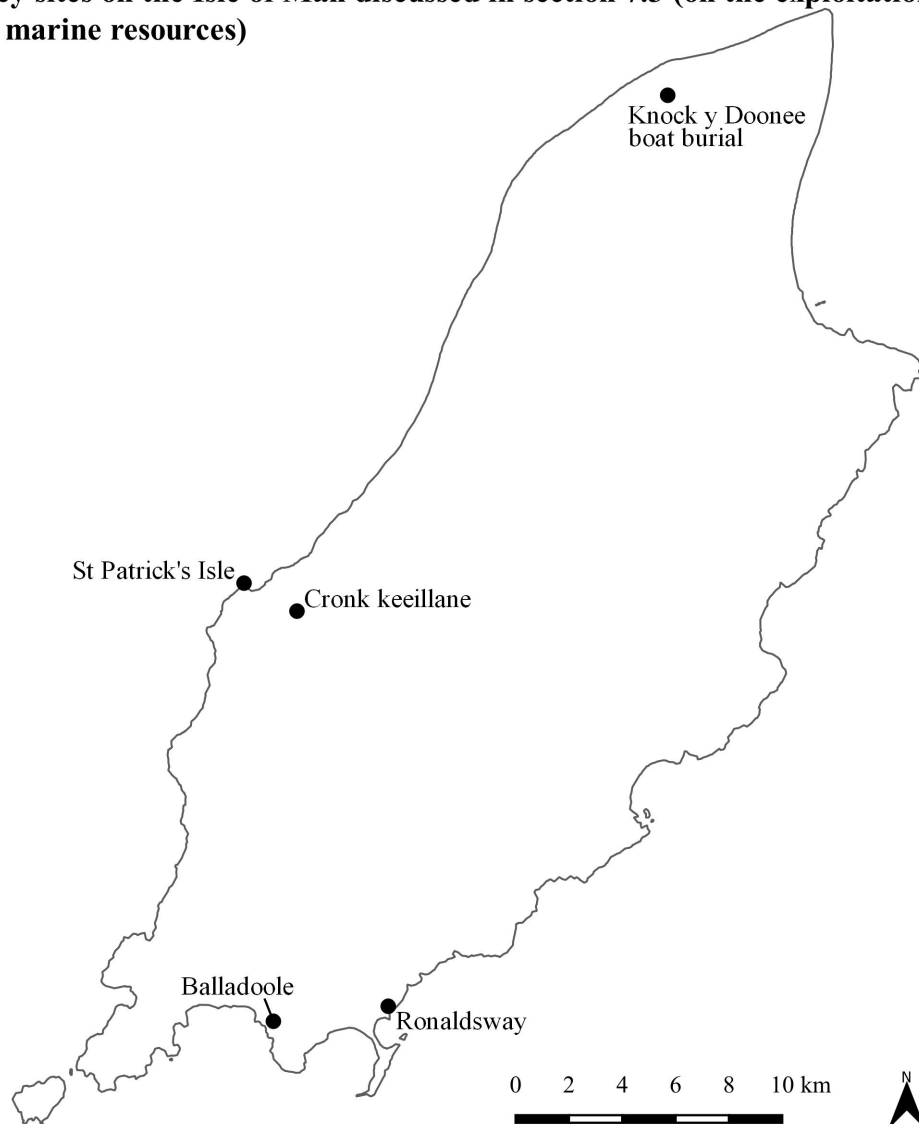


Figure 48

Key sites on the Isle of Man discussed in section 7.3 (on the exploitation of marine resources)



7.4.Imports

See figures 49-53 for key sites discussed in this section.

Maritime movement of goods in Wales does not seem to have been strictly controlled, and although some items would have been requested by patrons many others are likely to have been moved on a more opportunistic, entrepreneurial basis (6.5). There are clear differences in the experiences of Wales and the east coast of

Ireland in the maritime movement of goods, particularly in relation to the distance inland that maritime imports travelled (7.2) and in the emergence of Hiberno-Scandinavian towns. However, there are also some similarities between these areas, for example in the evidence for the pursuit of fairly opportunistic mixed-cargo trade outside major centres. Cornwall's experience seems to have been comparable to that of Wales. Mann's experience may also have been fairly comparable to that of Wales in the pre-Viking period, although its Viking-age experience was unique.

Imports from the Mediterranean and Continental trades are found in Ireland and Cornwall, but only E-ware is found on Mann, at Port y Candas (perhaps a site of some importance: Mytum 2011-13, 663-4) and Kiondroghad (a metalworking site of uncertain status: Gelling 1969, 83) (Campbell 2007a, xix, 116; 2007b, vessel E171 (Port y Candas), vessels E115-7 (Kiondroghad)). E-ware may have arrived on Mann from Ireland, where this pottery has a wide distribution and is thought to have arrived directly from the Continent (O'Sullivan *et al.* 2013, 258 fig.7.6; Doyle 2009, 34; Campbell 2007a, 136-8), perhaps with Irish merchants instigating trade with salt-producing areas of western France (Loveluck and O'Sullivan 2016, 25-6; p.227). E-ware in Cornwall and Wales may also have arrived directly from the Continent, perhaps with local mariners or mariners from Ireland (p.227).

There is more evidence for boats travelling from Ireland to the Continent than boats travelling from other areas of the Irish Sea. In the eighth-century *Life* of St Filibert a boat with goods from Ireland turns up at Noirmoutier (§42: Krusch and Levison 1910, 603; Picard 1997, 18, 19; Loveluck and O'Sullivan 2016, 24), in Jonas of Bobbio's seventh-century *Life* of St Columbanus a boat brings Irish trade to Nantes (I §23: O'Hara and Wood 2017, 35, 151) and in Notker's ninth-century *Life* of St Gall a boat with merchandise arrives in 'Gaul' ('litus Galliae') from Ireland

(‘Scotorum terra’) (§Ik: Strecker 1923, 1105 lns.12-13). Travellers from Wales and Cornwall on the Continent may be hidden within the general term ‘British’ (p.22).

Discussions surrounding the exchange mechanisms of the Mediterranean trade tend to emphasise elite control of import sites and the onward movement of goods within a system of gift-exchange; the islands of Dalkey, Co. Dublin and Dunnyneill, Co. Down feature prominently in such discussions, as gateway sites for maritime trade (Mytum 1992, 262-7; Campbell 2007a, 114, 124; Doyle 2009, 35; O’Sullivan *et al.* 2013, 268-9; Valante 2008, 34; Kerr *et al.* 2013, 47-8). Diffusion of imports in Wales through a system of clientship has been touched on previously (p.208). It is also argued for sites in Cornwall, with centres of import distribution including Tintagel and a postulated site near Hayle (Thomas 1988, 11, 16, 22). Possible examples of elite-controlled importation sites that do not themselves seem to be high-status include Dalkey Island, Co. Dublin, Tenby South Beach, Pembrokeshire (3.3.3, 3.4.2.7) and the industrial and craftworking site at Gwithian, Cornwall, where Phocaean Red Slipware, African Red Slipware, B-ware, E-ware and a single piece of imported glass have been found (Thorpe and Thomas 2007; Nowakowski and Thomas 2007, 54-5; Campbell 2007a, 121).

High-status sites are likely to have relied on lower-status maritime communities to undertake maritime activities on their behalf. This may have resulted in lower-status maritime communities enjoying a certain amount of autonomy, even those associated with a high-status site. Thomas Kerr *et al.* (2013, 45-6, 48; cf. Callmer 2007, 240-1) favour an entrepreneurial model of exchange in early medieval Ireland and this model would seem to have wider relevance around the early medieval Irish Sea. Although local elites would have expected to benefit from

maritime activities, members of lower-status maritime communities are likely to have been the active parties in the maritime movement of goods.

Even very early in the early medieval period, not all maritime imports were necessarily the result of elite control and distribution. For example, possible B-ware on Lambay Island, north of Dublin Bay (Cooney 1995:100) and the rimsherd of a fifth- to sixth-century glass cone beaker found without other evidence for early medieval activity at the Anglo-Norman castle of Dungarvan at the mouth of the Colligan River, Co. Waterford (Bourke 1994, 181) may reflect opportunistic, lower-status contact with mariners, perhaps in exchange for provisions, repairs or pilotage.⁶ Opportunistic contact of this kind might also explain the presence of imported pottery near St David's church on Caldey, Pembrokeshire (3.3.1.1) and the single, residual, sherd of Bi-ware (LRA2) at Mawgan Porth, north Cornwall (Campbell 2007b, vessel B78; Bruce-Mitford and Taylor 1997, 89, 101 Appendix 1 cat.no.96). Whilst there was certainly elite interest in what was being imported by sea there would not, therefore, appear to have been a high-status monopoly on landing places or transactions in Ireland, Cornwall and Wales. This may also have been the case in Mann, given the uncertain social status of Kiondroghad and Ronaldsway (pp.299, 305, 326-7).

In regard to opportunistic trading sites, it is apposite to note arguments related to the potential 'neutrality' of islands. It has been suggested that islands were neutral spaces, making them useful as sites of political negotiation and trade (O'Sullivan and Breen 2007, 154). However, the record of a royal meeting at Inis na Rígh in the eighth century (*AFM* AD 779) depicts the island as firmly part of the

⁶ A steersman living on Rathlin island in Adomnán's seventh-century *Life* of Columba may have made a living offering his services as a pilot (II §41: Sharpe 1995, 194; McErlean *et al.* 2002, 361).

territory of one king, and the boat of the other as firmly part of *his* territory. Both kings refuse to step on the territory of the other, demonstrating that these spaces in the sea, both terrestrial and floating, were imbued with the politics of the land and were not, therefore, neutral. In the Welsh tale of Lludd and Llefelys the episode in which the brothers meet at sea may reflect a perception of the sea as a politically neutral space; however, it is only when the peaceful intentions of Lludd are demonstrated that the space becomes one in which the allies can peacefully meet and confer (p.261, p.261 n.4).

Inhabited islands are unlikely to have ever been truly ‘neutral’, with the secular and/or ecclesiastical interests of local power-holders affecting interactions with mariners. Even if lower-status maritime communities were acting with a fair amount of autonomy, as may have been the case for that postulated in the vicinity of St David’s church on Caldey (3.3.1.1), landing places in the vicinity of these communities would not have been neutral since these communities would probably have attempted to cast themselves as the more powerful party in interactions with mariners (see pp.245-6). Arguably, the only truly ‘neutral’ spaces from the perspective of mariners would be uninhabited islands and coastlines.

Landing places on islands and coastlines away from obvious high-status control, such as Lambay, Co. Dublin, Castlebellingam, Co. Louth, Mawgan Porth and Porthleven in Cornwall, the vicinity of St David’s church on Caldey and Linney Burrows in Pembrokeshire and Porthamel, Anglesey, may not have been *neutral* but they might be argued to have been *politically liminal*, spaces where maritime exchange could be undertaken with mutual benefit to both parties, their actions not governed by elite interests.

Whilst durable materials demonstrate internal maritime movement of goods across the early medieval period in the Irish Sea (6.5.6 and see below), the apparent gap in external maritime imports between the end of the visible Continental trade and the integration of the Irish Sea into Viking economic routes is likely to be due to external imports being mostly (or even exclusively) organic. For example, Christopher Loveluck and Aidan O’Sullivan (2016, 27, 31-2) argue that trade in salt almost certainly continued between the Continent and Ireland after the visible trade in E-ware ceased. This salt may have been used in the preservation of Irish butter, perhaps a fairly common export to the Continent which is represented as an unremarkable and inexpensive item by Jonas of Bobbio in a metaphor in his AD 642/early 643 prefacing letter to his *Life* of St Columbanus, in which he contrasts the unlearned state of people like him, where Irish butter ‘scarcely makes us fat’, with learned people who were rich with exotic balsam and spices (O’Hara and Wood 2017, 35, 89). There may therefore have been regular maritime movement of everyday, unremarkable, archaeologically-invisible organic goods such as salt and butter between Ireland and the Continent in the early medieval period.

Organic cargoes listed in early Irish law are hides, salt, exotic nuts, wine and honey, with one recension adding feathers or furs, and *O’Davoren’s Glossary* adding British mares (Wooding 1996a, 69; *ALI* iii, 426-7; *O’Davoren’s Glossary* §1051: Stokes 1904a, 380-1). In Cogitosus’s seventh-century *Life* of St Brigid, Bishop Conleth wears foreign vestments from overseas (§28.2: Connolly and Picard 1987, 23; dating: Connolly 1987, 5). The diverse cargo of the boat from Ireland at Noirmoutier in the eighth-century *Life* of St Filibert included shoes and clothes for the brethren (see above), and the cargo of tenth-century traders from Ireland in

Cambridge included cloaks (*Liber Eliensis* II.32: Fairweather 2005, 130). Slaves would also have been moved by sea, both prior to the Viking age and during it.

The establishment of permanent Viking settlements, later towns, on the Irish coast heralded a new era in the exchange systems of the early medieval Irish Sea region. The far-reaching trade routes of Viking Dublin are evidenced by the wide variety of imports there including coins from England, walrus ivory from Arctic waters, amber from the Baltic coast or the east coast of England and silks from the east (Wallace 1987, 209 Map 1, 216, 219-20; O'Sullivan *et al.* 2013, 271), whilst people may have been enslaved and brought back to Ireland from as far afield as north Africa (*FA* AD 867; Green 2015). The diversity of cultural influences in such towns is common to ports across history, and would have encompassed more cultural influences than even the combined term 'Hiberno-Scandinavian' suggests (cf. 6.6.2, 7.6).

The clear influence of Viking maritime activity in the Irish Sea need not indicate a monopoly. Gruffudd ap Cynan's use of the ecclesiastical community of Aberdaron's boat to go to and from Ireland in the late-eleventh century indicates that boats from Scandinavian and Hiberno-Scandinavian centres were not the only vessels in the Irish Sea (4.4.2.1). Hiberno-Scandinavian items such as the Cresselly armring, Pembrokeshire (p.84) or the buckle frame found near Phillack, Cornwall (Tyacke 2007) could have been carried by ships and crews of any origin, and the backgrounds of mariners frequenting Hiberno-Scandinavian towns would have been diverse. Mariners from Wales, for example, might have arrived with cargoes such as 'British' horses, and slaves supplied by Welsh kings (pp.239-40).

The development of towns in Ireland was a unique phenomenon in the early medieval Irish Sea. There are no comparable sites in Wales, Cornwall or even Mann,

despite the fact that the latter was to emerge as a major Viking trading centre (Bornholdt Collins 2014, 481-3). There was certainly Scandinavian settlement on Mann (Cubbon 1983; Fellows-Jensen 1983, 43), and there was at least one coin mint based there, with the large number of hoards on the island indicating accumulation of wealth (Bornholdt Collins 2014, 481-3, 490, 494-6). However, centres of maritime exchange on Mann are elusive. Some Viking-age objects were found at the potential exchange site at Ronaldsway, near the natural landing place of Derbyhaven, but the majority of finds indicative of maritime movement at Ronaldsway are pre-Viking artefacts with Irish, Scottish and Frankish links, along with a beam balance in perhaps 'Celtic' or 'Romano-British' tradition rather than Scandinavian (Laing and Laing 1984-7, 401-6, 409, 412; Skinner and Bruce-Mitford 1940). Perhaps, on Mann, Viking-age cargoes never left their vessels or were simply transferred from one boat to another, making landing places archaeologically invisible since goods did not come ashore. Towns may not have developed here because although it was a central place in the maritime landscape it was not a major production or consumer site.

The Cornish experience during the Viking age would seem to have been more similar to that of Wales, with slim evidence for Scandinavian settlement (Padel 2013, 33; Preston-Jones and Okasha 2013, 47) and no development of towns despite the presence of some landing places that were clearly more favoured than others. The Hayle estuary is one such landing place, where finds near Phillack church included tenth- and eleventh-century English coins and the buckle frame previously mentioned (see above; Tyacke 2005a (EMC 2006.0015); 2005b (EMC 2006.0125); 2007; 2011; 2013; 2014; 2015 (EMC 2016.0140)). The vicinity of the monastery at Padstow on the Camel estuary is another such site, where the wealth of the

monastery may have attracted maritime traffic and where nearby finds include a sixth-century Byzantine copper coin (Moorhead 2009, 270 tbl.1 no.13), a tenth-century coin of Æthelred Unræd (EMC 1985.0053) and a sherd of northern French ‘Hamwic fabric 127’ pottery which is found at Hamwic, Hampshire in contexts from the eighth to eleventh centuries (Allan and Langman 2002-3, 97-8, 104).

Differences in hinterland may explain the development of towns in Ireland but not elsewhere in the Irish Sea. Hiberno-Scandinavian towns relied on their hinterlands for survival, since their focus was predominantly production and trade rather than subsistence (Griffiths 1992, 65; Valante 2008, 140-4). Both Cornwall and Mann have much smaller hinterlands for a potential town to draw on. Similarly, whilst the fertile coastal strip in Wales was attractive to those who chose to exploit it and take advantage of its maritime accessibility, it seems probable that to a newly-arrived settler’s eyes it was the greater tracts of agriculturally-productive hinterland in Ireland that were the best choice, at first to feed a hungry army and later to feed a hungry town.

Mary A. Valante (1998-9, 251) argues that only Hiberno-Scandinavian market towns offered safe conduct to merchants in Ireland and uses an episode from the thirteenth-century *Laxdæla Saga* which references the law ‘What is cast ashore is the property of the owner of the shore’ (*ALI* iii, 424-5) to illustrate this. In this saga the law is interpreted as putting a ship’s cargo in danger since the boat has come ashore away from a protected market; however, the leader of the ship’s company argues that this law only stands when there are no interpreters on board (Magnusson and Pálsson 1969, 90-3). It must be noted that early Irish law does not necessarily reflect activity in the later early medieval period (cf. Doherty 1980, 85), and its appearance in this saga may simply be as a storytelling device. Similarly, an early

commentary on this law describing the forfeits of three types of shipwreck exceeding the value of five ‘seds’ may not relate to the era of the Hiberno-Scandinavian towns but is worth paraphrasing here: a boat heading for a particular territory but blown ashore elsewhere forfeits her cargo in its entirety, a boat driven ashore within the territory she was aiming for could choose to forfeit half her goods in order to trade the other half, and a boat aiming for a particular person driven ashore in a nearby person’s lands was expected to pay a fine to the value of six ‘screpalls’ or the value of an ounce of silver or an ‘escup’ of wine or honey depending on the nature of the cargo (*ALI* iii, 424-7). The fines of the last two examples are similar to a tax, and taxes would also have been paid in towns such as Dublin (where the practice is referenced in a twelfth-century poem in the Book of Uí Mhaine: Valante 1998-9, 249-52; Ó Corráin 1997, 107-8).

Although safety in maritime contact may often have relied on that contact being between people who knew one another personally (cf. Sindbæk 2010, 436-8), the provision in law for boats coming ashore unexpectedly suggests that not all interactions took place within pre-determined spaces, even when a boat had originally been heading for a particular person or territory. Whether these laws can be directly related to activities of the later early medieval period or not, it certainly seems probable that towns were not the only places that maritime exchange could be undertaken safely. For example, two tenth-century English coins found in the demesne of Bellingham Castle, Castlebellingham, Co. Louth are unlikely to have been far from a probable beach landing place (Bellingham 1907; Hall 1973-4, 73), and suggest maritime movement of goods outside towns, as does the Dublin-type ringed pin found at the highly coastal site of Ninch, Co. Meath (McConway 2001:1007), as well as the evidence for internal maritime movement of souterrain

ware and stone on the east coast of Ireland (see below). Maritime movement of goods was certainly taking place away from more established centres in Wales (6.5), and possible examples of this in Cornwall include a ninth-century Carolingian coin found near Porthleven (Tyacke 2006) and a spindle whorl from a beach near Porth that may have Hiberno-Scandinavian origins (Tyacke 2018).

As in Wales (6.2.2, 6.5.6) there is evidence for internal maritime movement of goods in Ireland and Cornwall (fig.53). In Ireland, such goods included souterrain ware. This pottery is most prolific in north-eastern Ulster and has a date range running across the early medieval period (Ryan 1973, 619, 626, 630). It is found on a small number of sites outside its main area of distribution, including some sites to which it may have been moved by sea, such as St Peter's Church, Balrothery, Co. Dublin (Murphy 2002:0472), Carrigrohane, Co. Cork (Moloney 2003:0188) and several sites at Marshes Upper, Co. Louth (McCormick and Crone 2000, 555-6, 560; Gowen 1992, 103). Although Aidan O'Sullivan *et al.* (2013, 279) have warned that souterrain ware could have been made at its findspots rather than imported, the thin scatter of this ware south of its general distribution suggests that the odd vessel was finding its way down the coast rather than that the technology itself was spreading. At Marshes Upper 5, six fairly coarse vessels of highly varied fabric are thought to have been imported individually and 'from several sources' (McCormick and Crone 2000, 555-6), suggesting a number of voyages and perhaps a range of routes.

Internal maritime movement of stone seems to have taken place in Ireland and Cornwall as well as in Wales (6.5.6). There is a clear trend for movement of granite from the Mourne Mountains, Co. Down, northwards, including to coastal sites such as Larne, Co. Antrim and Ballyfounder, Co. Down (Joep and Ivens 1998, 111 fig.4), and it is likely that the heavy stones were moved by boat where possible.

Some items of Mourne stone were relatively small such as the quernstone at Ballynarry rath, Co. Down (Davison 1961-2, 73), whilst others were much larger such as the upper and lower millstones of tide mill 2 (constructed c.AD 789) at Nendrum monastery, Co. Down, found at least 80km by sea from their origin (Meighan 2007; Kerr *et al.* 2013, 61; McErlean and Crothers 2007, 111). Whilst the Nendrum millstones are likely to represent specially-sourced stone, the Ballynarry quernstone may have been moved more opportunistically, perhaps as saleable or unsaleable ballast (6.5.6). In Cornwall, the perhaps second-half of the eleventh- to early-twelfth-century St Piran's Cross at the former St Piran's Church, Penhale Sands may have originated in the St Austell Granite or Land's End Granite, with either c.30km journey likely to have been by sea (Bristow 2013, 14; Preston-Jones and Okasha 2013, 189-93). St Austell Granite used for a possibly sixth-century pillar-stone at St Materiana's church on the mainland just south of Tintagel may also have been transported by sea, having been brought overland to the Camel estuary (Bristow 2013, 14; Preston-Jones and Okasha 2013, 227).

The needs of towns and their markets encouraged internal trade and movement of goods in Ireland (O'Sullivan *et al.* 2013, 279; Valante 2008, 135-49), which may help explain the presence of artefacts with town parallels outside urban areas, for example the Dublin-type ringed pin at Ninch, Co. Meath (McConway 2001:1007). Internal trade instigated outside the towns is likely to have taken advantage of town markets, as suggested by the presence of possible souterrain ware in Dublin (Wallace 1987, 203; O'Sullivan *et al.* 2013, 279).

In Wales, internal maritime movement of goods is also suggested by the presence of potentially maritime-linked metalworking sites (6.2.2). The listing of iron as a possible ship cargo in early Irish law (*ALI* iii, 426-7) may suggest internal

maritime movement in Ireland of refined or partly-refined iron for use in object manufacture (and/or movement of iron ore, although potential sources of iron ore are quite common in Ireland and so its maritime movement may not have been necessary: see O'Sullivan *et al.* 2013, 219, 228 fig.6.3).

Maritime imports can hint at locations of landing places and areas of activity of maritime communities. Some goods would have been requested by, or directed towards, particular individuals but others were moved more opportunistically. Maritime imports travelled much further inland in Ireland than they did elsewhere in the Irish Sea study areas, perhaps due to the nature of the geography (7.2).

The development of early medieval towns in Ireland is not paralleled elsewhere on the shores of the Irish Sea. Towns would have attracted mariners in the same way as high-status sites would have done, but as with the high-status sites they did not hold a monopoly on maritime movement and exchange. Outside these towns the experience of Ireland may have been similar to that of Wales and Cornwall – arguably more similar than the experience of Mann, which despite its lack of towns saw more intensive Scandinavian influence than some of the coastal areas of Ireland. Indeed, the Viking-age experience of the Welsh and Cornish coastlines,⁷ outside the main arteries of Viking trade but not isolated from them, might shed light on the experience of maritime communities in Ireland away from the major port towns.

⁷ With the exception of the north Wales coast.

Figure 49
Distribution of key sites in Ireland, Cornwall and the Isle of Man
discussed in section 7.4 (on imports)

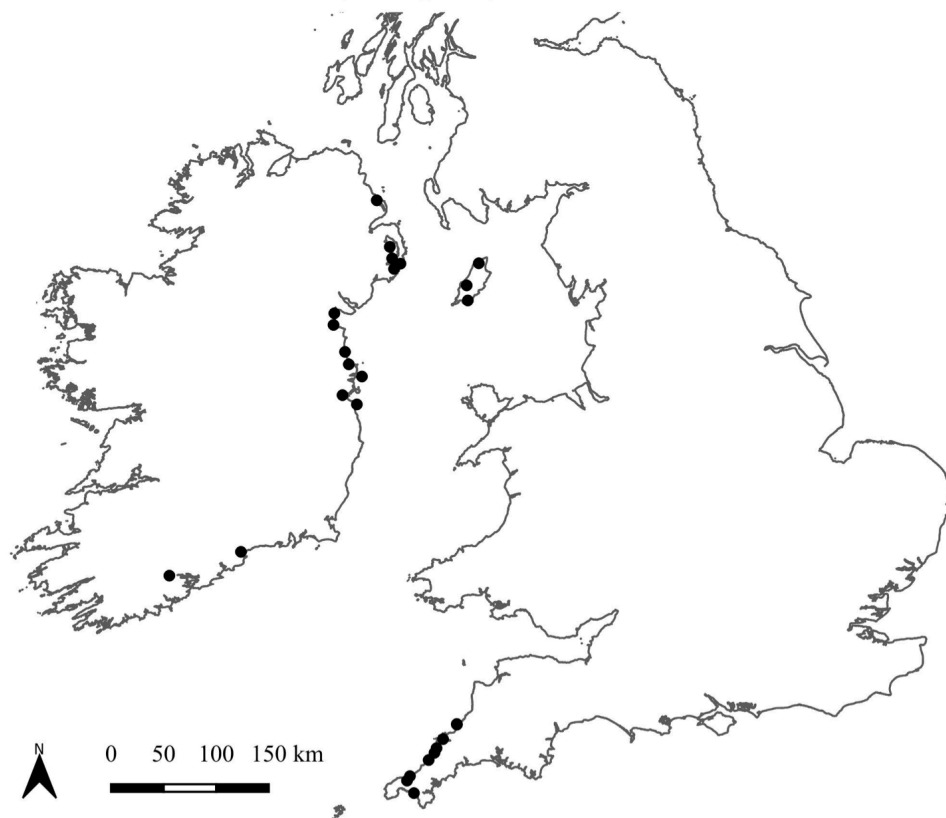


Figure 50
Key sites in Ireland discussed in section 7.4 in relation to external imports



Figure 51
Key sites in Cornwall discussed in section 7.4 in relation to external imports

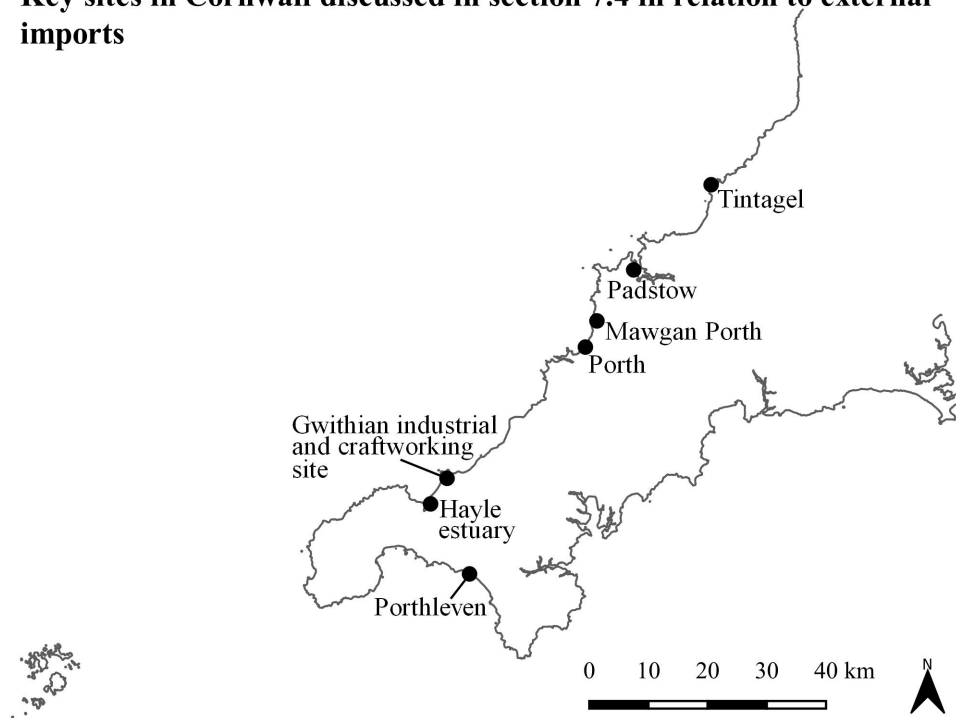


Figure 52
Key sites on the Isle of Man discussed in section 7.4 in relation to external imports

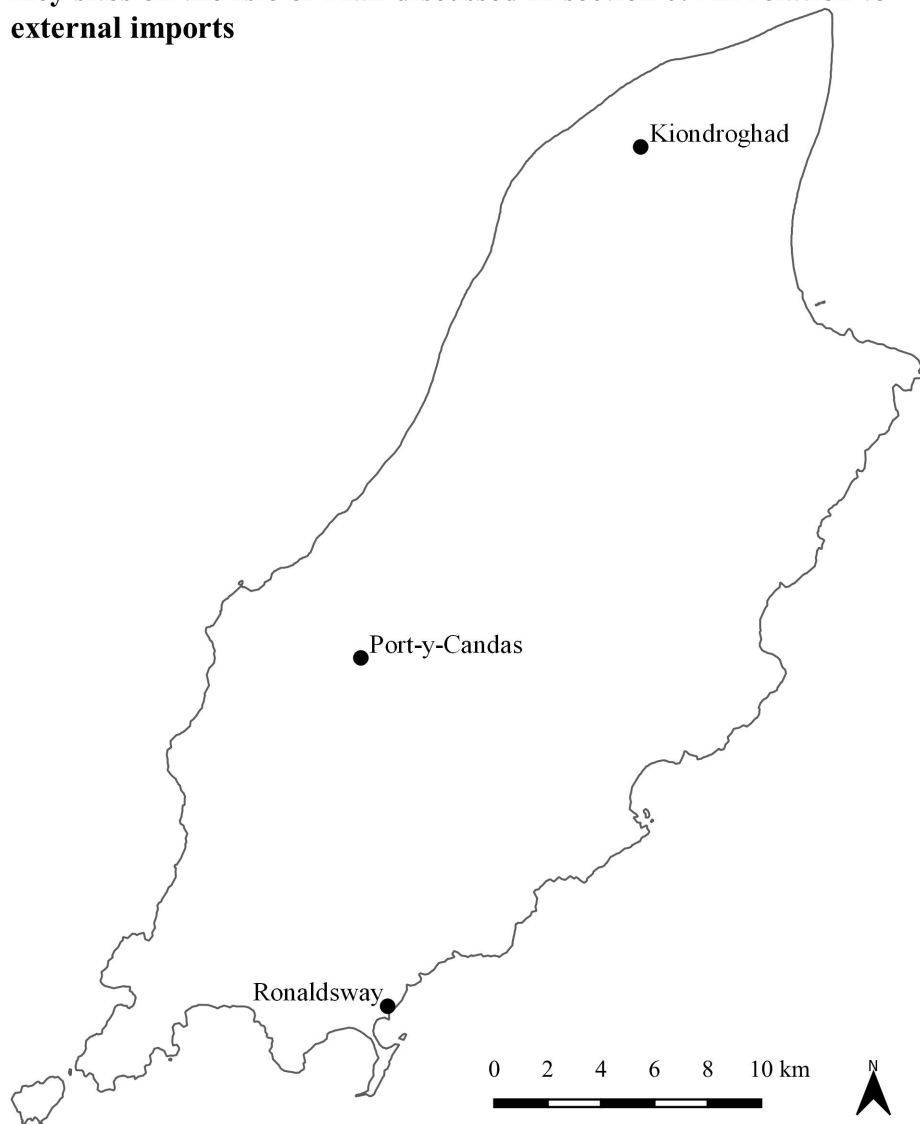
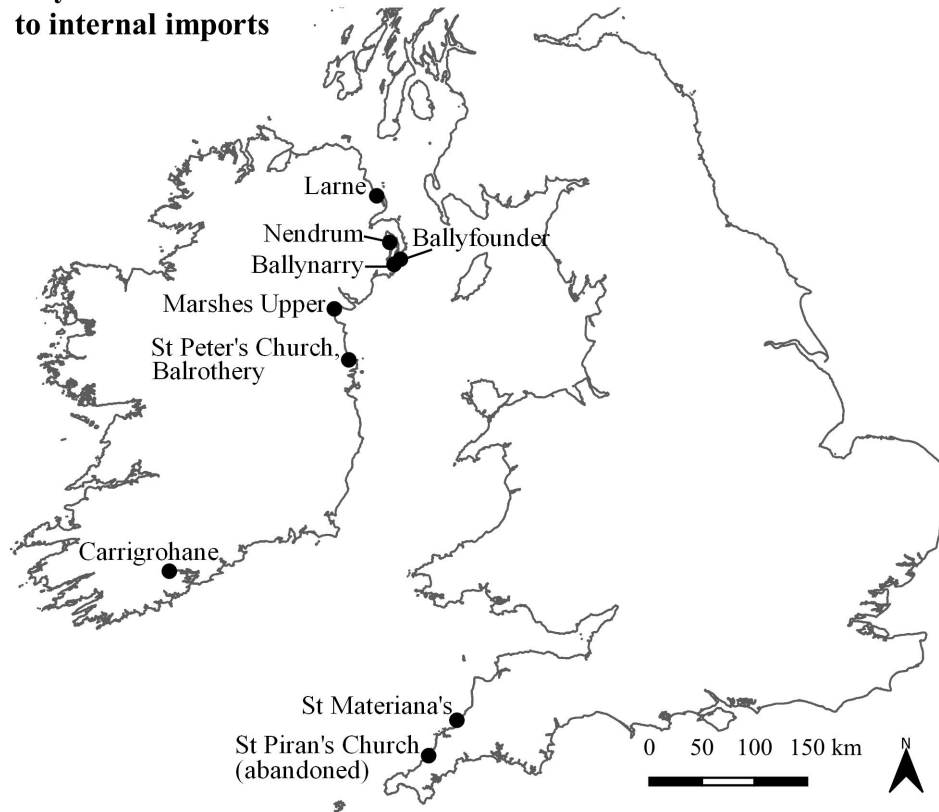


Figure 53
Key sites in Ireland and Cornwall discussed in section 7.4 in relation to internal imports



7.5. Burial and ecclesiastical sites

See figures 54-7 for key sites discussed in this section.

In the Welsh study areas, a combination of spiritual, cultural and practical considerations may explain the significant number of highly coastal early medieval burial sites, the majority overlooking or close to potential landing places (6.6.1). Similar sites, perhaps sited for similar reasons, are found in Cornwall and Mann, but are much fewer on the east coast of Ireland, where highly coastal burial does not seem to have been a common tradition.

Low-lying, marshy land on the east coast of Ireland may have discouraged communities from burying their dead close to the sea (cf. Cardigan Bay, p.242). A maritime community living and burying their dead a little way inland of their

maritime activities may be represented at Donnybrook, Co. Dublin, just over 1.6km from Dublin Bay and less than 400m east of the river Dodder. Here, midden material covering some of the burials in a cemetery contained marine molluscs and a spindle whorl comparable to one from a seventh- or eighth-century context at Lagore, and a bone comb from prior to the ninth to tenth centuries was also found at the site; the cemetery may have been abandoned, perhaps in favour of an ecclesiastical site, by the time of a Viking burial here for which a *terminus post quem* of c.AD 800 has been suggested (Hall 1978, 66, 68-70; O'Brien 1992; Frazer 1879-88a, 38-9, 51-2; 1879-88b, 118).

At least one marine shell (a 'volute') may have been deliberately placed on an individual's chest in an east-west orientated cist near Dromiskin, Co. Louth, a monastery c.1.5km from the sea appearing in documentary records from the late-eighth century (e.g. *AU* AD 793, 828); there was at least one other cist here, with bone ploughed up in the vicinity suggesting further burials (Raftery and Tempest 1942, 133-6; Reade 1862, 200). If deliberately deposited, the shell may indicate maritime connections for either the possibly early medieval interred individual or those who buried them (cf. burials including seashell in Pembrokeshire and Anglesey: pp.246-7).

At Betaghstown, Co. Meath, previous prehistoric burial associations may account for the location of over seventy graves of males and females and all ages on adjacent sites at 'Anchorage' (where radiocarbon dates span the fifth to sixth centuries) and 'Brookside' (where radiocarbon dates span the mid-third to later-seventh centuries) on a ridge less than 200m from the sea, where isotope evidence suggests a mobile population and a nearby probable enclosure was associated with marine molluscs and charcoal dated fifth to seventh and sixth to seventh centuries,

suggesting that these burial sites may have belonged to one or more local maritime communities; the apparently early cessation of burial here may hint at a move to an ecclesiastical site (Eogan 2010, 103-4, 107-12; Kelly 1977-9:0057; Cahill Wilson 2010, 192 tbl.7.5, 160-1, 194-7; Murphy 2005:1158; Cahill Wilson and Standish 2016, 237; O'Brien 1993, 96-7; 7.6). Maritime activity is likely to have continued in this area following the cessation of burial on the ridge, given the proximity of the navigable rivers Boyne and Nanny, and the Tara brooch's discovery nearby suggesting an area of importance which may have attracted maritime traffic (Eogan 2010, 113). However, the abandonment of the ridge as a burial site suggests that burial in this highly coastal location lost its significance sometime in the seventh century, even for those whose livelihoods may have been bound up with the sea.

Prehistoric associations may also explain the location of the possibly early medieval cemetery overlooking Howth Harbour on the north side of Howth Head, where a seven-foot by two-foot cist and traces of uncoffined interments were found on the east side of a hill surmounted by a mound and lying opposite Ireland's Eye island; the hill is thought to have once been surrounded by sea on three sides (Shearman 1866-9, 331-2). In the *Fragmentary Annals* for AD 702, a king of Brega is recorded as standing on a hill facing Ireland's Eye when a 'British' (perhaps Welsh?) fleet lands there, whereupon he is killed (*FA* AD 702). Howth Head is the nearest mainland to Ireland's Eye and the hill in the narrative may be the one in which the cist was found, the death of the king in this place perhaps indicating knowledge of previous or contemporary burial there. This story might also hint at an early medieval landing place somewhere on the north side of Howth Head, which these burials overlooked.

More certain examples of early medieval burials overlooking or close to potential landing places are found at Ninch, Co. Meath, Rogerstown, Co. Dublin and Carnsore Point, Co. Wexford. At Ninch, seventh- and eighth-century burials were found at a site with both pre-Viking and Viking-age settlement, with E-ware, a Dublin-type ringed pin and unspecified shell suggesting maritime connections across the early medieval period (McConway 2001:1007; 2010, 163-4, 166-7). On the estuary at Rogerstown, coastal erosion has eaten into a cemetery from which two burials were radiocarbon dated to the seventh century (Mullins 2011:229; 2011, 14, 85, 109; 2012:244). At Carnsore Point (the nearest Irish coast to Pembrokeshire), at least one of the twenty-seven burials found associated with an early church and enclosure may pre-date a wooden structure here (with charcoal from the structure's post-holes dated cal.AD 607-942, 2σ:HAR-1380), suggesting that this was a burial site prior to the structure's construction (Lynch and Cahill 1975:37; O'Kelly 1975, 35-6; O'Sullivan *et al.* 2013, 361 tbl.4.2). At Carnsore, then, burial may have begun prior to the arrival of ecclesiastical presence (cf. Whitesands, Pembrokeshire and Tywyn y Capel, Ynys Gybi: 3.4.2.18, 4.4.2.15), whilst the burial sites at Rogerstown and Ninch do not seem to have ever attracted ecclesiastical presence (cf. Lower Broad Moor, Pembrokeshire, 3.4.2.4).

At Brecaun's church on the Hook Peninsula, Co. Wexford, burials eroding out of the cliff below the church (Redmond 1898, 33) may have been early medieval, given the presence of a fragmentary ogham stone (undated but thought probably to be a late example: Macalister 1930, 52, 54-5) and a recumbent slab with a crudely-incised Latin cross (HEV WX054-009003-). This site may be comparable with early medieval cliff burial sites in Pembrokeshire, although the burials at Brecaun do not

seem to have overlooked a likely landing place as the majority of Pembrokeshire cliff burials do.

As in Wales, a mixture of spiritual and practical factors made saltwater islands in Ireland favoured spaces for early medieval ecclesiastical activity (6.3). The death of an abbot of St Patrick's Island off the coast of Co. Dublin is recorded in AD 903 (*AU* AD 903; *Martyrology of Donegal* Calendis Februarii 6b Octavo Idus Februarii: O'Donovan *et al.* 1864, 40-1; *Martyrology of Gorman* Februarius 6b: Stokes 1895, 30-1; Ryan *et al.* 2004, 107), and earlier ecclesiastical activity here is suggested by a Viking raid in the late-eighth century (*AU* AD 798) and the island's appearance in Tírechán's late-seventh-century writings on St Patrick (*Collectanea de sancto Patricio* §3: Bieler 1979, 126-7; Ryan *et al.* 2004, 106-7). Some of the graves found here in the first half of the nineteenth century may have been early medieval, although a stone coffin (not a cist) was probably medieval (Ryan *et al.* 2004, 114).

An abbot of Inis Teimle (Great Island on the tidal River Barrow, Co. Wexford, a true island prior to silting) is known from the late-seventh and early-eighth century (Ní Dhonnchadha 2002, 451-3), and Viking raids are recorded in the ninth and tenth centuries (*Chronicum Scotorum* AD 822: Hennessy 1866, 130-1; *AFM* AD 820, 823, 951, 960; *AU* AD 825; *Annals of Clonmacnoise* AD 819: Murphy 1896, 131). Indications of an early ecclesiastical site at Kilmokea on the island include a large enclosure and a small high cross (Culleton 1999, 210). The Viking raids suggest a wealthy site, perhaps as a result of its maritime and riverine accessibility.

Dairinis on the tidal River Blackwater, Co. Waterford (a true island until the late-eighteenth century) also had good maritime and riverine access; its ecclesiastical site is documented in the eighth and early-ninth centuries, and its connection with

one of the compilers of the *Collectio Canonum Hibernensis* suggests an ecclesiastical site of some importance (*AFM* AD 742, 777, 819; *AU* AD 725, 747; Power 1932, 142-3; Kenney 1966, 248-9). Note that the second Dairinis in *AFM* AD 819 is in Wexford Harbour (Power 1932, 143), the raid suggesting another important early site although not necessarily an ecclesiastical one.

On Ireland's Eye north of Howth Head, Co. Dublin, burials near the church and less than 100m from a beach include an adult-sized cist grave on a slightly different orientation to the church, the earliest standing remains of which may be pre-Norman (Shearman 1866-9, 332-3; Cochrane 1893, 402). The different orientation of the cist might suggest that it pre-dates the current church building, and may therefore be early medieval. In AD 960 an attack on Ireland's Eye resulted in the taking of 'prey' (*AFM* AD 960), suggesting that there was a substantial community there at this time, whether ecclesiastical or secular. In the late-ninth century the Vikings ('foreigners') of Dublin were besieged on Ireland's Eye (*AFM* AD 897), a reminder that islands could be used as defensive sites (cf. Ynys Seiriol, Anglesey: 4.4.1.2). Dalkey Island, Co. Dublin, where the church may have Viking-age origins, would also seem to have been used as a stronghold, both to keep hostages and slaves in and keep others out (Doyle 1998, 101; *AFM* AD 938, 942).

Early medieval burial on islands with ecclesiastical sites may have had more to do with the presence of the ecclesiastical site than a particular desire to be buried near tidal waters. Indeed, on Irish ecclesiastical islands burial on the seashore may actually have been considered less holy than burial inland. On the monastic island of Inishmurray, Co. Sligo the women's cemetery, where the association with women may have early medieval origins, is in a highly coastal location and has been partially eroded by the sea, and in the *Life* of St Senan in the fifteenth-century Book

of Lismore, women are not generally allowed on Scattery island but one holy woman is allowed burial on the very edge of the land (Ins.2416-49: Stokes 1890, 72-3, 219-20, v; Ó Carragáin 2013, 27). Although this *Life* is late, the episode may reflect earlier reasoning behind the highly coastal location of the women's cemetery on Inishmurray, with women on this monastic island being, in death, relegated to the liminal seashore.

The burial site overlooking a landing place on Ireland's Eye may have begun as that of a secular maritime community pre-dating the arrival of ecclesiastical presence, as suggested on Ramsey, Pembrokeshire (3.4.1.2). Potentially early medieval burial sites on Great Island, Cork Harbour may also be secular since they do not seem to have had early ecclesiastical presence; they are likely to represent the island's inhabitants, at least some of whom may have been involved in the maritime and riverine activity of the large natural harbour. Undated graves on this island include a 'vast number of bones' near Walterstown Castle, near a holy well (O'Farrell 1894, 35; Power 1921-4, 202), and stone-built graves at Morloag Woods and Redington, Ballybrassil (O'Farrell 1894, 35; Power 1921-4, 202; HEV CO088-086----). All these sites are close to potential landing places.

Traditions of burial overlooking, or close to, potential landing places seem to have been shared between north Cornwall and Wales, especially Pembrokeshire. At St Gothian's Chapel, Gwithian, within coastal sand-dunes less than 400m south of an early medieval workshop complex with early imports and near the remains of the medieval village of Connerton (including pottery from the tenth to late-thirteenth centuries and middens containing seashells), burial may have begun in the sixth or seventh century with the first stone chapel constructed in the seventh or eighth (Thorpe and Thomas 2007; Nowakowski and Thomas 2007, 54-5, 58; Campbell

2007a, 121; Thomas 1964, 4-7, 7 fig.2). Although Charles Thomas (1964, 6) postulates a timber oratory associated with the earliest burials it is possible that burial began before the arrival of ecclesiastical presence (cf., for example, Whitesands, Pembrokeshire: 3.4.2.18). As well as the visible imports, raw materials for and finished goods from the workshop may have been passing through the probable beach landing place c.630m from the burial site.

Stone monuments at Phillack suggest that this was an important early medieval ecclesiastical site overlooking the eastern arm of the Hayle estuary (Preston-Jones and Okasha 2013, 193-6; Thorpe 2001, 5). Successive graves, including cists, have been found here, with pottery associated with lower levels including tenth- or eleventh-century Sandy Lane ware and a single rim-sherd of Phocaean Red Slipware (Thomas 1973; 1994, 197-8; Campbell 2007a, 14-15). Many imports from later in the early medieval period have also been found nearby (p.305). Possibly prehistoric and/or Romano-British graves (Penaluna 1838, 169; Thorpe 2001, 5) may have encouraged early medieval burial at this site. However, good landing places in the Hayle estuary and on Gwithian beach are also likely to have encouraged early medieval interests and burial here, with the church's importance bolstered by the maritime advantages of its position.

Burials, some in cists, have been recorded over a fairly wide area at St Piran's Chapel, Perran Sands, and include adults and children (two of the children radiocarbon dated eighth- or ninth-century, one more probably ninth) found during the partial excavation of the probably eleventh- or twelfth-century chapel (Gossip 2015; Cole and Gossip 2010, 17, 20; Tomlin 1982, 11, pl.8). The chapel lies in wind-blown sands c.680m from the current shoreline, a probable beach landing place. A sherd of Phocaean Red Slipware found at Perran Sands is not directly

associated with the chapel but indicates early trading contacts nearby (Campbell 2007a, 122; 2007b, vessel P21; Olson 1989, 43). *Lanpiran* is recorded in the Domesday Book and may have been the site of an early monastery (Olson 1989, 88, 105), although this does not rule out the possibility that the site may have originated as the secular burial ground of a maritime community.

East-west cists overlying north-south burials associated with Roman-period objects on a cliff near Trevone Bay may represent early medieval burials drawn to a site of previous sanctity as well as a possible landing place; it is uncertain whether there was a chapel here, and one is not mentioned in the earliest report (Manning and Stead 2002-3, 90; Thomas 1971, 56-7; Kent 1843, 394; Trollope 1860, 312; Dudley 1964, 19).

Radiocarbon dates from the cist cemetery at Padstow on the Camel Estuary range from the mid-seventh to later-tenth centuries (Bayliss 2002-3, 96 tbl.1). The few graves excavated were probably part of a much larger cemetery that may have been associated with the monastery here, with osteoarchaeological analysis indicating physically stressful lives and the presence of women and children suggesting inclusion of lay members of the monastic community or a nearby secular community, perhaps even a maritime one (Manning and Stead 2002-3, 83, 92-3; Gestsdóttir 2002-3, 96). The monastery is likely to have taken advantage of maritime connections (see pp.305-6 for nearby imports). Its sheltered estuarine location may have helped protect it from sea storms and hostile humans, as suggested for several high-status secular sites in Wales (6.2.1). There are no comparable estuarine high-status ecclesiastical sites in the Welsh study areas, but locations such as those of St Ishmael's on the Milford Haven Waterway, Pembrokeshire and Llanbadarn Fawr, Cardigan Bay also balance maritime accessibility with protection (3.4.2.12, 5.5.2).

Burials of both adults and children overlooking the probable landing place of the sandy haven of the Menalhyl estuary may be contemporary with the nearby ninth- to eleventh-century settlement at Mawgan Porth (Bruce-Mitford and Taylor 1997, 87-8; Ashbee 1997, 63, 70). Maritime connections at this settlement are suggested by evidence for the exploitation of marine resources (p.290) and a late-tenth-century coin of Æthelred Unræd (EMC 1985.0046; Bruce-Mitford and Taylor 1997, 85). A residual sherd of Bi-ware (LRA2) also suggests much earlier use of a nearby landing place (p.301).

Burials of adults and children stretching beyond the current cliff-top churchyard at St Materiana's on the mainland just south of Tintagel are associated with finds of early imported pottery (Bi- (LRA2), Bii- (LRA1), Biv- (LRA3) and Bv-ware); early phases of the cemetery may be late-fifth- to early-sixth-century with burial perhaps continuing as late as the eighth, whilst the earliest known church possibly dates to the tenth century (Nowakowski and Thomas 1992, 6, 10, 20-1, 34-5, 38; Thomas 1993, 102-5). In addition to the imported pottery, overseas contacts are suggested by possible indications of a Mediterranean-style funerary custom of graveside feasting and by attempts at compass-drawn crosses on slates in the cemetery, these attempts perhaps resulting from a well-travelled patron being unable to adequately explain the technique to a craftsman (Nowakowski and Thomas 1990, 15, 22; 1992, 2, 8, 10). Internal maritime movement may explain the presence of a possibly sixth-century pillar-stone of St Austell Granite (p.309). Perhaps the pillar-stone was once visible from the seaways as a navigation marker. The burial site does not seem to directly overlook a landing place. If this was the burial site for the early medieval settlement at Tintagel, it is interesting that it is located on the coast near the headland rather than on the headland itself (cf. Welsh burial sites in highly coastal

positions but not on nearby headlands at Longoar Bay and West Angle Bay, Pembrokeshire: 3.4.2.3, 3.4.2.17; might these headlands also have contained early medieval settlement activity?).

Possible and certain early medieval burials overlooking or close to landing places are also found on Mann. Lintel graves at The Crofts (imuseum 0003.00; Bruce 1968, 46) and St Mary's Chapel, Castletown (imuseum 0032.20-; Bruce 1968, 20-1) are both less than 100m from potential landing places on the south coast, whilst the burial site at St Patrick's Chapel, West Nappin (Kermode 1911, Jurby) is less than 400m from a potential landing place on the north-west coast. No ecclesiastical site is associated with The Crofts, suggesting that it was the proximity of the landing place that encouraged burial here. St Mary's and St Patrick's chapels are likely to have been located to take advantage of the maritime connections of their nearby landing places, and may have been founded on sites already used for burial by secular maritime communities, as previously suggested for sites in Wales, Cornwall and Ireland (p.257, see above).

Two higher-status ecclesiastical sites on Mann also seem to have been drawn to highly coastal positions. Graves on St Patrick's Isle, a tidal island off the west coast, have been dated from the mid-seventh to the mid-fifteenth centuries (Freke 2002, 59-61, 266 tbl.1) and there may have been an early medieval monastery here given the discovery of a stylus head from pre-tenth-century levels; the site had enough status by the tenth century to attract rich Scandinavian burials (Freke 2002, 66, 440; one child amongst the Scandinavian burials had a coin in their mouth, a rite paralleled in the Irish Sea only on Bardsey, Gwynedd: 4.4.1.1; Freke 2002, 71). The presence of fish and shellfish (p.291) and a possible sherd of tenth-century pottery from northern France (Davey 1999, 241, 248) suggest maritime connections, and

Scandinavian (and earlier) interests in the island may have been encouraged by the site's defensive potential (see Freke 2002, 133-6). As with other Irish Sea island ecclesiastical sites, Christian and pre-Christian concepts of islands along with practical considerations are likely to have encouraged ecclesiastical activity here.

At Maughold, within 400m of the sea on the north-east coast, a collection of keeills associated with white quartz pebbles, early medieval carvings and burials including cist graves indicate an important early ecclesiastical site which may have been attracted to this location partly by prehistoric importance and a well on the face of the nearby cliff (Kermode 1915, Maughold parish church). Potential maritime connections are discernible in sculptural influences from Scotland, Northumbria and Ireland and a stone bearing the Saxon name 'Blakman' in Saxon runes (Trench-Jellicoe 2002, 15, 23-5; Laing 2006, 289; Kermode 1915, Maughold parish church). Whilst coves around Maughold Head could have provided landing places, the ecclesiastical site is not as accessible by sea as it would have been if, for example, it were closer to Ramsey to the north. Perhaps the slight distance from a landing place was to protect the site from hostile maritime contact (cf. St Davids Cathedral, Pembrokeshire: 3.4.3.7), or to make this mainland location fit into Christian 'desert' ideals of isolation. Or perhaps the site's prehistoric importance outweighed any early medieval desire to be nearer a landing place. Cross-inscribed stones and lintel graves at Lag ny Keeilly on the south-west coast indicate another early cemetery (and probable ecclesiastical site) overlooking a relatively inaccessible sea (Kermode 1909).

At Ronaldsway, a site with maritime connections near the natural landing place of Derbyhaven on the south-east coast of Mann (pp.291, 305), uncoffined burials overlying lintel graves could indicate an early medieval cemetery succeeded

by later medieval burials (Cubbon 1935-7, 154-5, 159). Two unusual cists at the top of a hillock with upper chambers containing white quartz stones and one with an eighth- or ninth-century cross-slab headstone could represent a *leacht*, an outdoor devotional monument found mainly in Ireland, although St Patrick's Chair is another possible Manx example (Cubbon 1935-7, 156; Neely 1940, 72, 86; Laing and Laing 1984-7, 398-9; imuseum 0302.00; O'Sullivan and Ó Carragáin 2008, 321). The unusual cists suggest a site of some importance, although there is no certain evidence for the monastery proposed by Lloyd and Jennifer Laing (1984-7, 400). Whatever the site's status, it is another example of a burial site close to a landing place, and it may well have been used by an early medieval maritime community.

The only known boat burials within the study areas are at Balladoole and Knock y Doonee, Mann. Both boats are known only from iron nails, and although the burial rite is Scandinavian the boats themselves could have been local Manx craft (Bersu and Wilson 1966, 4, 92; Kermode 1927-8, 242-3). Knock y Doonee boat burial lies c.1.2km from the sea and c.300m east-south-east of Knock y Doonee keeill, where there is evidence for early medieval burial (Kermode 1911, Andreas). At Balladoole the boat burial was dug into a pre-existing early medieval cemetery, which continued to be used and gained a keeill (possibly on an earlier keeill site); burial here may have been encouraged by earlier activity including Iron Age occupation and Bronze Age burial (Bersu and Bruce 1970-2, 645, 664). The nearest coast is less than 400m from the Balladoole burials but is an unlikely landing place. However, one female young adult buried here may have grown up on the Continent or in the Mediterranean (see 7.6), suggesting maritime connections in this community beyond the more obvious Scandinavian influences.

The boat burials clearly reflect Scandinavian maritime interests, and the locations of other Viking mound graves on Mann, for example at Ballateare and Cronk Moar (Bersu and Wilson 1966, 45, 63), may have been chosen partly for their sea views. However, the preceding discussion shows that, as in Ireland and Wales (6.6.1.1), a desire for maritime proximity and visibility at early medieval burial sites on Mann was not confined to those with Scandinavian influence.

Early medieval burial sites close to tidal waters, and often close to landing places, are found in Wales, north Cornwall, Mann and the east coast of Ireland. As previously discussed in relation to Welsh examples (6.6.1), reasoning behind such locations is likely to have been complex, possibly including a wish to bury individuals in a landscape that was important to them or their community, a desire to have the dead watching over and even aiding the maritime activities of the living, and practical considerations such as visually laying claim to territory. The presence of burial sites overlooking or close to landing places around the Irish Sea study areas may indicate shared traditions in choice of burial location amongst early medieval maritime communities.

Prehistoric activity may have encouraged early medieval burial at certain sites. At some of these, maritime proximity may have been simply a coincidence and not that important to the early medieval community. For example, at Betaghstown, Co. Meath, early cessation of burial suggests a move elsewhere, perhaps to an ecclesiastical site. However, at other sites (e.g. Phillack, Cornwall and Balladoole, Mann), early medieval burial continued and gained ecclesiastical presence, suggesting a specifically early medieval desire for burial in proximity to tidal waters.

Both Cardigan Bay and the east coast of Ireland have relatively few early medieval burial sites close to tidal waters. These areas have some geographical

similarities, their immediate coastal hinterlands including wetland areas and fairly flat, fertile land. Centuries of intense agricultural use may have destroyed evidence for early burial, or burial sites may have been placed further inland so that fertile land right up to the water's edge could be worked or burial in wetlands avoided. Local beliefs may also have led to inland burial sites being preferred. Whilst the similarities between Cardigan Bay and the east coast of Ireland are intriguing, it is possible that they were caused by similar responses to local landscape rather than shared traditions.

Figure 54
Distribution of key sites in Ireland, Cornwall and the Isle of Man
discussed in section 7.5 (on burial and ecclesiastical sites)

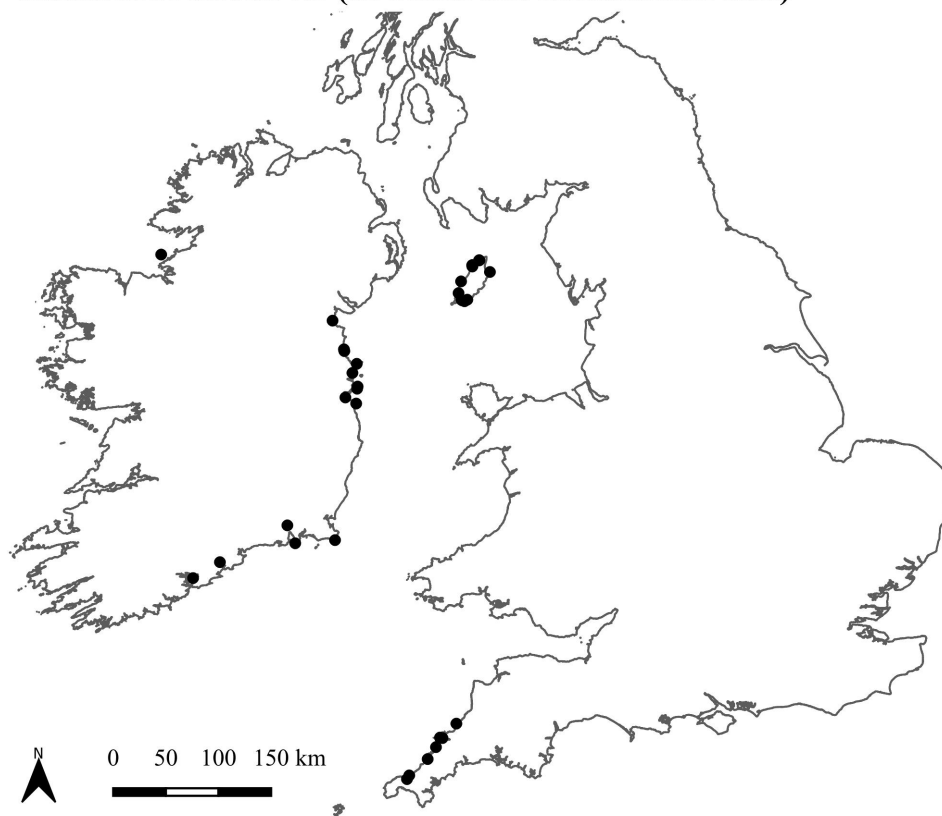


Figure 55
Key sites in Ireland discussed in section 7.5 (on burial and ecclesiastical sites)

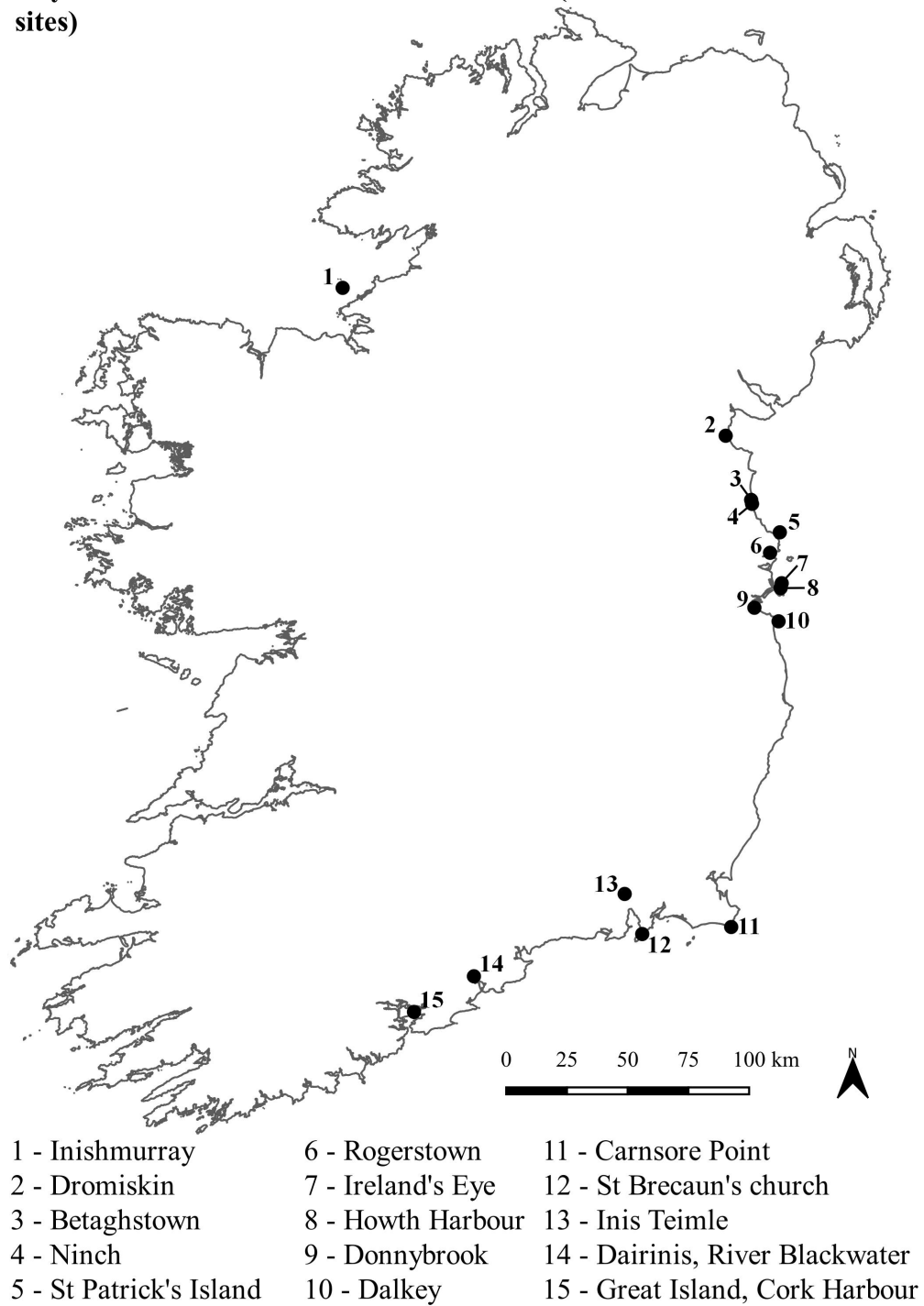


Figure 56

Key sites in Cornwall discussed in section 7.5 (on burial and ecclesiastical sites)

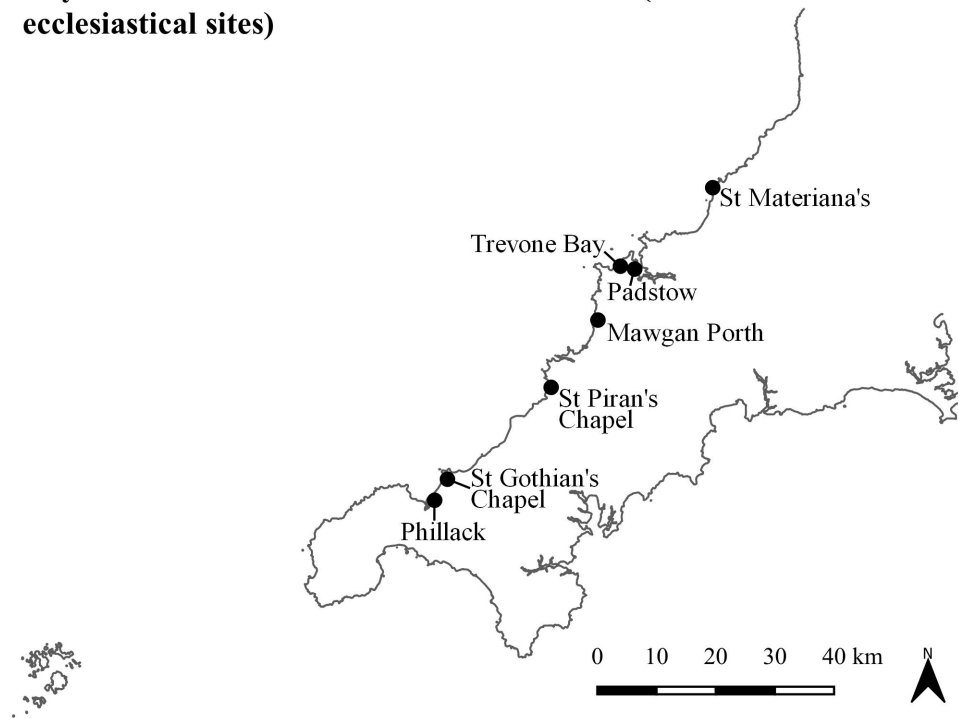
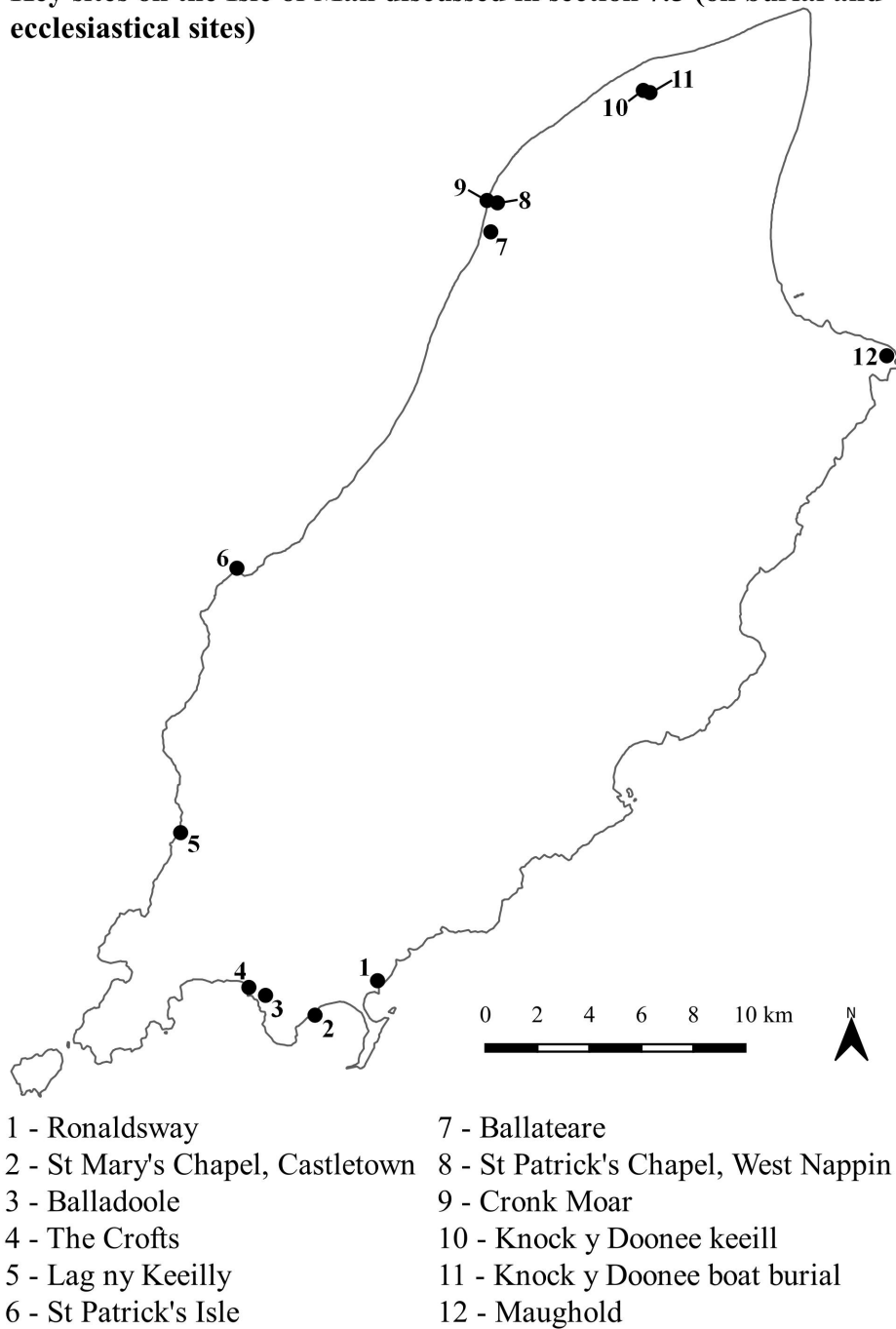


Figure 57
Key sites on the Isle of Man discussed in section 7.5 (on burial and ecclesiastical sites)



7.6. Isotope analysis and multicultural communities

See figure 58 for key sites discussed in this section.

It has been argued that maritime communities in Wales were generally inclined to integrate newcomers and cultural influences arriving by sea, the chief

evidence for this being isotope analysis suggesting the presence of individuals with local and diverse non-local origins buried in the same cemeteries, and generally in the same ways, in south Wales and Anglesey (6.6.2).

Evidence for individuals with non-local origins in early Ireland include a male (cal.AD 356-622, 2 σ :OxA-2652) at Betaghstown, Co. Meath, buried in a crouched inhumation who may have grown up in the Mediterranean, possibly on the coast of southern Spain, or Portugal, or in north Africa, and individuals in extended inhumations at Betaghstown (a female, cal.AD 256-576, 2 σ :OxA-2654) and Ninch, Co. Meath (two males, cal.AD 390-535, 2 σ :UBA-20057 and cal.AD 607-59, 2 σ :UBA-20055, and a juvenile possible female, cal.AD 549-633, 2 σ :UBA-20056) who may have grown up in cooler regions or further from the Atlantic coast, perhaps in Britain or northern Europe (Cahill Wilson and Standish 2016, 233-4 tbl.1, 237-8; Cahill Wilson 2010, 194-7). Further inland, burials from the late Iron Age through to the ninth century at Knowth, Co. Meath are of individuals with both local and non-local origins, including a male in an extended inhumation (cal.AD 668-800, 2 σ) and an individual in a cist grave (cal.AD 710-891, 2 σ :UBA-11697) who may have spent their early years outside Ireland, perhaps in Scotland or Yorkshire (Cahill Wilson *et al.* 2012, 780 tbl.A5:1, 781, 781 fig.A5.2, 784). The evidence for individuals with non-local overseas origins this far inland may be due to Knowth's maritime connections and high status (pp.279-81) attracting newcomers.

As in Wales, the burial of individuals with non-local and local origins in the same cemeteries and generally in the same ways at these sites suggests that established communities were willing to integrate newcomers. At Knowth, one male with non-local origins (dated cal.AD 660-810, 2 σ) may have been decapitated, although there is disagreement on whether this was actually caused by taphonomic

disturbance (Cahill Wilson 2010, 186; Cahill Wilson *et al.* 2012, 781, 784), and given the presence of individuals with non-local origins who were not decapitated, the possible decapitation of this individual may have been unrelated to their non-local origins.⁸

In Dublin, isotope analysis of seven individuals buried at Fishamble Street II and III and John's Lane from the ninth to eleventh centuries and four individuals buried at Wood Quay in the twelfth century suggests that all these individuals lived in the Dublin area for the last year of their lives and generally grew up in this area too, with those who had travelled from elsewhere not having apparently travelled far (Knudson *et al.* 2012, 313, 316-18). These results point towards acculturation and at least second-generation settlement, rather than first-generation migrants from Scandinavian areas or elsewhere (Knudson *et al.* 2012, 316-18). Dublin, being a port town, might be expected to have had a diverse population. It is possible that further isotope analysis on individuals from Dublin's early medieval cemeteries will reveal evidence for overseas travellers, slaves and first-generation migrants, with individuals of non-local origin perhaps buried in different areas to those of more local origin (see below, pp.336-7).

On Mann, isotope analysis suggests that Viking-age migration from Scandinavia is represented within the Balladoole boat burial and in the group of tenth-century burials with Viking-age artefacts on St Patrick's Isle (Symonds *et al.* 2014, 7-8, 15-17). However, there was pre-Viking-age mobility also. A female from Speke Keeill (cal.AD 530-650, 2σ:NZA-26664) (as well as two females and two males from St Patrick's Isle, who may have lived in the pre-Viking or Viking age)

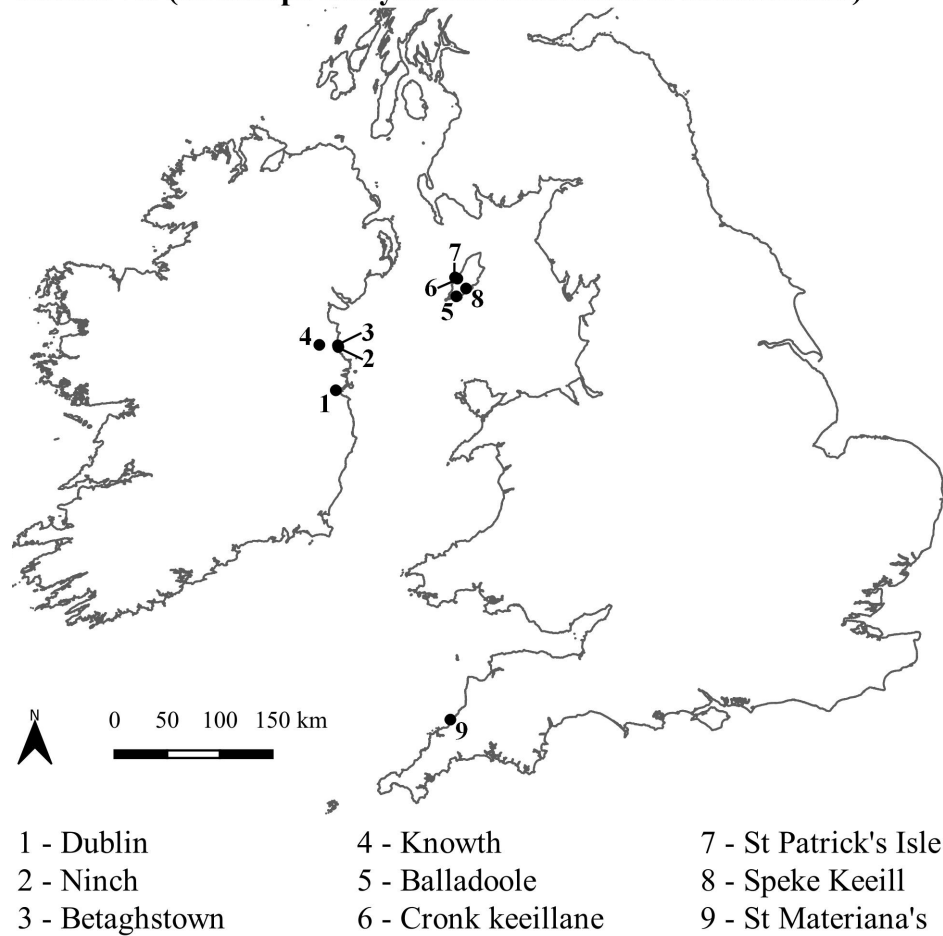
⁸ Similarly, the individuals buried outside the rampart at Llanbedrgoch, Anglesey may have been treated unusually in death for reasons other than their non-local origins (p.253).

had origins elsewhere in north-west Europe, including southern and central England, parts of Ireland, Norway, the Netherlands, northern Germany, Denmark and southern Sweden (Symonds *et al.* 2014, 13-15; Wessex Archaeology 2007, 18-19, 35 tbl.4). Hemer *et al.*'s 2014 study, focussing specifically on pre-Viking-age movement to Mann, suggests that individuals with potentially non-local origins at Balladoole, St Patrick's Isle and Cronk keeillane may have grown up in coastal areas of England, Scotland, Ireland, Wales and the Atlantic coast, whilst one 18-25 year old female from Balladoole may have grown up on the Continent or in the Mediterranean, perhaps around the southern or eastern margin of the Mediterranean Sea, north Africa or southern Iberia (Hemer *et al.* 2014, 244 tbl.1, 245-6).

In Cornwall, the possible observation of a Mediterranean-style funerary custom and attempts at compass-drawn crosses in the cemetery at St Materiana's church on the mainland near Tintagel (p.324) are suggestive of a multicultural community including travellers with local or non-local origins. Future isotope analysis on early medieval individuals in Cornwall may reveal clearer evidence for multicultural, integrative communities.

Isotope analysis paints a picture of mobility within and into the early medieval Irish Sea. Burial of individuals with non-local origins alongside those with local origins in graves that do not generally indicate either a particular status or noticeable ostracism suggests that long-distance travel was not confined to those of high status or wealth, and that communities on the fringes of the Irish Sea could be fairly welcoming, integrating newcomers at least in death.

Figure 58
Key sites in Ireland, Cornwall and the Isle of Man discussed in
section 7.6 (on isotope analysis and multicultural communities)



Jacqueline Cahill Wilson and Christopher D. Standish (2016, 239) have noted that whilst there is evidence for mobility in late Iron Age and early medieval Ireland, there is not evidence for large migrant groups. This would seem to have been the case across the study areas. It would appear that movement was generally undertaken by individuals or small groups, which in itself would have encouraged integration into pre-existing communities. People of all ages and genders may have moved for myriad reasons, including as traders, travellers, migrants, pilgrims or slaves. The exact reasons for movement of the individuals analysed remain uncertain.

In Dublin, the local and fairly-local signatures of all individuals analysed may suggest that in this busy port, newcomers from overseas were buried in different

areas to those who had more local origins. If so, this would be different to what is seen in cemeteries in rural areas. It may be that in smaller communities, newcomers were known on a more personal basis and were therefore more likely to be integrated, whilst in more populated areas with many newcomers, those with local and non-local origins may have kept more separate. However, further isotope analysis in Dublin and other more populated areas would be necessary to explore this hypothesis.

7.7. Maritime folklore and belief

Discussion of maritime folklore and belief in Wales has drawn particularly on literary elements such as the character of Dylan Eil Ton, legends of drowned kingdoms and the potential maritime associations of the Otherworld, along with Christian symbolism and suggestions of beliefs behind burial in highly coastal locations (6.9, 6.6.1.4). Although written sources may not accurately reflect oral tradition they can offer a glimpse into the folklore and beliefs of the general populace as well as into the minds of those who put pen to paper.

There are many maritime episodes in saints' lives in Ireland. Some of these are practical and realistic (e.g. Muirchú's seventh-century *Life* of St Patrick i.1 §4-5, i.9 §4, i.11 §1-7: Bieler 1979, 66-9, 74-5, 76-9 and the medieval *Life* of St Fursa §1, §16: Stokes 1904b, 388-9, 398-9). However, the sea could also be a supernatural space that could miraculously punish an antagonist (e.g. Muirchú's *Life* of St Patrick i.26 §1-3: Bieler 1979, 112-13 and the medieval *Life* of St Féchín of Fore §30: Stokes 1891, 340-1), or be traversed in an impossible fashion, such as in the *Life* of

St Findan when Findan's clothes swim for him (page 159; this seems to have been written by an Irish monk in Switzerland not long after Findan's death in the late AD 870s: Downham 2014, 2-3; Somerville and McDonald 2020, 218), or the *Life* of St Ailbe, in which a bronze boat carries Ailbe to and from a supernatural otherworldly place (§54: Heist 1965, 130-1; Herbert 1999, 184-6; this life seems to be at least as early as the ninth century: Sharpe 1991, 338, 384, whilst Herbert 1999, 182 argues for a date in the eighth).

The otherworldly voyage of St Ailbe is not without precedent. The lost eighth-century manuscript *Cín Dromma Snechta* contained two secular stories with this element: the *Echtrae Conlae* in which the hero journeys in a glass boat to find the Otherworld, and the *Voyage of Bran* in which supernatural adventures befall the protagonists at sea, including finding the Island of Joy and Land of Women and the impossible lengthening of their lives so long as they do not return home (Carey 2000 (1982-3), 113; *Echtra Condla* §1-6: Oskamp 1974, 221-8; *Voyage of Bran*: Mac Mathúna 1985, 33-58). It may have been these two tales that introduced the concept of an overseas otherworld into Irish literature, resulting in the literary genre of *immrama*, voyage tales, such as those of St Brendan and Máel Dúin (Carey 2000 (1982-3), 119).

In earlier literature the Irish Otherworld might be beneath hills, on land, on islands or beneath lakes or the sea, but there was not such a strong tradition for an overseas location (Carey 2000 (1982-3), 116-17; 116 n.19; 117 n.21). Irish voyage-tale concepts of otherworldly islands being practically unreachable and far out to the west were perhaps influenced by Isidore of Seville's earlier-seventh-century description of the Blessed/Fortunate Isles being situated in the Ocean closest to the

place the sun sets (Egeler 2017, 57-61; *Etymologies* XIV.vi.8: Barney *et al.* 2006, 294; dating: Barney *et al.* 2006, i, 3).

The appearance and development of the overseas otherworld trope in early medieval Irish literature suggests a flowering of interest in the potential for overseas voyaging. Perhaps more long-distance voyages were being undertaken, fuelling the imaginations of those left behind. Supernatural islands encountered in the written voyage tales may have had counterparts in oral storytelling, including those invented by maritime communities imagining islands on the edge of their knowledge. Local maritime geography would have been known in accurate, practical detail but, as Barry Cunliffe has observed (2017, 8-9), horizontal space can become increasingly supernatural the further away it gets.

Islands would have been associated with both Christian concepts of sanctity in isolation and non-Christian supernatural concepts (p.217). Close links between Christian and non-Christian concepts of islands in Ireland are demonstrated in the late-ninth- or early-tenth-century *Tochmarc Becfhola*, where the same lake island holds both a supernatural otherworldly feasting hall and an ecclesiastical settlement, the leader of which melts down the gold and silver of dead warriors who were fighting over the otherworld island to make reliquaries (§6-12: Bhreathnach 1984, 73-6, 78-81, 70; Ó Carragáin 2013, 22-3).

The *immrama* reflect the Christian and ecclesiastical world in which they were written (Dumville 1976, 93-4), supernatural events taking on the air of miracles rather than otherworldly phenomena. In early medieval Irish Christian thought the sea was a place where the marvels of God could humble voyagers and a place of repentance; a place where the faithful could be tested (for example, St Brendan) and the criminal purged and reborn (for example, the brothers in *Immram Curaig Ua*

Corra, a story perhaps as old as the tenth century) (Clancy 2000, 194-5, 198, 209-12).

The idea of purgation at sea is particularly interesting for its similarities to the early Irish law of setting adrift. Here, the sea – or, in a more specifically Christian framework, God’s control of the sea – was cast as the judge, for example in the case of a child born of incest, a woman guilty of a crime punishable by death or a man whose crime was unintentional or in some way exempt from the death penalty (Kelly 1988, 219-21; Byrne 1932, 98-9; O’Neill 2017, 1-4; *Cáin Adamnáin* §45: Meyer 1905, 30-1).⁹ A form of this punishment is found in an episode of Muirchú’s seventh-century *Life* of St Patrick wherein the would-be murderer Macc Cuill goes to sea, fettered, in a boat without means of steering; he is washed up on Mann, rescued by ecclesiastics and later becomes bishop there (i.23 §11-21: Bieler 1979, 104-7). Some individuals undertook similar ordeals freely in a desire to put their lives and travels into God’s hands, one documented instance being three individuals who in the late-ninth century set out from Ireland in a boat without oars and ended up in Cornwall (*Anglo-Saxon Chronicle* AD 891: Swanton 2000, 82). Other religious individuals such as St Columbanus entered self-imposed exile in a more practical way and do not appear to have eschewed steering (Jonas of Bobbio’s *Life of Columbanus* I §4: O’Hara and Wood 2017, 104). The punishment of setting adrift and the religious romanticism attached to imposing this on oneself, or, in a less austere manner, in voyaging from home in order to better serve God, provide a real-life backdrop to the adventures in the *immrama*.

⁹ Cf. an episode in the Welsh *Hanes Taliesin* (a story first recorded in the sixteenth century although it may have earlier origins), in which the baby Taliesin is put to sea in a skin bag (Williams 1944, 60-1). This may hint at a setting-adrift law or knowledge of the Irish setting-adrift law in Wales at an early period.

Out in the ocean of the voyage tales supernatural beings might be met with, from the sea deity Manannán mac Lir (see below) to monsters imagined from occasionally-encountered animals such as the fire-spewing sea monster in the *Voyage of St Brendan* (§16: Webb 1998, 253), which may be inspired by a surfacing whale, the condensing water vapour exiting its blowhole seeming like smoke from a distance. Second-hand information would also have played its part in the creation of mythology. For example, the giant, pale woman recorded in the *Annals of Ulster* as cast up by the sea in Scotland in the late-ninth century (*AU* AD 891) may have provided excellent fuel for sailors' yarns around the Irish Sea, but if seen first-hand by a mariner would have been instantly recognised as a whale of some kind. It is interesting that there are no sea monster stories in early Welsh literature. The closest hint of one is the boar Twrch Trwyth in the tale of Culhwch and Olwen, who swims from Ireland to Wales with his piglets and eventually disappears (alone) into the sea off Cornwall (Davies 2007, 210, 212). Although this is a monster who uses the sea, it is not a sea monster like those found in early medieval Irish literature.

The main sea-deity figure in early Irish literature is Manannán mac Lir (who shares his name with Manawydan fab Llŷr in the second and third branches of the *Mabinogi*, although Manawydan has no maritime attributes: Davies 2007, 22-46, 232-3). Manannán mac Lir is closely associated with Mann. For example, in *Sanas Chormaic* (which may be associated with Cormac ua Cuilennáin, d. AD 908), Manannán is stated to have been a merchant who lived on Mann, his excellent pilotage and weather knowledge leading him to be hailed as a god (§Manannan mac lir: Stokes 1862, 31; O'Donovan and Stokes 1868, 114; dating: Russell 2006). Manannán mac Lir's outpouring of grief at the death of his son is said to have flooded three loughs, including Strangford (*Metrical Dindshenchas* §32 Bend

Boirche II), the god's unpredictable, dangerous nature in keeping with his maritime associations. It is probable that early medieval Irish and Manx mariners called on him in the hopes of currying favour with the merciless, impersonal sea. As recently as 1910, a prayer collected from a still-living elderly woman on Mann, calling on Manannan beg mac y Leirr's (Little Manannan son of Leirr's) blessing on fishermen, was recorded; it was used by the woman's grandfather, although her father substituted St Patrick's name for Manannán's (Morrison 1911, 118).

Manannán mac Lir appears in the *Voyage of Bran* riding in a chariot across the sea. He explains to Bran and his companions that what they perceive as sea is to him a flowery plain, and what they see as salmon are in fact calves and lambs (§32-8: Mac Mathúna 1985, 38-9, 51-2). A similar story of sea-as-land, land-as-sea is told in the January notes of the perhaps originally ninth-century *Martyrology of Oengus*, where St Scothíne appears to St Barre to be walking on the sea, whilst Barre appears to Scothíne to be sailing on land (Notes, January 2: Stokes 1905b, 40-1; dating: Stokes 1905b, vii). Similarly, when in the *Metrical Dindshenchas* the sea is called the seals' green plain, the implication is that for the seals, the sea is land (§32 Bend Boirche II).

Manannán mac Lir also tells Bran that his boat is sailing across the tops of trees (§42-3: Mac Mathúna 1985, 40, 53), and in one episode in the late-eighth- or early-ninth-century voyage of Máel Dúin, the sea-voyagers find themselves sailing through cloud above a landscape (§23: Stokes 1889, 54-7; dating: Herbert 1999, 188-9). Mid-eighth-century Irish annalistic entries for ships sailing in the sky (e.g. *AU* AD 749; *Annals of Tigernach* AD 748) proved a popular story, subsequently developed in retellings (Carey 1992, 16, 21, 26 n.1), and the concept is likely to be older than its first appearance in writing. In sculpture, the vertically-orientated boat

on the eighth- or ninth-century Kilnaurane pillar stone, Co. Cork might represent a sky-ship, perhaps, as Michael McCaughan (1998, 179) suggests, a Ship of the Church sailing heavenwards in heavenly seas (Harbison 1992, 382 for possible ninth-century dating). However, the early written versions of the ships in the sky story show that the wonder was not always given a Christian interpretation (see Carey 1992).

Tales of sea that is actually land or sky that is actually sea are arguably not representative of the traditions and mythology of those who actually interacted with the sea. Manannán mac Lir rides his chariot at sea and Scothíne walks on the water *because the sea is actually land*. These tales are not about maritime prowess, and neither are the episodes in saints' lives when supernatural events allow safe passage at sea. Similarly, ships sailing in the sky may be the constructs of those who saw boats from afar, whether on a river or at sea, and imagined impossible possibilities for them, rather than the constructs of those who were closely involved with sailing. The written versions of the sky-ships tale came to be associated with the assembly of Tailtiu (Teltown) and with Clonmacnoise (see Carey 1992, 16-19), both of which are far from the sea.

However, the sea-as-land trope could also be argued to reflect a maritime-orientated perspective, as to a landlubber the sea is an empty, endless expanse, but to a sailor it is as productive and traversable as land. Perhaps Manannán mac Lir and Scothíne have such affinity with the sea that it has become land to them, the implicit suggestion being that those who are good sailors will also glimpse this world.

The sea-as-land concept is not found in early medieval Wales, with the exception of the episode in Rhygyfarch's late-eleventh-century *Life* of St David in which Barre rides across the Irish Sea on David's horse; however, this is clearly

influenced by the tale of Scothíne and Barre recounted above (pp.270-1, 342). The sea-as-land concept does not seem to have been used in early medieval Cornwall. It is unknown whether it appeared in Manx tales.

Although the sea-as-land, land-as-sea trope may not have been shared around the Irish Sea, highly coastal burials in Wales, Cornwall and Mann and on the east coast of Ireland as well as episodes previously discussed from the fourth branch of the Mabinogi and the Irish *Colloquy of the Two Sages* suggest there may have been shared concepts around the Irish Sea concerning the importance and potential power of the place where land met sea (pp.247-9, 269-70).

Legends of drowned lands in early medieval Wales (pp.266-7) and, recorded in later written sources, in Brittany and Cornwall (Bromwich 1950, 232-41; Thomas 1985, 281, 287) may indicate a shared element of maritime folklore in these places that was not shared with Ireland or Mann.

Although stories and traditions would have travelled by boat around the early medieval Irish Sea not all of them would have been taken up and woven into local folklore and belief. Even when they were, they would soon have become unique to the community they had entered. However, some elements of maritime folklore and belief would seem to have been shared even if their specifics differed, resulting, for example, in highly coastal burials (the majority overlooking or close to potential landing places) in all the Irish Sea study areas.

Perhaps one of the most intriguing of the distinct elements of maritime folklore and belief on either side of the Irish Sea is the differing characters of Dylan Eil Ton and Manannán mac Lir. Both take the role of sea deities who may well have been called on by early medieval mariners for protection and blessings. However, whilst in the literature Dylan takes on the sea's nature and moves with the waves as

though he is one with them, Manannán is more external to the sea, perceiving it as land and riding his chariot over it, and sending an outpouring of grief that drowns the loughs. It would seem that on either side of the Irish Sea sea-god mythology and its echoes remained distinct throughout the early medieval period, despite the clear evidence for maritime connections across this body of water.

7.8 Conclusion: the wider Irish Sea context

Maritime imports and marine fish and molluscs were making their way much further inland in Ireland than elsewhere in the Irish Sea study areas, perhaps due to longer stretches of riverine routeways and greater tracts of fertile hinterlands encouraging maritime connections away from the open sea. As well as high-status sites with maritime connections much further from tidal waters than is evident in Wales, Cornwall and Mann, it would seem that lower-status settlements in more inland situations on the east coast of Ireland were more likely than their counterparts elsewhere in the Irish Sea study areas to come by, or journey to collect, maritime goods such as imports and marine molluscs. There is clear evidence for fishing in early medieval Ireland, Cornwall and Mann and it is possible that more fishing was being undertaken in Wales than at first seems apparent. Dietary isotope analysis in Ireland and Mann suggests that even in areas where fishing was taking place, not every member of the population consumed a marine diet. Cetacean exploitation was certainly undertaken in Ireland. Its absence from archaeology and early texts elsewhere in the Irish Sea study areas might hint that use of such animals was

considered taboo, with processing in Wales, Cornwall and Mann perhaps kept to beaches or not undertaken at all.

As in Wales, both external and internal imports around the Irish Sea study areas can hint at landing places and areas of activity of maritime communities. Mann's Viking-age experience was unique, becoming a trade hub in the Irish Sea, but the lack of Viking-age imports on the island suggests that it was not generally a destination in itself in this period. On the east coast of Ireland the emergence of towns changed the dynamics of maritime trade, with these major production, processing and exchange centres drawing in mariners and centralising much maritime activity. However, maritime activities were still taking place outside these towns, and the experience of maritime communities in the rural areas of the east coast of Ireland in the Viking age might have been very similar to the experiences of those in Wales and Cornwall.

There are relatively few burial sites in highly coastal positions and overlooking or close to probable landing places on the east coast of Ireland compared to north and south Wales, Cornwall and Mann. Possible reasons behind such locations, discussed in relation to Welsh sites (6.6.1), may have been shared around the Irish Sea. The relative paucity of such sites on the east coast of Ireland and in Cardigan Bay may relate to low-lying, fertile, marshier land in both areas encouraging burial further inland, even for those undertaking activities on the coast. Practical and spiritual reasons behind the presence of ecclesiastical sites on islands and on mainland sites with good maritime accessibility are likely to have been shared around the Irish Sea.

There would seem to have been a tendency towards multicultural communities on the fringes of the Irish Sea, and burial of individuals with local and

non-local origins in the same cemeteries and generally in the same ways suggests integration of newcomers into pre-established communities, at least in death.

Knowth, Co. Meath is an inland site with evidence for individuals with overseas origins, probably due to its high status attracting travellers, but generally such sites are closer to the coast. It is intriguing to note the apparent lack of mobility in those analysed from Dublin, perhaps suggesting that in areas where the proportion of newcomers was higher they were less likely to be integrated into communities of individuals with more local origins.

The evidence that remains for maritime folklore and belief around the Irish Sea suggests that whilst stories from different places would have been known to communities engaging in maritime contact, the stories preserved in writing record distinct maritime legends in different areas, from the voyage tales in Ireland to the sunken kingdom legends in Wales, Cornwall and Brittany; from Manannán mac Lir in Ireland and Mann to Dylan Eil Ton in Wales. Maritime folklore and beliefs in Cornwall and Mann remain more shadowy than those in Ireland and Wales. However, it seems probable that Cornwall and Mann generally had more maritime folklore in common with south Wales and Ireland respectively.

Folklore and belief systems within each maritime community would have been formed from a complex variety of elements, not only those mirrored in the literature and created locally from unique landscape features and personal experience but also those brought by sea. It is likely that maritime communities knew stories with a variety of geographical origins, stories that did not become well known enough outside these lower-status multicultural spaces to find their ways into written texts.

There were both shared elements in the experiences of maritime communities around the Irish Sea, and elements that were unique to communities or to individuals within them. The Irish Sea was a space of connectivity and interaction, where newcomers could integrate into maritime communities and where stories and culture might be shared, but it was also a space in which each maritime community's experience was unique, where different activities might be undertaken depending on circumstance, location, status, resources and culture, where specifics of geography made local knowledge essential for beneficial maritime activities and where distinct folkloric elements could be maintained on different shores.

The final chapter of this thesis will present some final concluding thoughts on the main themes that have emerged in this study, and look forward to potential future research.

8. Conclusions

8.1. Introduction

Utilising a variety of source material this thesis has explored evidence for the locations, activities, cultures, status, folklore and belief systems of early medieval maritime communities in Wales, and placed the findings within their wider Irish Sea context. It has been demonstrated not only that there was an important maritime aspect to Welsh society in the early medieval period, but that this took many forms around the long and varied coastline. There was not one maritime cultural landscape but many, with local approaches to practice and belief forging distinct identities.

Maritime communities themselves have received little attention in previous studies touching on maritime aspects of early medieval Wales, where the focus might be on movement of goods or individuals, rather than on the communities who made the sea journeys possible (e.g. Campbell 2007a; Conway 1997, 26-7). However, these maritime communities are of paramount importance to an understanding of how early medieval people in Wales saw themselves and their place in the wider world, as it was these communities who would have been the first point of contact with people, objects and culture from overseas. A community that used the sea would have had a very different experience of, and outlook on, the world to those who did not, and to consider the history of early medieval Wales from an inland perspective only is to ignore a whole section of society.

Maritime interests of a community cannot be determined purely through location, since a community might live right beside the sea but only have terrestrial interests. Even a land-focussed coastal community is, however, likely to have been

affected by the proximity of the sea, whether this was expressed through an aversion to it or simply a perception of it as a potentially dangerous nuisance. A community that lived near the sea but had no use for it had their horizons narrowed by this barren, watery wasteland where instead there might have been land for crops, animals and settlement. In contrast, a community that did use the sea had their horizons greatly widened, the sea not only a potential resource but also a route to other places – places that might offer the possibility of lucrative interactions and from which could arrive diverse objects, people, knowledge and culture (see Westerdahl 1992, 6; 2000, 11). It is highly unlikely that an early medieval settlement in a location with excellent maritime accessibility was coincidentally sited, and there is a strong likelihood that such settlements housed maritime communities. The sea is a potentially dangerous neighbour, threatening storms and hostile raiding parties. The choice to live beside it would not have been without good reason, whether that was a desire to interact with the sea itself or to use particularly fertile coastal land – or, most probably, a combination of such maritime and terrestrial factors.

There are many ways in which the sea can be perceived: as an economic asset and as a place of spiritual meaning; as a positive space of potential and a negative space of death; as a routeway and as a barrier. These perceptions are as fluid as the sea itself and even apparent opposites could co-exist in the early medieval mindset. Exploring the myriad roles of the sea and focussing on an era and an area that has previously received little attention in maritime studies, this thesis has built up a picture of early medieval maritime communities and their maritime cultural landscapes in Wales and placed them within their wider Irish Sea context.

8.2.Travel and contact

People, ideas and objects certainly moved by water in the early medieval Irish Sea. Although the diffusionist arguments of scholars such as Cyril Fox (1932) and E.G. Bowen (1969, 1972) may have exaggerated scale and frequency of maritime contact (Wooding 1996a, 4), they spearheaded a move in academic viewpoint from the sea as a barrier to the sea as a routeway which is essential to an understanding of the outlook and activities of maritime communities around the early medieval Irish Sea. The potential for contact was constant even if contact itself was not. Jonathan Wooding (1996a, 4) has argued that rather than there being ‘natural connections’ by sea, maritime contact was in response to political and economic circumstances, whilst Christer Westerdahl (2000, 16) suggests that although politics might change the direction of traffic it will not change the transport zone itself. It is likely that maritime contact took place within a framework determined by geography, tides, currents and seasons, whilst the impulse for that contact came from individuals.

The focus of this thesis was not on mapping routes, but on the maritime communities themselves. Shared traditions, imported objects and isotope analysis can give hints towards travel and contact in early medieval Wales and around the Irish Sea. Whilst exact sea-routes cannot be determined, we can consider the ways in which the maritime communities were affected by this contact (cf. Henderson 2007, 19-20).

Shared traditions both within Wales and around the Irish Sea are most obvious within an ecclesiastical context, such as artistic motifs in sculpture or the reasoning behind ecclesiastical foundations on islands (p.217). Movement of ecclesiastics (seen, for example, in the travels of Sulien, 5.5.2, and in the scribal

work of the Cambridge *Juvencus*: McKee 2000, 19-20) encouraged the sharing of knowledge around the Irish Sea. This is not to say that the Church in the Irish Sea was uniform, however, the lauding of different saints in different areas a good illustration of variation in local custom. Whilst some ecclesiastics may have had maritime skills, it is likely that in general the maritime interests of ecclesiastics were facilitated by the skills of secular maritime communities.

Outside the ecclesiastical sphere, shared traditions within Wales include legends of flooded kingdoms, which seem to have been associated with several locations around the Welsh coast (pp.266-7), and a tendency on the part of high-status settlements to favour sites with maritime accessibility but not highly coastal positions (with the notable exceptions of Tenby, and perhaps Gateholm: 6.2.1). There were also many aspects of culture and society that were not shared around the Welsh coast. For example, the tendency towards highly coastal burial seen in the Pembrokeshire and Gwynedd study areas is less clear in Cardigan Bay (6.6.1), and there is no apparent diagnostic site-type for lower-status maritime communities in Wales (6.2.2).

Possible examples of shared traditions around the Irish Sea include the use of the term ‘ninth wave’ in both Irish and Welsh contexts (pp.64, 262-3) and the presence of burials overlooking or close to potential landing sites in all the study areas although most commonly in north and south Wales, Cornwall and Mann (6.6.1, 7.5). Artefacts such as the penannular brooch with loose parallels in Scotland and Ireland at Trearddur Bay on Ynys Gybi, Anglesey (4.3.4) may indicate shared traditions in material culture and artistic preferences. Beach, inlet and estuary sites seem to have been favoured spots for contact all around the Irish Sea, with any structures at these sites ephemeral.

Differences are also evident, for example in the greater proportion of high-status secular settlements with direct maritime accessibility on the west coast of Wales than the east coast of Ireland (6.2.1, 7.2), and the fact that far more literature with maritime interests survives in Ireland than anywhere else in the study areas. The distribution of ceramics is a good illustration of how contact does not necessarily result in shared culture. Pottery was made and used in early medieval Cornwall and souterrain ware from the north-east of Ireland occasionally found its way down the Irish coast, but Wales and Mann appear to have remained aceramic throughout the period of this study, even on the coastal fringes where contact with ceramic cultures can be expected. Despite contact, local custom prevailed.

Shared traditions may owe more to a general cultural milieu than to individual, direct interaction (cf. Preston-Jones and Okasha 2013, 33 in relation to Scandinavian influence on names and sculpture in Cornwall). Imported objects and isotope evidence for first-generation movement of people can offer a more direct link to specific instances of contact. Maritime imports might have originated as far afield as the Byzantine coins at Tenby South Beach (3.3.3) or as close to home as the stones transported around the Welsh coast (6.5.6), but it must be remembered that the origin of an import does not necessarily indicate the origins of the boat and crew who transported it (pp.238-9). Some mariners and sea-travellers could have been regular visitors to settlements outside their own (cf. Sindbæk 2010, 436-8), and it is possible that maritime communities in frequent contact may even have considered themselves neighbours. Other shipboard arrivals might have been strangers, hoping perhaps for provisions, opportunistic trade or a new home. Strangers would have been a more common occurrence in maritime communities than non-maritime communities, and their reception may have differed correspondingly. Irish law

considers castaways and exiles from overseas as outsiders and accords them very low social standing (Kelly 1988, 5-6). However, it is uncertain whether such laws would have been stringently upheld in small maritime communities constantly open to sea-borne contact.

Isotope analysis in south Wales and Anglesey (6.6.2) and objects such as the hogback grave marker at Llanddewi Aberarth, Cardigan Bay and the coin in an individual's mouth on Bardsey, Gwynedd (5.4.1.2, 4.4.1.1) hint at multicultural communities open to newcomers on the coastal fringes of Wales, people with non-local origins and/or cultural backgrounds being buried in the same cemeteries and generally in the same ways as those who grew up locally. This suggests that the newcomers were integrated members of the communities, and/or that the communities were willing to share their burial grounds with relative strangers who had died at sea or shortly after making land. None of the cemeteries with evidence for long-distance travellers are far from the sea or tidal waters, suggesting that maritime accessibility encouraged multiculturalism. Women and children are well represented in this dataset: it was not only adult males travelling by boat, and there is no reason to assume that women and children did not take an active role in sailing. The identities of the newcomers are unknown, although possibilities include traders, travellers, migrants, pilgrims and slaves. A similar pattern of early medieval multicultural communities on the coastal fringes is found elsewhere in the Irish Sea, with Knowth, Co. Meath being unusually far inland, although this could have been due to the site's high status encouraging travellers (7.6).

Although in some areas (e.g. Dublin), Scandinavian interests in the Irish Sea led to a high proportion of immigration with a resulting influx of cultural and societal changes, Scandinavian influences in Wales, although present, do not seem to

have effected major changes in the cultures of communities.¹⁰ Scandinavian and Hiberno-Scandinavian contact with Wales can be glimpsed in material culture (e.g. the Creselly armring, Pembrokeshire: p.84), and in records of raids (e.g. on Aberffraw, p.126) and political connections, such as Maredudd ab Owain hiring ‘Gentiles’ to ravage Glamorgan with him in the late-tenth century (*Pen.* and *RBH* AD 992: Jones 1952, 10; 1955, 18-19) and Gruffudd ap Cynan’s Scandinavian and Hiberno-Scandinavian links (*Life of Gruffudd ap Cynan*: Russell 2005, 52-91). In all cases, maritime communities would have been the first point of contact and would have funnelled objects and people in and out of Wales in the Viking age, but, with the exception of Llanbedrgoch in Anglesey, these communities do not seem to have been heavily influenced by Scandinavian or Hiberno-Scandinavian culture. The Viking-age experience of maritime communities in Wales is likely to have been similar to that of maritime communities in Cornwall and the east coast of Ireland outside Viking centres, whilst Mann’s strategic importance but lack of towns is likely to have made the Viking-age experience of its maritime communities unique (7.4).

There do not seem to have been any major differences in the ways in which maritime travel and contact were undertaken around the Irish Sea in the early medieval period. Maritime communities appear to have been open to contact and to have had a generally multicultural make-up. In one sense this is a common theme around the Irish Sea, but the very fact of that diversity would have made each community unique.

¹⁰ With the exception of the unusual site of Llanbedrgoch, Anglesey (see, for example, Redknap 2005, 18-34).

8.3.Movement of goods

Study of the maritime movement of goods into and around the early medieval Irish Sea has tended to focus on the Mediterranean and Continental imports of the fifth to sixth and sixth to seventh or early-eighth centuries and on Viking economic activity of the mid-ninth century onwards (e.g. Campbell 2007a; Wooding 1996a; Doyle 2009; Wilson 2000; Valante 2008; Griffiths 2010, 100-39). However, sea-borne movement of goods also took place outside these highly visible interactions and in the apparent gap between them (6.5, 7.4). Long-distance trade links are hinted through the presence of Irish and British merchants, mariners and travellers on the Continent and the probable importation of salt from France to the Irish Sea even after E-ware ceased to be imported (Loveluck and O'Sullivan 2016, 25-6; pp.22, 227, 299-300). Shorter-distance trade links might be represented by English coins on the Welsh coast (fig.39) and other goods found outside their place of origin, for example the Llanddaniel Fab (Anglesey) cast copper-alloy object with decoration typical of eighth- or early-ninth-century fine Irish metalwork (4.3.2). Internal trade is also evident, for example through the movement of stone and raw or smelted iron ore in Wales and stone and souterrain ware in Ireland (6.2.2, 6.5.6, 7.4). Transactions with mariners generally seem to have taken place near the coast (see, for example, the distribution of coins and merchants' weights in Wales: 6.5.2, fig.39). It is possible that mariner merchants who enjoyed safe trade near the coast might have faced more problems if they had tried to take their transactions further inland, meaning that communities with good maritime accessibility were uniquely placed to take advantage of what the sea might bring.

It is clear that from the mid-ninth century onwards, a significant amount of trade in the Irish Sea took place through the Viking settlements, later towns, on the east coast of Ireland. Towns were not the only places through which beneficial trade could be undertaken, however, either outside or within the Viking economy – for example, Mann was clearly an important Viking trading hub, but did not develop a town (pp.304-5), and transactions at or near probable landing places continued outside towns in Ireland and in areas outside the main Viking economic routes (pp.307-10).

The majority of early medieval cargoes in the Irish Sea are likely to have been organic, leading to invisibility in the archaeological record (pp.239-40, 303-4). The possibility that horses may have been an important export from Wales (pp.239-40) is a reminder that maritime communities were not isolated from activities in their hinterlands. Maritime communities would have been exporting surplus produced both by their own terrestrial activities and by entirely land-focussed settlements. Some maritime communities may have been under the direct control of high-status individuals, and even fairly independent maritime communities may have had the patronage of, or economic relationships with, local landowners.

As well as finished goods, raw materials were also moved by sea. The Welsh coastal movement of stone almost certainly included uncarved blocks (6.5.6), and raw or smelted iron ore seems to have travelled by boat to South Hook, Pembrokeshire (3.2.2.3). This suggests that maritime movement of raw materials could have been both opportunistic, e.g. stone moved as ballast, and in response to specific demand, e.g. the iron ore at South Hook.

In Wales, maritime imports do not seem to have made their way far inland (6.5). This would also seem to be the case in Cornwall and Mann, but in Ireland

maritime imports made their way much further inland, perhaps due to a well-developed riverine and overland network in relatively low-lying hinterlands, although original transactions are still likely to have taken place at the coast (7.2).

The diversity of types and findspots of maritime imports suggests a multiplicity of interactions. Trade was driven by individuals, whether they might be high-status patrons or entrepreneurial mariners, and interactions were as diverse as the individuals involved. The who, how, what, where and when changed depending on circumstance and demand.

With the arrival of the Vikings the economics of trade were transformed in the Irish Sea, particularly in the newly-formed Irish towns and on Mann. However, this does not mean that mariners from Scandinavian and Hiberno-Scandinavian centres held a monopoly on maritime movement of goods in the Irish Sea. Maritime communities in Wales, Cornwall and Ireland outside Hiberno-Scandinavian centres continued to engage in a diverse range of maritime activities, including the movement of goods (6.5, 7.4).

8.4.Control of the coast

Were maritime communities in early medieval Wales and the wider Irish Sea area relatively independent, or were they closely controlled as places of arrival and departure from a particular jurisdiction? Without direct written evidence this question remains very difficult to answer, but some suggestions can be made.

The maritime accessibility of high-status secular sites in Wales (6.2.1) suggests that their inhabitants were interested in exploiting maritime connections,

and probably therefore in controlling access to that stretch of coast. There would be little to gain and many resources to lose in any attempt to fully control an entire coastline so it seems likely that these sites enjoyed only a fairly localised control. High-status ecclesiastical sites with good maritime accessibility around the Irish Sea are also likely to have been sited to take advantage of maritime connections and would similarly have held only localised control over their stretch of coast.

Every high-status site, whether secular or religious, would have had a lower-status community attached to it. The associated lower-status communities of high-status sites close to the sea are likely to have undertaken maritime activities on their behalf. This does not mean, however, that the maritime activities of lower-status communities attached to high-status sites were closely controlled. It is likely that the superior maritime knowledge of the lower-status communities may have been recognised through being allowed a certain amount of freedom in their activities, so long as their associated high-status site benefitted from such activities.

On the east coast of Ireland the majority of high-status secular sites seem to have been set back further from the coast, making direct association with maritime communities less likely (7.2). However, the access of some of these inland sites to maritime goods, such as the marine produce and imports at Knowth and Lagore, both in Co. Meath (7.2), suggests that the maritime activities of maritime communities may have been overseen by representatives of these inland high-status sites, or perhaps that maritime communities enjoyed independence through ensuring that the high-status sites benefitted from their maritime activities. A ‘symbiotic relationship’ (Loveluck 2017, 316) of this latter form may also explain the apparent absence of a high-status settlement in the vicinity of the estuary of the Afon Braint, Anglesey, probably the important landing place of Abermenai. Here, the lower-status

settlement of Rhuddgaer may have housed a community who saw to the needs of the landing place on behalf of a high-status settlement elsewhere, perhaps at Rhosyr over 2.5km away (4.2.2.5).

Gifts of ships are recorded between Irish kings in the perhaps originally eleventh-century *Lebor na Cert*, Book of Rights (e.g. I §1, §5, V §1: Dillon 1962, 4-5, 30-1, 84-7; dating: Dillon 1962, ix, xx), and the Ulaoid in particular seem closely associated with maritime activities (see *AU* AD 577, 578, 913, 1022). Whilst control of ships would seem to have been desirable for Irish kings, it is uncertain whether they had permanent fleets or simply mustered them when necessary. Similarly, Welsh kings would have had boats at their disposal – for example, Gwynedd rulers would have needed boats to keep contact between north Wales and Mann when Mann was under their rule (p.42), and later in the early medieval period, kings such as Gruffudd ap Cynan and Gruffydd ap Llywelyn were certainly utilising naval forces (Lloyd Gruffydd 2016, 1-6)¹¹ – but it is uncertain, and perhaps unlikely, that fleets were permanent. When boats from Wales were mustered for the purposes of kings, these vessels and their skilled occupants may have been drawn from maritime communities who were otherwise relatively independent in their maritime activities.

Areas of controlled maritime activity could be amongst the most lucrative. This is clearly seen in the success of the Viking towns in Ireland, with struggles over who controlled Dublin highlighting the desirability of this successful centre (Valante 2008, 156; Ó Corráin 1997, 92, 98-103). The absence of towns in Wales, Cornwall and Mann may be partly due to not having hinterlands that could support such intense settlement (p.306). Towns were not the only desirable destinations in

¹¹ Although there were certainly boatloads of mercenaries and allies from Ireland involved in later Welsh naval activity, this does not mean that local boats were not also called upon.

the early medieval Irish Sea, however. Wealthy high-status secular and ecclesiastical sites with good maritime accessibility would have attracted beneficial maritime contact, which would in turn have increased the wealth of the sites.

Lower-status settlements not associated with a high-status site may also have attempted to control their own section of coast, their maritime activities determined by local custom, individuals and attitudes. Since the construction and maintenance of a boat requires resources, time and skill, boat-builders and boat-owners are likely to have held high positions within maritime communities, perhaps giving them some control over who got to travel where, when and with what. Similarly, those with the best pilotage and navigational knowledge may have held an important place in local society. Whole communities may also have taken part in deliberate displays of ownership to leave a newcomer in no doubt as to whose territory they had entered, ensuring that the balance of power remained with the community rather than with the stranger, however enticing the contents of their boat; burial sites on the edge of the land are an example of this (6.6.1.3).

There are clear differences in how control of the coast may have been attempted or enacted around the early medieval Irish Sea, including the existence of towns in Ireland and the greater number of high-status secular sites with direct maritime accessibility in Wales. Similarities are also seen, such as the presence of high-status ecclesiastical sites with good maritime accessibility all around the Irish Sea, and the fact that lower-status maritime communities, whether directly associated with a high-status site or more independent, are likely to have had some control over their choice of maritime activities and the ways in which they were undertaken.

Control of the coast in any one area in the Irish Sea would have been unique to that area and affected by desirability of the hinterland, accessibility of the coast and the location of high- and lower-status settlements. Whatever the degree of attempted control it is inevitable that some landings would have been made without prior warning or agreement, and unlikely that such people would have been summarily turned away simply because they were unexpected (see 6.5.7 and p.209). Control of the coast in the early medieval Irish Sea was about the most influential members of a community ensuring they got what they wanted from maritime activities, rather than having absolute control over those activities.

8.5. Maritime activities and knowledge

As well as the movement of goods and people by sea, maritime activities might include boat building, maintenance of landing-places, fishing, intertidal picking and navigation, with all these activities requiring specialist knowledge. Place-names played an important role in structuring and ordering the maritime cultural landscape of these activities. These practical and cognitive aspects – along with maritime folklore and belief, discussed below (8.7) – contributed to personal and communal identity within maritime communities.

Evidence for marine resource exploitation in early medieval Wales is slim, and within the study areas there is only one possible fishtrap (at New Quay, Cardigan Bay: 5.2.2.2) and one site with evidence for shellfish consumption (Longbury Bank, Pembrokeshire: 3.2.1.4). Evidence for marine resource exploitation is, however, much clearer on the east coast of Ireland, and also in Cornwall and

Mann (7.3). Dietary isotopes in Wales and around the early medieval Irish Sea show a reliance on terrestrial foodstuffs even in highly coastal locations and even, in the case of St Patrick's Isle, Mann, on a site with evidence for fishing, suggesting that even when fishing was taking place not everyone was eating fish (pp.221, 291-2). It is uncertain whether the lack of archaeological evidence for marine resource exploitation in Wales reflects reality. Dietary isotope analysis on early medieval individuals buried in areas busy with medieval stone fishtraps in mid-west and north Wales may yet reveal communities who regularly exploited and consumed the products of the sea (p.224). The absence of cetacean remains in Wales, Cornwall and Mann suggests a taboo surrounding the use of marine mammals, perhaps on processing them away from the intertidal zone. A taboo such as this might also explain the paucity of cetacean remains in the Irish archaeological record, which is surprising considering the existence of laws detailing their use (p.293).

Aside from the presence of probable Viking-age boat clench-nails at Llanbedrgoch, Anglesey (Redknap 2019, 91 fig.6.4), there is no archaeological evidence for sea-going boats in early medieval Wales and no boats at all are known from early medieval Cornwall, whilst in Ireland and Mann the strongest archaeological evidence for sea-going boats post-dates the beginning of the Viking age (pp.26-7). However, there certainly were sea-going boats in the Irish Sea throughout the period of this study. It seems probable that rough seas and sharp rocks made short work of wrecks, whilst the materials of boats that had come to the end of their working lives may have been salvaged for other purposes (this may, for example, explain the clench-nails at Llanbedrgoch). It must also be noted that not all maritime communities necessarily had the use of a boat – they may have simply worked within the intertidal zone and interacted with boats from elsewhere.

The general invisibility of boats raises questions surrounding other items and activities that might be expected to have existed around the early medieval Irish Sea but which are missing from the archaeological record. Evidence for shipbuilding is lacking, as is sailmaking, rope-making and man-made harbour structures. Boats (aside from potential iron fastenings), ropes and sails are all constructed from organic materials and it is perhaps unsurprising that they are long-gone. However, relatively sheltered, waterlogged conditions such as estuaries and inlets might be expected to have preserved wooden harbour structures, if these structures existed. For example, such conditions have preserved the earlier-seventh-century wooden platform/landing place at the site of the Nendrum tide mills in Strangford Lough, Co. Down (McErlean and Crothers 2007, 65-8). The absence in the archaeological record of known early medieval man-made harbour structures in Wales, Cornwall, Mann and most of the east coast of Ireland might therefore reflect a real absence. Natural harbours such as coves, inlets, estuaries and beaches would have been used instead, the skills and local knowledge of pilots guiding visiting boats safely to land with the helping hands of those on shore.

Knowledge of the local landscape and seascape – of names and places, of tides and currents, of dangers and safe passage – is important to both the activities and culture of maritime communities; in the words of Aidan O’Sullivan and Colin Breen (2007, 25), ‘local knowledge was a significant source of social identity’. O’Sullivan (2003, 465-6) has talked about the way in which fishing communities are likely to have forged a distinct identity, their knowledge of tides and fish movements differentiating them from inland agriculturalists. Knowledge of tides, currents and local topography are also likely to have encouraged a distinct sense of identity amongst communities involved in other maritime activities such as sailing or

receiving boats. Since tides, currents and topography might vary significantly along the same stretch of coast in the Irish Sea, even neighbouring maritime communities would have been distinct from one another in their knowledge and experiences (cf. Cooney 2003, 325). Such local knowledge is likely to have been guarded, both for economic reasons – for example, making sure that local pilots and sailors were indispensable – but also for social reasons, a community defining itself against others through possession of a unique cognitive landscape. This probable guarding of knowledge makes it likely that a high-status site with good maritime accessibility and an associated lower-status community would have occupied very different maritime cultural landscapes from one another, despite their shared location.

Christopher Tilley (1994, 19) has argued that ‘names create landscapes’. The naming of important places within a community’s known maritime geography helped construct and express both practical and spiritual aspects of its maritime cultural landscape. With the exception of those with Scandinavian elements, early medieval maritime place-names in Wales have received little attention in previous scholarship (p.25). It was beyond the scope of this thesis to do a full survey of maritime place-names within the study areas but individual place-names have been discussed as they have come up, for example Ynys Enlli (4.4.1.1) and Ynys Glannauc (4.4.1.2). It is clear that a more in-depth study of Welsh maritime place-names in Wales has great potential for insight into the maritime cultural landscapes of the past.

Through learned and experienced knowledge each individual within a maritime community would have created their own understanding of the maritime cultural landscape and their place within it. Some elements of this were communal and helped to create the social space and cohesion of the community, whilst other

elements would have been personal, perhaps only shared with chosen relatives or trusted friends. Some knowledge would have been shared with other maritime communities and visiting seafarers whilst some would have been kept within the community, perhaps even jealously guarded. The ways in which maritime activities were perceived and undertaken in early medieval Wales and the wider Irish Sea area are as diverse not only as the geography but also as the individuals creating and inhabiting those spaces.

8.6. Islands

Sharon A. Greene (2009, 50, 52) has argued that no island was truly isolated, with activity on islands testifying to activity at sea that is otherwise invisible archaeologically. Islands were simultaneously liminal and connected and in a clear difference to coastal mainland sites where maritime activities were not essential, maritime activities on islands were almost always made necessary by location (complete self-sufficiency is possible on some of the larger islands but unlikely to have been the norm). The separation of islands from the mainland did not necessarily make them ‘neutral’ spaces, although as with mainland landing places away from obvious elite control, some islands may have been used by mariners as stopping-off, provisioning and trading points of mutual benefit to themselves and local communities (pp.301-2). Whilst the islands of Dalkey, Co. Dublin and Dunnyneill, Co. Down seem to have been centres of maritime trade, there is no evidence for similar levels of exchange on islands elsewhere in the Irish Sea study areas.

The majority of early medieval activity on Welsh offshore islands – and those elsewhere in the Irish Sea – would appear to have been ecclesiastical, but there is also evidence for secular settlement, contact with mariners bringing imports and use as places of escape and defence. It is interesting that whilst there are high-status ecclesiastical sites on islands such as Bardsey in Gwynedd and Caldey in Pembrokeshire, high-status secular sites on offshore islands are unknown in Wales, or indeed anywhere in the Irish Sea areas of this study.¹² It is possible that the potential for temporary storm-bound isolation was off-putting to a secular ruler who might lose out politically if cut off from the mainland for a time. High-status ecclesiastical sites, on the other hand, were supported by their place within the powerful Church network and were less reliant on the immediate actions of particular individuals to uphold their positions: temporary loss of contact would have simply served to increase the perceived sanctity and high standing of island ecclesiastical sites.

Reasoning behind the locations of ecclesiastical sites on islands is likely to be similar around the Irish Sea, tied up with concepts of the Biblical Ocean and the Christian desert and also probably with supernatural island associations outside a Christian framework (p.217). Whether such perceptions affected the everyday lives of islanders is unclear. Members of ecclesiastical island settlements may well have considered their location spiritually important, but it is less certain whether this was also true of secular islanders. However, it is probable that all islanders would have considered themselves culturally distinct from mainland communities (p.217).

¹² Note that there may have been some high-status secular activity on Dunnyneill Island, Co. Down, but this island is in a relatively sheltered position within Strangford Lough (McCormick and Murray 2010, 52-3).

Being a member of an ecclesiastical island community did not necessarily require maritime prowess. Some monks may well have been sailors, or at least have some knowledge of the skill, whilst others would have relied wholly on the competency of others, occupying a very different maritime cultural landscape to the individuals (whether islanders or nearby mainlanders) who engaged in maritime activities on their behalf (p.218). Whoever undertook the maritime activities, it must be reiterated that island communities were far from isolated. Building materials, livestock and supplementary food would have arrived by sea, and island ecclesiastical sites could have strong mainland links (for example, Bardsey in Gwynedd and Ramsey in Pembrokeshire: 4.4.1.1, 4.4.1.2).

Early medieval burial near sites of ecclesiastical activity on islands in Wales and the wider Irish Sea study area has probably more to do with the locations of the ecclesiastical sites than any specific desire for maritime proximity in death. However, burial in highly coastal positions very close to landing places and away from early medieval ecclesiastical activity on Ramsey and Caldey, Pembrokeshire (4.4.1.2, 3.3.1.1, 3.4.1.3), burials near the church but overlooking a landing place and perhaps originally sited for the landing place itself on Ireland's Eye, Co. Dublin (p.320), and burials close to landing places and without apparent ecclesiastical presence on Great Island, Cork Harbour (p.321), may have been (or originally been) the burial sites of secular maritime island communities desiring proximity to the sea and maritime activity in death, a tradition apparently shared with many mainland communities (6.6.1, 7.5).

Whilst islands have clearly defined borders they would have been fully integrated into the maritime landscape of their localities, with sustained activity upon them requiring the skills of maritime communities. Islands could be both

conceptually isolated and truly isolated by wind and weather, but they were also key places within the maritime landscape as destinations and navigation markers, whether such islands housed an important ecclesiastical community or were completely uninhabited.

8.7.Folklore and belief

In any maritime community the sea plays a formative role in creating culture and tradition – in Christopher Tilley’s words (1994, 67), ‘landscape is intimately related to myth’. The sea is not alive and yet appears to have life; it is made up of infinite parts and yet can move as a single body. It is a rich resource for myth and ritual. Practical actions in early medieval Welsh maritime communities would have been undertaken within the context of local beliefs and rituals. The Porth Nefyn crosses fulfilled practical functions but were also spiritual symbols (4.4.2.10); burials overlooking or close to landing places were physical representations of power in the locality, but would also have been associated with intangible beliefs (6.6.1).

The few maritime elements in early medieval literature from Wales tend to depict an unremarkable sea: a space which it is sometimes necessary to cross but which seldom has an important role in a story. The drowned kingdom legends of Wales do not reflect a supernatural sea, and maritime miracles in Welsh saints’ lives are scarce – and in the case of those in Rhygyfarch’s *Life* of St David, clearly inspired by Irish literature (pp.270-1). The Welsh probable sea-deity Dylan Eil Ton would appear to move as one with the water, rather than defy its physical laws as Manannán mac Lir does in the Irish *Voyage of Bran* (pp.344-5). Indeed, maritime

episodes in early medieval Irish written sources tend towards a depiction of a more remarkable sea, from sea that is land or sky that is sea to the transformative space of Irish voyage tales and the use of the sea as a stage for Christian miracles (7.7). There is far more early medieval literature with maritime elements surviving from Ireland than anywhere else in the study areas, perhaps suggesting that authors outside Ireland were less interested in writing about the sea. There would have been oral maritime folklore in all the study areas, however, and the literature that survives may preserve some echoes of this.

Some maritime beliefs may have been shared between Irish Sea communities, such as concepts of the Biblical Ocean and the desert of the sea, but there would have been many maritime beliefs that were unique to individuals or communities. Individuals would have created their own understanding of myth and ritual within their community, and communities may have held different beliefs even to their closest neighbours, perhaps influenced by local topography and lived experience. Despite maritime contact, belief systems and mythology could remain distinct. This is difficult to pinpoint on a local level given the absence of written records, but the inclusion of limpet shells in some burials (certainly two) at Whitesands, Pembrokeshire may reflect a unique local belief, since this rite is not known in any other Pembrokeshire cemetery (pp.246-7). On a much wider scale, the differences between the Welsh and Irish/Manx sea-gods Dylan Eil Ton and Manannán mac Lir (pp.344-5) demonstrate that knowledge of a myth or belief does not necessarily lead to its adoption.

Natural disasters cannot always be predicted or avoided, and maritime belief systems across human history have focussed on warding off potential danger through ritualised acts. Christer Westerdahl (2005, 2) has argued that what might be termed

maritime ‘superstition’ was in fact a ‘coherent system of cosmology’. Some rituals were personal, but others would have been shared by whole communities, generations of application solidifying the rituals into a communal belief system. The essential dichotomy between sea and land is likely to have been at the core of maritime belief systems in the early medieval Irish Sea. Rituals may have formed surrounding sending boats off, behaviour on board and the ways in which those left on land might ensure the survival of those at sea. Such oral culture is lost to us now, but the presence of highly coastal burials and hints in Welsh and Irish literature of the shore being a space of practical and fantastical potential suggests that the amorphous line between land and sea was important in early medieval Welsh and wider Irish Sea maritime belief systems (pp.247-9, 269-70).

Burial sites in highly coastal positions, the majority overlooking or close to potential landing places, are found in the Pembrokeshire and Gwynedd study areas and also in north Cornwall and Mann and occasionally on the east coast of Ireland and in Cardigan Bay (6.6.1, 7.5). The majority of such sites seem to have originated in the early medieval period, suggesting the influence of early medieval maritime belief systems rather than simply a continuation of previous burial traditions. Several possible explanations for the siting of land-edge burials have been considered, including retention by a maritime community of an ‘other’ identity to nearby terrestrial settlements and the use of the cemeteries as markers of land ownership (6.6.1). Within the context of maritime belief systems that placed emphasis on the dichotomy between sea and land and the importance of the liminal shoreline these land-edge burials may also have been sited in an attempt to break down the barrier between sea and land, smoothing the transition between the two so that the living

members of a community could safely move between these spaces under the protection of their predecessors (p.249).

Whilst certain elements of maritime folklore and belief might be shared around the Irish Sea (including concepts of the Christian sea and possibly the reasoning behind highly coastal burials), other elements remained distinct (such as the differences between the sea-god figures of Manannán mac Lir and Dylan Eil Ton). As with other facets of the maritime cultural landscape, maritime folklore and belief systems were as diverse as the communities and individuals they belonged to.

8.8.Future research

Many avenues of potential future research are suggested by this study. Whilst the three Welsh study areas of Pembrokeshire, Gwynedd and Cardigan Bay provide snapshots of early medieval maritime experience on the west coasts of Wales, expanding these study areas to incorporate the whole west coast would be informative, and studies of the north-east and south-east coasts would expand this understanding and widen the discussion with the inclusion of near neighbours such as Somerset, Gloucestershire, Merseyside, Lancashire and Cheshire. It was only possible to focus on a small portion of the east coast of Ireland in this project and future work could explore more of the Irish coastline, one question being whether there were greater similarities between maritime communities on the west coasts of Wales and Ireland than between those on the west coast of Wales and the east coast of Ireland.

Within the 15km limits of the Welsh study areas the clearest difference in the archaeological record in the experience of sites closer to and further from the coast is that maritime imports do not seem to have made their way far inland. The apparent lack of other distinguishing features between those sites closest and furthest from the Welsh coast is interesting. Further research into the differences and similarities between coastal and inland sites, and between purely terrestrial coastal communities and maritime communities (who are likely to have undertaken both maritime and terrestrial activities) would be informative, especially in exploring the relationship between those who produced goods that were exported by sea and those involved in that exportation.

In addition, whilst this thesis is interdisciplinary the main focus has been archaeological and there is still much to be drawn from the written sources, including further exploration of maritime folklore and beliefs and literate individuals' perceptions of maritime communities and their activities. A comprehensive study of maritime place-names would also provide a glimpse into maritime folklore and beliefs and help in a reconstruction of the practical (e.g. navigational) and spiritual aspects of the maritime cultural landscape.

8.9.Final conclusion

Through an interdisciplinary approach this thesis has thrown light on the activities, folklore and beliefs of early medieval maritime communities living on the coastal fringes of Wales and in other locations around the Irish Sea, and the maritime cultural landscapes they inhabited.

Ultimately, it has been shown that there was no single ‘maritime cultural landscape’ within the Irish Sea. Certain aspects of culture or activities might be shared between communities along the same stretch of coast or across the water, whilst other aspects differed. Local knowledge, custom, belief, folklore, lived experience, available resources, geography, tides and currents all played their part in constructing the ways in which a maritime community might interact with their landscape and see their place within it. Despite potential connections by sea with other maritime communities, each maritime community in the early medieval Irish Sea retained individuality in practical and spiritual approaches to their world, creating a myriad of maritime cultural landscapes.

The CHERISH project, now in its fifth (penultimate) year, and the publication in September 2019 of *Wales and the Sea: 10,000 Years of Welsh Maritime History* (Redknap *et al.* 2019) are indicative of current interest in the maritime past in Wales and the Irish Sea. This study has drawn on the archaeological record, documentary sources and literature to advance an understanding of the uses and perceptions of the sea in early medieval Welsh society, including through synthesising early medieval findings of surveys undertaken on Welsh coastal heritage over the last few decades, many of which had yet to be discussed in an integrated analysis. The study has shown that there is a variety of evidence for maritime connections in early medieval Wales if we look beyond the absence of obviously maritime archaeology such as boats and man-made harbour structures.

This study has shown that not only is there evidence for maritime communities in early medieval Wales, but that maritime activities of these communities were essential to their livelihoods and culture. These were not communities that only undertook maritime activities when it was unavoidable, but

communities that had close practical and spiritual links with the sea. This is perhaps seen most clearly in two of the most important findings of this thesis: the evidence for internal maritime movement of relatively low-status everyday goods and raw materials, and the number of highly coastal burials overlooking or close to potential landing places.

It is increasingly recognised that maritime studies are key to understanding the past in the Irish Sea, not only during the Viking age and in the modern era of industrial shipping, but throughout human history. In its focus on Wales in the early medieval period this thesis has helped fill a gap both in the history of early medieval Wales and in the maritime history of the Irish Sea, shedding light on a less-discussed era and area in maritime studies and demonstrating that maritime studies are essential to an understanding of early medieval Wales.

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Online databases

Archwilio	https://www.archwilio.org.uk/arch/
BM collection online	https://www.britishmuseum.org/collection
CELT	https://celt.ucc.ie/
Coflein	https://www.coflein.gov.uk/
EMC	https://emc.fitzmuseum.cam.ac.uk/
excavations.ie	https://excavations.ie/
HEV	https://webgis.archaeology.ie/historicenvironment/
Historic England	https://historicengland.org.uk/listing/the-list/
IHBW	http://battlefields.rcahmw.gov.uk/
imuseum	https://www.imuseum.im/
NMW collections online	https://museum.wales/collections/online/
OS maps (National Library of Scotland)	https://maps.nls.uk/os/
PAS	https://finds.org.uk/

Appendix 1: Explanation of data fields used in data collection spreadsheets

Sheet 1: Overview

Data Field	Explanation
Site	Name of site
Easting	Easting of site, as accurate as known
Northing	Northing of site, as accurate as known
Grid reference	Grid reference of site, as accurate as known
PRN	Primary Reference Number of site as allocated by the Welsh archaeological trusts
Community	Welsh community (lowest tier of local government) the site is within
References	Sources used to compile the entry
Archwilio	url of related Archwilio entry
Excavated	Whether the site has been excavated
Excavation year	The year/s excavation took place
Fully excavated	Whether the site has been fully excavated
Site plans	Whether there are plans of the site
Seventh to eleventh	Whether there is certain evidence for activity at the site within the seventh to eleventh centuries
Stone_D	Whether the site has been dated through the presence of stone sculpture
Carbon_D	Whether the site has been dated through radiocarbon dating
Doc_D	Whether the site has been dated through documentary evidence
Object_D	Whether the site has been dated through the presence of an artefact
Radiocarbon dates	Details of any radiocarbon dating evidence
Fifth	Whether the site has evidence for fifth-century activity
Sixth	Whether the site has evidence for sixth-century activity
Seventh	Whether the site has evidence for seventh-century activity
Eighth	Whether the site has evidence for eighth-century activity
Ninth	Whether the site has evidence for ninth-century activity
Tenth	Whether the site has evidence for tenth-century activity
Eleventh	Whether the site has evidence for eleventh-century activity
Twelfth	Whether the site has evidence for twelfth-century activity
Settlement	A site with evidence for early medieval secular occupation (see 2.5)
Ecclesiastical	A site with evidence for early medieval ecclesiastical presence (see 2.5)
Burial	A site with evidence for early medieval burial (see 2.5)
Routeway	A site with evidence for early medieval use as a routeway (see 2.5)

Industrial	A site with evidence for early medieval industrial activity (e.g. metalworking, stoneworking, boneworking) (see 2.5)
Crop-proc	A site with evidence for early medieval crop-processing (see 2.5)
Findspot	A site known only, or predominantly, through the finding of an early medieval artefact (see 2.5)
Landing place	A site entry solely defined as an early medieval landing place (see 2.5)
<i>Llys</i>	A settlement site that is thought to have been a high-status royal court (see 2.5)
Agri	A site with evidence for early medieval agricultural, land-based activity not including crop-processing (e.g. furrows, burnt mounds) (see 2.5)
Fishtrap	A site with evidence for an early medieval fishtrap (see 2.5)
Enclosed	Whether the site was enclosed
Defended	Whether the site was defended
Burial	Whether the site has evidence for early medieval burial
Highly coastal burial	Whether the site has evidence for early medieval burial within 500m of the sea or tidal river
Artefact	Whether the site has one or more early medieval artefacts
Import	Whether the site has one or more early medieval imports (see 2.2 for definition of import)
Imported stone	Whether the site has one or more early medieval stone artefacts where the stone itself has moved over 5km from its origins
Corn dryer	Whether the site has one or more early medieval corn-drying kilns
Crop-proc	Whether the site has evidence for early medieval crop processing
Metalworking	Whether the site has evidence for early medieval metalworking of any type
Smelting	Whether the site has evidence for early medieval smelting
Smithing	Whether the site has evidence for early medieval smithing
Fine metalworking	Whether the site has evidence for early medieval fine metalworking
Textile manufacture	Whether the site has evidence for early medieval textile manufacture
Eccel building	Whether the site has evidence for one or more early medieval ecclesiastical buildings
BA or earlier activity	Whether the site has evidence for Bronze Age or earlier activity
IA activity	Whether the site has evidence for Iron Age activity
Roman activity	Whether the site has evidence for Roman activity
Medieval activity	Whether the site has evidence for medieval activity (c.

	twelfth-fifteenth centuries)
Reuse IA encl	Whether the site is re-using an Iron Age enclosure
Nearby IA encl	Whether the site is within 400m (c. five minute walk) of an Iron Age enclosure
Nearby IA coastal encl	Whether the site is within 400m (c. five minute walk) of an Iron Age enclosure overlooking the sea
Marine mollusc	Whether the site has marine molluscs in an early medieval context
Quernstone	Whether the site has one or more early medieval quernstones
Carved stone	Whether the site has one or more early medieval carved stones
Sand site	Whether the site is in a sandy area
Nearest seawater	What the nearest seawater to a site is (Sea, Estuary, Tidal River, Milford Haven Waterway, Menai Strait)
Distance to seawater	What the distance to the nearest seawater is, as the crow flies
Davidson et al	What the classification of the site is according to Davidson <i>et al</i> 2002's classification of early medieval ecclesiastical sites in north-west Wales
S&H	What the classification of the site is according to Silvester and Hankinson 2004's classification of early medieval ecclesiastical sites in mid and north-east Wales
Ludlow	What the classification of the site is according to Ludlow's classification of early medieval ecclesiastical sites in Pembrokeshire, Carmarthenshire and Ceredigion (2003; 2004a; 2004b)
Notes	A detailed description of the site
Additional notes	Additional notes on the way in which the site is presented in the spreadsheet

Sheet 2: Artefacts

Data Field		Explanation
Site		Name of site
Easting		Easting of site, as accurate as known
Northing		Northing of site, as accurate as known
Grid reference		Grid reference of site, as accurate as known
PRN		Primary Reference Number of site as allocated by the Welsh archaeological trusts
References		Sources used to compile the entry
Pottery	PRSW	Number of Phocaean Red Slipware sherds from site
	Bi	Number of Bi-ware (Late Roman Amphorae 2) sherds from site

	Bii	Number of Bii-ware (Late Roman Amphorae 1) sherds from site
	Biv	Number of Biv-ware (Late Roman Amphorae 3) sherds from site
	B misc	Number of B misc(ellaneous)-ware (originally termed Biii-ware) sherds from site
	DSPA	Number of DSPA-ware (<i>Dérivées sigillées paléochrétiennes</i> Atlantic group, also termed D-ware) sherds from site
	E-ware	Number of E-ware sherds from site
Glass	Bead	Number of early medieval glass beads from site
	Continental vessel	Number of early medieval Continental glass vessel sherds from site
	Fragment	Number of early medieval glass fragments from site
Currency	English	Number of early medieval English coins from site
	Anglo-Norman	Number of early Anglo-Norman coins from site
	Viking York	Number of early medieval Viking York coins from site
	Hiberno-Scandinavian	Number of early medieval Hiberno-Scandinavian coins from site
	Byzantine	Number of early medieval Byzantine coins from site
	Carolingian	Number of early medieval Carolingian coins from site
	Sasanian	Number of early medieval Sasanian coins from site
	Samanid	Number of early medieval Samanid coins from site
	Ingot	Number of early medieval ingots from site
Pins and brooches	Pin	Number of early medieval metal pins (not ringed) from site
	Ringed pin	Number of early medieval ringed pins from site
	Bone pin	Number of early medieval bone pins from site
	Penannular brooch	Number of early medieval penannular brooches from site
	Brooch (unknown type)	Number of early medieval brooches of unknown type from site
Weapons	Sword	Number of early medieval swords from site
	Spearhead	Number of early medieval spearheads

		from site
	Axe head	Number of early medieval axe heads from site
Agricultural	Ard/Plough	Number of early medieval ards/ploughs from site
Textiles	Loom weight	Number of early medieval loom weights from site
	Bone needle	Number of early medieval bone needles from site
	Spindle whorl	Number of early medieval spindle whorls from site
Accessories	Armring	Number of early medieval armrings from site
	Bracelet	Number of early medieval bracelets from site
	Necklace	Number of early medieval necklaces from site
	Bead (not glass)	Number of early medieval beads (not glass) from site
	Belt fitting	Number of early medieval belt fittings from site
	Strap end	Number of early medieval strap ends from site
	Bone comb	Number of early medieval bone combs from site
	Knife	Number of early medieval knives from site
	Harness fitting	Number of early medieval harness fittings from site
Trade	Merchant's weight	Number of early medieval merchant's weights from site
	Amber	Number of amber pieces in early medieval contexts from site
Metalworking	Crucible	Number of early medieval crucibles from site
	Clay bellows protector	Number of early medieval clay bellows protectors from site
Everyday	Iron nail	Number of iron nails in early medieval contexts from site
	Bucket	Number of early medieval buckets from site
	Handle	Number of early medieval handles from site
	Flint	Number of flints in early medieval contexts from site
	Stone lamp	Number of early medieval stone lamps from site
	Quernstone	Number of early medieval quernstones from site

	Honestone	Number of early medieval honestones from site
	Whetstone	Number of early medieval whetstones from site
	Slickstone	Number of early medieval slickstones from site
Bone	Worked bone	Number of worked bone pieces in early medieval contexts from site
Eccl. object	Shrine	Number of early medieval shrines from site
	Bell	Number of early medieval bells from site
Stone monuments	Carved stone (lost)	Number of early medieval now-lost carved stones from site
	Carved stone	Number of early medieval still-extant carved stones from site
	Grave marker	Number of early medieval grave markers in-situ on graves from site
Other		Number of early medieval artefacts not otherwise noted in previous data fields
Notes		A detailed description of artefacts from site
Additional notes		Additional notes on the way in which the artefact(s) are presented in the spreadsheet

Sheet 3: Burials

Data Field	Explanation
Site	Name of site
Easting	Easting of site, as accurate as known
Northing	Northing of site, as accurate as known
Grid reference	Grid reference of site, as accurate as known
PRN	Primary Reference Number of site as allocated by the Welsh archaeological trusts
References	Sources used to compile the entry
Burial	Whether the site has evidence for one or more early medieval burials
Cist	Whether the site has evidence for one or more early medieval cist burials
Dug	Whether the site has evidence for one or more early medieval dug burials
Mortuary enclosure	Whether the site has evidence for one or more early medieval mortuary enclosures
Number of graves	Number of early medieval graves found at site
Individuals	Number of early medieval individuals found at site
Fully excavated	Whether the site has been fully excavated
Radiocarbon dates	Details of radiocarbon dating related to burials from site

Male	Number of male individuals from site
Female	Number of female individuals from site
Indeterminate sex	Number of individuals of indeterminate sex from site
Adult	Number of adult individuals from site
Juvenile	Number of juvenile individuals from site
Age unknown	Number of individuals whose age is unknown from site
Cist	Number of cist graves from site
Dug grave	Number of dug graves (without cist or coffin structures) from site
Timber components	Number of graves with timber components from site
Stray bone	Whether stray human bone is known from site
Grave marker	Number of grave markers (both in-situ and not in-situ) from site
Isotopes	Details of isotope analysis undertaken on bone from site
Notes	A detailed description of burials from site

Sheet 4: Plants and Animals

Data Field	Explanation
Site	Name of site
Easting	Easting of site, as accurate as known
Northing	Northing of site, as accurate as known
Grid reference	Grid reference of site, as accurate as known
PRN	Primary Reference Number of site as allocated by the Welsh archaeological trusts
References	Sources used to compile the entry
Radiocarbon dates	Details of radiocarbon dating related to plants and animals from site
Corn dryer	Number of early medieval corn dryers at site
Quernstone	Number of early medieval quernstones from site
Hulled wheat	Whether there is hulled wheat in early medieval contexts from site
Free-threshing wheat	Whether there is free-threshing wheat in early medieval contexts from site
Wheat (type unknown)	Whether there is wheat (type unknown) in early medieval contexts from site
Barley	Whether there is barley in early medieval contexts from site
Rye	Whether there is rye in early medieval contexts from site
Oat	Whether there is oat in early medieval contexts from site
Flax	Whether there is flax in early medieval contexts from site
Malting	Whether there is evidence for malting in early medieval contexts from site
Notes (plants)	A detailed description of plant remains in early medieval contexts from site
Deer	Whether there are deer remains in early medieval contexts from site
Pig	Whether there are pig remains in early medieval contexts from site

Sheep	Whether there are sheep remains in early medieval contexts from site
Cattle	Whether there are cattle remains in early medieval contexts from site
Ox	Whether there are ox remains in early medieval contexts from site
Oyster	Whether there are oyster remains in early medieval contexts from site
Cockle	Whether there are cockle remains in early medieval contexts from site
Mussel	Whether there are mussel remains in early medieval contexts from site
Limpet	Whether there are limpet remains in early medieval contexts from site
Whelk	Whether there are whelk remains in early medieval contexts from site
Periwinkle	Whether there are periwinkle remains in early medieval contexts from site
Scallop	Whether there are scallop remains in early medieval contexts from site
Notes (animals)	A detailed description of animal remains in early medieval contexts from site

Appendix 2: Pembrokeshire study area sites with evidence for early medieval maritime connections

Note: Grid references from the PAS are given to four figures; more accurate references were known to the author when analysing the findspots but cannot be printed here.

Site	Grid reference	PRN	Site type(s)
Brawdy Castle	SM86272395	14289	Settlement; Industrial
Brownsdale Barrow	SR905972	543	Settlement; Burial
Caldey Monastery	SS14089631	4278	Ecclesiastical
Camrose Church	SM92712006	46774	Ecclesiastical
Capel-y-Pistyll	SM73922425	2709	Ecclesiastical
Capeston Tumulus	SM86900948	3016	Burial
Carew Castle	SN04500377	37469	Settlement; <i>Llys</i>
Castlemartin Church	SR91069888	46779	Ecclesiastical
Castlemartin floor finds	SR9099	509	Findspot
Castlemartin rath	SR91529840	564	Settlement
Coedcanlas Church	SN01630826	46785	Ecclesiastical
Cosheston Church	SN00070366	46786	Ecclesiastical
Cresselly armring	SN0606	PAS: NMGW- 22CFAA	Findspot
Freshwater West merchant's weight	SM8800	518	Findspot
Gateholm	SM77020721	2929	Settlement
Kilpaison Burrows barrow	SM88960063	3080	Burial
Lawrenny Church (and possible <i>llys</i>)	SN01640689	46802	Ecclesiastical; ?Settlement; ? <i>Llys</i>
Linney Burrows finds	SR896967	14660	Findspot
Llanstadwell Church	SM95520502	46820	Ecclesiastical
Llawhaden Church	SN07521746	46827	Ecclesiastical
Llonion	SM97680346	10800	Settlement
Longbury Bank	SS111999	14286	Settlement; ? <i>Llys</i>
Longoar Bay	SM84950632	44703	Burial
Lower Broad Moor	SM81981198	110463	Burial
Manorbier Castle	SS06389779	4221	Settlement; ? <i>Llys</i>
Manorbier Church	SS06509764	46832	Ecclesiastical
Manorbier harness fittings	SS0698; SS0598	PAS: NMGW- A32297; NMGW- E0B4C0	Findspot
Martin's Haven stone	SM76050903	46833	Findspot
Molleston Back pot and brooch	SN0871313073	112083	Findspot
Monkton burials	SM9738301377	8978	Burial
Newton, Llanstadwell	SM9290505006	102357	Crop-processing

Pembroke Castle	SM98160161	4518	?Settlement; ? <i>Llys</i>
Pembroke sword pommel	SM9901	NMW acc. no. 96.17H	Findspot
Penally Church	SS11779917	3442	Ecclesiastical
Penarthur Farm stones	SM747269	46862	Findspot
Penarthur Farm pin	SM74652650	None	Findspot
Porth Clew	SS01959856	4194	Burial
Pwllcrochan Church	SM92070267	30131	Ecclesiastical
Ramsey burials	SM70592372	7309	Burial
Rhoscrowdder Church	SM90390220	46851	Ecclesiastical
Robeston West/Walwyn's Castle merchant's weight	SM879103	NMW acc. no. 92.12H	Findspot
Southwood Farm stone	SM85982163	Edwards 2016: P141	Findspot
South Hook	SM87220675	99500	Settlement; Industrial; Crop-processing
St Brides burials	SM80211094	94896	Burial
St David's, Caldey	SS14289664	4244	Burial; ?Ecclesiastical
St Davids Cathedral	SM75072541	4348	Ecclesiastical
St Elvis Church	SM81222406	4326	Ecclesiastical; Burial
St Govan's Chapel	SR9670492962	46770	Ecclesiastical
St Ishmael's Church	SM830067	14354	Ecclesiastical; Burial
St Justinian's Chapel	SM72362525	7470	Ecclesiastical; Burial
St Mary's Chapel	SM86110353	7596	Ecclesiastical
St Non's Chapel	SM75072434	46863	Ecclesiastical; Burial
St Tyfanog's, Ramsey	SM703242	2712	Ecclesiastical
Tenby <i>llys</i>	SN13700053	39120	Settlement; <i>Llys</i>
Tenby South Beach brooch	SS1298	PAS: NMGW-DA579E	Findspot
Tenby South Beach coins	SS1399; SS1299	PAS: PUBLIC-88A871; PUBLIC-88DE28	Findspot
Ty Gwyn farm	SM73492738	2633	Burial
Upton Churchfield/Graveyard	SN02150555	3450	Ecclesiastical
Walton West Church	SM86511283	47492	Ecclesiastical
West Angle Bay	SM8516503062	35095	Settlement; Burial
Whitesands Bay	SM7337027230	46864	Burial

Appendix 3: Gwynedd study area sites with evidence for early medieval maritime connections

Note: Grid references from the PAS are given to four figures; more accurate references were known to the author when analysing the findspots but cannot be printed here.

Site	Grid reference	PRN	Site type(s)
Aber	SH659729	4072	?Settlement; ? <i>Llys</i>
Aberdaron Church	SH17322637	3291	Ecclesiastical
Aberffraw	SH354689	3184	Settlement; <i>Llys</i>
Bangor Cathedral	SH5807372052	2305	Ecclesiastical
Bangor hoard	SH5872	2310	Findspot
Berllan Bach	SH5815072103	2371	Burial
Caergybi Church	SH2471782618	6915	Ecclesiastical; Burial
Caernarfon	SH48536240	3089	Settlement; ? <i>Llys</i>
Capel Bronwen	SH3132581954	2058	Burial
Carreg-y-Bwgan stone	SH2979840551	Edwards 2013: CN34	Findspot
Castell, Porth Trefadog	SH2908685903	1	Settlement; Industrial
Cefn Cwmwd	SH4362774157	33501	Settlement; Findspot
Clynnog Fawr	SH41424967	85	Ecclesiastical; Burial
Conwy coin	SH783775	EMC: 2014.0232	Findspot
Deganwy	SH78167945	2814	Settlement; <i>Llys</i>
Dinas fort	SH51906710	3683	?Settlement
Ffriddoedd burials	SH56807175	1432	Burial
Fron burials	SH45657531	2680	Burial
Llanddaniel Fab cast copper-alloy object	SH5067	PAS: GAT- 242150	Findspot
Llandudno Junction hone	SH79707765	2819	Findspot
Llandwrog hoard	SH4454	PAS: NMGW- 038729	Findspot
Llanfachraith Church	SH3131883122	6978	Ecclesiastical
Llanfaes burials	SH6112877520	2579	Burial
Llanfaes <i>llys</i>	SH6045077870	2592	Findspot; ?Settlement; ? <i>Llys</i> ; ?Ecclesiastical
Llanfaglan Church	SH45546068	3102	Ecclesiastical
Llanfair Garth Branan	SH58037227	3182	Burial; ?Ecclesiastical
Llanfair Is Gaer Church	SH5016566024	6986	Ecclesiastical
Llanfairpwllgwyngyll Church	SH5369071200	6988	Findspot; ?Ecclesiastical
Llanfairpwllgwyngyll enclosure	SH5357071160	24788	Settlement; Industrial; Crop-processing

Llangefni Church	SH4580375925	7010	Ecclesiastical
Llangefni Link Road/Coleg Menai Campus	SH47247580	81674	Settlement; Burial
Llanrwst	SH7974061610	7034	Findspot; ?Ecclesiastical
Llanwnda sword pommel	SH4758	PAS: NMGW- 0969C1	Findspot
Nefyn <i>llys</i>	SH308407	6622	?Settlement; ? <i>Llys</i>
Neigwl	SH25303040	1636	?Settlement; ? <i>Llys</i>
Newborough whetstone	SH4246165554	67758	Findspot
Parc Bryn Cegin	SH5927270379	31786	Industrial; Crop- processing
Parc Cybi	SH2564580835	31600	Burial; ?Industrial; ?Crop-processing
Pen-y-Graig	SH3055989472	2040	Burial
Penmon beach coin	?SH6278	PAS: LVPL2174	Findspot
Penmon Church (and possible <i>llys</i>)	SH6303280729	2538	Ecclesiastical; ?Settlement; ? <i>Llys</i>
Pistyll Church	SH3283242320	7062	Ecclesiastical
Pistyll Ty Mawr stone	SH31974181	1276	Findspot
Porth Dafarch	SH2340180085	1776	Burial
Porthamel weight(s)	SH50776756	17185	Findspot
Rhosyr	SH4192865359	899	?Settlement; ? <i>Llys</i>
Rhuddgaer burial	SH44556426	3078	Burial
Rhuddgaer settlement	SH44086388	32809	Settlement; Agricultural activity
St Mary's, Bardsey	SH1201122170	781	Ecclesiastical; Burial
St Tudwal's Island East burials	SH34212591	4009	Burial; ?Ecclesiastical
Tre'r Ceiri	SH3731244655	613	Settlement
Trearddur Bay brooch	SH256790	2011	Findspot
Trefriw	SH780630	6833	?Settlement; ? <i>Llys</i>
Ty'n y Cae stone	SH3125041069	1536	Burial; Findspot
Ty'n y Coed stone	SH42005055	Edwards 2013: CN16	Findspot
Tywyn y Capel	SH2561479003	2001	Burial; Agricultural activity
Ynys Seiriol Monastery	SH6517282165	5017	Ecclesiastical
Ysgol yr Hendre	SH4896562395	34043	Burial; Crop-processing

Appendix 4: Cardigan Bay study area sites with evidence for early medieval maritime connections

Site	Grid reference	PRN	Site type(s)
Aberystwyth coin	SN5881	EMC: 2015.0282	Findspot
Barmouth stones	SH604168	6895; 6897	Findspot
Bryncrug burials	SH61390322	71238	Burial
Bryncrug cropmarks	SH6103	Coflein: 423851; 406318; 420685; 275900	?Settlement
Henfynyw Church	SN44766120	49326	Ecclesiastical
Llanarth Church	SN42285774	49330	Ecclesiastical
Llanbadarn Fawr Church	SN59918101	816	Ecclesiastical
Llanddewi Aberarth Church	SN47666329	50134	Ecclesiastical
Llangynfelyn Church	SN64589218	50147	Ecclesiastical
Llanina Church	SN40495982	50150	?Ecclesiastical
Llanllwchaearn Church	SN38485990	50151	Findspot; ?Ecclesiastical
Llansantffraed Church	SN51256749	50152	Ecclesiastical
Morfa Mawr burnt mounds	SN504654	9792	Agricultural activity
New Quay fishtrap	SN39635965	103606	Fishtrap
Pennal	SH699004	9875	?Settlement
Tal-y-Garreg	SH57400358	1778	?Settlement
Tywyn Church	SH5882000950	7078	Ecclesiastical