Early medieval hilltop and enclosed settlements of Scotland during the first millennium AD

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Abstract

Throughout western and northern Britain and in Ireland fortified settlement played important roles in creating new forms of society in the first millennium AD. Both the archaeological and historical records suggest that the mid 1st millennium AD was a dynamic period, where social, economic and elite culture transformed dramatically. Hilltop settlements and enclosed settlement more generally appear to have played instrumental roles in supporting and maintaining social hierarchies in this period. This chapter discusses the evidence for fortified settlement in early medieval Scotland, outlining the evidence for a diverse range of enclosure and hilltop settlement forms, how these forms changed through time and the types of society that these settlements helped underpin. The evidence draws on a number of important new excavations over the last ten years.

Introduction

For northern Britain the topic of early medieval hilltop settlements is very pertinent as hilltop and enclosed settlements of a variety of forms are one of the few settlements types known in the latter half of the first millennium AD. During the first millennium AD, the geographical area of modern Scotland was partly subsumed within the Roman Empire for periods in the first and second centuries AD, but thereafter contact with the Roman world was through raiding, trading and diplomatic relationships (Hunter 2007). During the Roman Iron Age, very few hilltop settlements are known (though coastal promontory forts are – see below) and from the third century the settlement record in general dramatically falls away with very few settlements or houses of any kind known throughout remainder of the first millennium AD. Nonetheless, from the 5th century AD in particular there was a rise in the construction of hillforts and other forms of enclosed settlement. This chapter will review the types of enclosed sites presently known in Scotland, the functions of these enclosures/settlements and the power structures and historical conditions that led to their rise and demise. A dramatic rise in data in the last decade in particular is beginning to enrich our evidence for this formative period where archaeological evidence has traditionally been thin on the ground.

Scotland from the Roman Iron Age to 10th century AD

The first millennium AD in Scotland and northern Europe more generally stands at the interface between prehistory and history. Many regions remained essentially prehistoric (e.g. Scotland and Scandinavia, while others (e.g. Ireland in the west) saw a flourishing of historical records and written sources. Scotland occupies the challenging end of the scale in which there are few native documents or historical records prior to the 12th century and the records we do have focus on limited areas of present-day Scotland with very sketchy or absent coverage elsewhere. Nonetheless, the 5th century and the following centuries mark a key transition when sources for the societies that lived north of the Roman frontier began to increase and there are some, albeit very limited native sources written within the early medieval communities that occupied Scotland (See Evans 2014; Fraser 2009; Noble and Evans 2019; Woolf 2007). Like other regions such as Ireland and Anglo-Saxon England, the literary sources suggest that this was a transformative period with the emergence of new systems of rulership and social structure, and in northern Britain the 6th century marks a point when references to kings and kingdoms occur in multiple sources that can be cross-referenced indicating a shift towards

lineage-based power systems (See Alcock 2003 for a useful overview). Kings and kingdoms in contrast were not a feature of the Roman Iron Age, at least not in the written sources we have for that period, but an ever-shifting picture of kings and kingdoms dominates the second half of the first millennium AD.

<Insert Figure 1 here>

In Scotland, the historical sources suggest that in the early medieval period there were a multitude of competing social, political and cultural identities (Figure 1). To the west lay the Scots of Dál Riata, Gaelic-speaking peoples with strong connections to Ireland (Campbell 2001); in the southwest of modern Scotland were Brittonic polities; in the southeast, were further Brittonic societies under pressure from the expanding Anglo-Saxon kingdom of Bernicia/Northumbria. In the northeast were the kingdoms of the Picts (See also Woolf 2007: 5, Map I.1). From the late 8th century onwards Viking intrusion and subsequent settlement had a significant impact on all of the existing polities and kingdoms that occupied the landmass of modern Scotland (Woolf 2007: 275–311). By the 10th century major changes in the political geography of mainland Scotland had occurred with the two largest kingdoms – the Picts and the Scots – disappearing, being replaced by the kingdom of Alba, the forerunner of the Medieval kingdom of Scotland. Traditionally the changes in the nature of power and rulership have been difficult to track in Scotland, with the trajectories in Scotland thought to follow that of other, better documented regions: envisaging a shift sometime in the 6th-7th century AD from locally based power to more direct regional and intra-regional control, influenced and stabilised by the adoption of Christianity (e.g. Alcock 2003; Warner 1988: 57). However, the patterns have been difficult to draw out, but the renewed work on defended settlements represents one way in which the material trappings of rulership and the exercise of power can be traced through the first millennium AD.

Hilltop settlements/Defended Enclosures

All of the early medieval societies that occupied the present landmass of Scotland: Picts, Scots, Britons and Anglo-Saxons, constructed defended settlements from at least the 5th or 6th century AD and these sites appear to be deeply implicated in the emergence of new, lineage-based, power structures where warfare, the conquest of land and growing hierarchies allowed the expansion of kingship and kingdoms. However, as noted above tracking these changes has been hampered by the archaeological record of this period. The number of sites known has been traditionally very small (dozens rather than hundreds) and the archaeology of this period has often been described as problematic. The scale of archaeological investigation has also been frustratingly slight until recent years (See Carver 2011).

Key elements of the archaeological record can be outlined. As noted above the settlement record becomes very sparse after the 3rd century AD – roundhouses had dominated the settlement record for over 2000 years, but after the 3rd century settlement of any form is difficult to trace (Hunter 2007, 49). There are upland longhouse settlements in central Scotland dating to the later first millennium AD and stone-built structures known from the northern Isles, but in the lowlands only a handful of structures are known. On the other hand, the burial record increases – after more than a thousand years of very limited burial evidence, we see the widespread establishment of cemeteries, including barrow cemeteries and long-cist cemeteries (e.g. Maldonado 2013; Mitchell and Noble 2017). Memorials to the dead and monumental carved stone monuments are also a frequent and iconic element of the archaeological record with these monuments clearly playing important roles in creating and maintaining new forms of personal and group affiliation in this time of change (e.g. Forsyth 1997; Goldberg 2013: 155–159; Henderson and Henderson 2004; Samson 1992).

The occurrence and re—emergence of hilltop sites and enclosed settlements is also an important element of this period and the study of these has formed a key element of early medieval scholarship for northern Britain and Scotland in particular. Hilltop settlements in particular often form the focus

of any consideration of settlement given the dearth of domestic traces and also because certain defended settlements are referenced in the slim historical literature we have for this period and region. These sources, e.g. the Irish Annals, lives of Saints – e.g. *Vita Columbae*, imply that hilltop settlements and other forms of defended settlement were at the top of the settlement hierarchy. Defended settlements that had contemporary historical or literary references formed the pioneering work of Leslie Alcock on early medieval studies in Scotland with Alcock in the 1970s and 1980s undertaking a series of keyhole excavations at some of these historically documented places, in a programme explicitly aimed at identifying early medieval phases of occupation at these sites (Alcock 1988, 2003; Alcock and Alcock 1990: 216; Alcock *et al.* 1989). More recent work, particularly over the last decade has also substantially fleshed out the picture.

The evidence base

A number of reviews of the evidence have been carried out in recent years (Noble 2016; Noble *et al.* 2013; Ralston 2004) and a welcome upsurge in excavated sites has begun to flesh out our evidence base for hilltop settlements and allied traditions. The evidence for enclosed settlement of the 5th-10th centuries AD can be loosely categorised under the following headings:

Ringforts, Duns and Palisaded Enclosures

<Insert Figure 2 here>

At the smaller end of the scale of early medieval enclosed sites in Scotland are monuments variously classified as 'ringforts', 'duns', or simply 'enclosures' (Figure 2). These can be hilltop situated, but they are also found in a range of other topographic settings. In western Scotland, duns, (normally hilltop or on hillslopes) stone-walled enclosures enclosing areas less than 30m in diameter are known to include early medieval examples of the first millennium AD, but similar monuments also date to the Iron Age. There is also a serious lack of radiocarbon dates for this site type, though for early medieval examples continental imports help pin down the chronology of a small number of sites (Campbell 2007: Table 19). Finds from the galleried stone-walled dun at Ardifuir, Argyll (Figure 2), for example, include E ware suggesting a 6th-7th century AD occupation, but a sherd of Samian pottery as well as the morphology of the site indicate that the enclosure may have been initially constructed and occupied in the early centuries AD. Kildalloig, Kintyre has produced similar evidence. Here a dun, 13–15m in internal diameter, had a probable earlier occupation phase associated with 2nd century AD Roman imports and a later occupation layer produced E ware, glass beads and rotary querns again suggestive of 6th or 7th century phase (Bigwood 1964: 19; Campbell 2007: Table 19). Confirmed or probable later first millennium AD occupation, based on artefactual associations, is recorded at other duns in the region of Argyll, the locus of the kingdom of Dál Riata. Examples include Kildonan (Figure 2), which furnished a penannular brooch and radiocarbon dates of the 8th or 9th centuries AD (Fairhurst 1939; Peltenburg et al. 1984), as well as Dun Fhinn, an unusual sub-rectangular dun (RCAHMS 1971: 83-4), Dùn An Fheurain (Ritchie 1971), Leccamore, Luing (Macnaughton 1893) and Ugadale Point (Alcock and Alcock 1987: 131; Fairhurst 1956) (Figure 2). The notable element shared by all of these Argyll sites with early medieval occupation is that they are small and generally of a different character from the more typical circular duns considered to be solely of Iron Age date which are present in the region (Harding 2012: 168–9).

Smaller enclosed settlements of the character of those found in Argyll are less common elsewhere in Scotland, but in Pictland in the east a number of sites of similar scale have recently been confirmed. However, as in Argyll, there is some difficulty in definitively separating Iron Age examples from early medieval phases of use (some Iron Age sites were reused in the early medieval period) without excavation. In central Scotland in Perthshire there are hundreds of examples of sites known variously as ringforts, homesteads and small walled enclosures of various types (Taylor 1990). Some sites of

this form show only Iron Age use (Atkinson 2016; Strachan 2013), but others such as Queen's View (Figure 2) and Litigan have finds that suggest early medieval phases if not early medieval primary construction (Taylor 1990). The Perthshire sites are usually around 15m in internal diameter, but can extend up to 30m, with stone walls up to 3 or 4m thick. Excavations at Aldclune, Perthshire, showed that Iron Age homesteads were re—used in the early medieval period. One of a pair of homesteads, originally constructed in the last centuries BC or early centuries AD, was re—occupied in the second half of the 1st millennium AD, with a 9th century brooch suggesting that occupation continued or was renewed in the late 1st millennium AD (Hingley *et al.* 1997: illus. 2 and 3). Like the duns of the west these sites in central Scotland occupy a range of topographic positions from hilltops to hillslopes to valley bottoms.

Sites similar to Aldclune and some of the other larger Perthshire homesteads/ringforts also occur in northeast Scotland in Aberdeenshire, a region which would also have been part of Pictland. Here enclosures of a similar scale to the homesteads/ringforts of Perthshire have recently been dated to the early medieval period (Cook 2011a, 2011b). Examples investigated include Maiden Castle on the slopes of Bennachie (Cook 2011a) (Figure 2), which featured remains of at least two successive enclosures: here a thick stone—walled enclosure of around 20m in internal diameter was enveloped by perhaps successive phases of surrounding ramparts and ditches (attaining a maximum of 40m in overall diameter). Other sites dated to this period include a bivallate fort at Cairnmore (Figure 2), in western Aberdeenshire and, potentially, a series of surveyed, but as yet largely unexcavated, sites in the Don Valley of central Aberdeenshire (Cook 2011b). Topographically, these sites are all generally hillslope locations rather than hilltop. Elsewhere in Pictland there are also re-used Iron Age enclosures, including duns. For example, excavations at Dun Ardtreck on Skye recovered a sherd of E ware suggesting a 6th or 7th century AD phase of occupation there (MacKie 2000). Dun Ardtreck consists of a central oval thick stone-walled dun around 11-14m in diameter within an outer enclosure wall that encloses around 0.07ha.

Palisaded Enclosures

<Insert Figure 3 here>

Palisaded enclosures, so far only identified in lowland locations rather than hilltops, are a rare, but important category of defended enclosure constructed in early medieval Scotland. The most recently investigated example is an elaborate enclosure in Pictland at Barflat, Rhynie, Aberdeenshire, which combined palisaded elements with a ditched (and presumably banked) earthwork (Noble et al. 2013) (Figures 2 and 3). The enclosure and landscape around, which includes a contemporary cemetery, has a series of eight Pictish carved symbol stones associated. These stones show a variety of human and animal figures, and abstract symbols (Gondek and Noble 2011; RCAHMS 2007: 119-122). University of Aberdeen and University of Chester led excavations from 2011-17 identified that one of the symbol stones, the Craw Stane carved with a salmon and a symbol known as a 'Pictish beast' that still stands in situ was enclosed by two ditches and a third outer timber-defined enclosure measuring c.60 m in maximum diameter. The outer enclosure consisted of a deep foundation trench (up to 1.5 m) which held huge oak planks and was flanked by an inner setting of postholes. This arrangement probably defined an elaborate timber-framed rampart or enclosing wall of some kind, perhaps with a wall-walk. The construction of this outer enclosure appears to be a secondary phase. Inside the enclosures a series of beam slots, postholes and finds-rich layers suggest the presence of settlement and activity inside associated with a number of timber buildings. The finds at the site include the northernmost examples of Late Roman amphorae (B ware) in the world, extensive metalworking evidence including moulds, ingots and tools, and glass from Gallic workshops (Noble et al. 2013, 1142–1143; Noble et al. 2019). The radiocarbon dating and the artefactual evidence from Rhynie

suggest this complex emerged in the late fourth century and came to an end in the sixth century AD. Lowland palisaded and ditched enclosures appear to have been a later 1st millennium AD phenomenon in Pictland too, with a truncated 9th to 10th century AD example known from Perthshire at Upper Gothens (Barclay 2001). A number of the more developed hillforts in Pictland may have also begun as palisaded enclosures (e.g. Dundurn in Perthshire – see below).

Palisaded enclosures may have also been constructed in areas occupied by Anglo-Saxon groups in southeast Scotland. For example, at St Abb's Head, Scottish Borders, at a site that may be referred to in various Anglo-Saxon sources as *Colodesbyrig/Colodaesburg*, Leslie Alcock found two lines of palisade, one burnt, under a complex rampart enclosing a coastal promontory. The site may have been a secular fortification that later became a monastery (Alcock *et al.* 1986: 262–4). Another Anglian settlement in the Borders at Whitmuirhaugh, Sprouston, is associated with two different palisaded enclosures identified by aerial photographs, one of which is around 0.72 hectares in extent, but neither is directly dated (Smith 1991: 272). A confirmed early medieval palisade, possibly cutting off the promontory of land, did however form part of the defence of Phase 8 of the Anglian royal settlement at Castle Park, Dunbar, East Lothian (Perry 2000: 59).

Coastal promontory forts

<Insert Figure 4 here>

Archaeological studies have also revealed that a number of coastal promontory forts in Scotland date to the early medieval period (Figure 2). The most sustained archaeological work has been along the Moray Firth coast of northeast Scotland where a number of Pictish sites show evidence of the use or construction of defended enclosures in the 1st millennium AD. The most spectacular example of these defended coastal settlements is undoubtedly Burghead (Figure 2 and 4). The fort appears to have covered an area of around 5.5 hectares – the largest early medieval site known in Scotland (Alcock 2003: 193; Foster 2004: 43; Oram 2007; Small 1969; Young 1891, 1893). The early medieval archaeology at Burghead is rich despite the fact that a large portion of the fort was destroyed in the early 19th century with the construction of a planned village and harbour over the remains of the fort (see Oram 2007 for a full historiography). Excavation at the site has had a long history, extending back to the 1860s, with antiquarian investigation focusing on the impressive timber-laced/framed ramparts that extend up to around 8m thick and 6m high (MacDonald 1862: 348; Young 1891: 189). The finds of up to 30 carvings of bulls and a fascinating cistern structure are well-known finds from the 19th century investigation and destruction of Burghead (Oram 2007; Ralston 2004; RCAHMS 2007: 104; Young 1890, 1891, 1893). Investigation continued into the 20th century, but unfortunately the largest campaign of investigation by Small has never been published (Small 1969). University of Aberdeen led excavations from 2015 and due to continue till 2022 have greatly enriched our understanding of Burghead with multiple buildings in the interior of the fort identified and the complexity of the defences underlined with investigations at the seaward end of the fort revealing a timber framed wall still standing 3m high. Over 40 radiocarbon dates are now available showing that activity at the site began sometime in the fifth century AD, and endured until the Viking Age.

The evidence from Burghead can be set alongside that from a limited number of further examples of promontory forts from northeast Scotland with secure evidence for construction or use in the second half of the first millennium AD; these include much more modest forts such as Green Castle, Portknockie on the Banffshire coastline and re-used Iron Age sites such as Cullykhan (Greig 1970, 1971; Ralston 1980, 1987, 2004). Elsewhere in Scotland promontory forts are less well-known, but there are a number of sites that might date to the early medieval period. In the south these include Isle Head, Whithorn, one of the most heavily defended promontory forts of southwest Scotland that stands at the entrance to the harbour at the Isle of Whithorn (Figures 2). Toolis and Bowles (2017: 145) suggest this was a high-status counterpoint to the major ecclesiastical settlement of Whithorn. In the

far north of Scotland few promontory forts have been excavated, but high status early medieval finds and structures are known from promontory and stack sites such as the Brough of Birsay and Brough of Deerness, Orkney [2840] (Barrett and Slater 2009; Curle 1982; Morris 1996), though whether these were enclosed by ramparts remains to be established. These latter sites became Viking power centres, by the 9th or 10th centuries AD.

Promontory forts are one of the few enclosed site types of Scotland that do have a clear currency extending back into the Roman Iron Age. University of Aberdeen excavations at Dunnicaer, Aberdeenshire, have confirmed occupation centring on the second to fourth century AD at a heavily eroded promontory fort, the findspot of five carved Pictish symbol stones in the 19th century. The stones appear to have come from the rampart of the fort and the excavations revealed evidence for settlement inside including multiple hearths. A number of Roman finds came from the occupation layers, including Samian pottery and sherds of Roman glassware, finds that are very rare this far north. A number of other promontory forts on the east coast of Scotland have dates in the early centuries AD, for example Blockiehead, Aberdeenshire and Barns Mill, Fife.

Complex hillforts

The most famous early medieval enclosures in Scotland are the hilltop sites, especially those identified as 'nuclear' hillforts (Figure 2). The legitimacy of the category 'nuclear fort' is questionable given the variety of forms, but in general these sites are characterised by a complex hierarchical layout, with a series of terraces and enclosures usually occupying different components of craggy hills at different heights and generally surrounding a central (and higher) enclosure that was of seemingly greater significance (Figure 2). This site type was first identified and explored by Stevenson (1949). The best known example is Dunadd in western Scotland, which may be described as a multivallate fort on a prominent rocky hill, and has been identified as a principal royal seat of Dál Riata (Lane and Campbell 2000) (Figure 2). Like many of the smaller sites described above, the early medieval fort of Dunadd was previously occupied in the Iron Age (Lane and Campbell 2000: 89). A new phase of settlement on the summit occurred from the 5th and 6th centuries AD and by the late 6th or 7th centuries AD a series of lower enclosures had been constructed to create a complex multivallate fort that was occupied at least until the 9th century AD. The excavations at Dunadd have produced one of the most extensive metalworking assemblages known from early medieval Britain, with evidence for gold and silver working, hundreds of crucible fragments and moulds for brooches and other high-status objects (Lane and Campbell 2000: 98-148). Dunadd also has the largest assemblage of E ware known from Scotland. Other examples of identified complex early medieval forts in the west include Dunollie and Dunaverty, both sites referenced in early sources (See Alcock and Alock 1987).

Other examples of nuclear hillforts in Pictland include Dundurn, Perthshire, a site mentioned in the *Annals of Ulster* as the location of a siege in the late 7th century (Figure 2). At Dundurn, Alcock's keyhole excavations revealed a prominent summit citadel enclosure on top of a craggy hill overlooking the upper Earn river valley, with a series of lower ramparts enclosing lower terraces of the hill (Alcock *et al.* 1989). The stone-built ramparts appear to have replaced earlier timber defences. A further Pictish example of a complex multivallate fort was Clatchard Craig, Fife, a site now unfortunately completely destroyed by quarrying (Figure 2). The defences on Clatchard Craig comprised a hilltop citadel that had been enclosed by no less than seven ramparts covering an area of around 2 hectares (Close-Brooks 1986). Recent radiocarbon dates from this site suggest the fort was constructed and destroyed in a relatively short period during the 7th century AD. There are a number of further possible examples of complex hilltop forts in Pictland including sites such as East Lomond Hill in Fife and King's Seat, Dunkeld, Perthshire, both currently under excavation (Driscoll 2011: 256; Feachem 1955) (Figure 2). Others include The Mither Tap o' Bennachie, in Aberdeenshire, where small-scale excavations conducted as part of path improvement by Forestry Commission Scotland and recent work by the University of Aberdeen has confirmed occupation in the 1st

millennium AD, with the focus of occupation in the 7th and 8th centuries cal AD (Atkinson 2006; Feachem 1955: 76; RCAHMS 2007: 105–107; Shepherd 1993) (Figure 2).

Other major hillforts in use in the first millennium AD in Pictland also utilised the surviving remains of earlier, Iron Age forts, such as Craig Phadrig, Inverness (Figure 2), where finds of E ware and a fragment of a mould for an escutcheon from a hanging bowl, as well as a radiocarbon date from an occupation layer of the 5th to 6th century AD, all reveal an early medieval phase of use (Small and Cottam 1972). Recent work following storm damage also revealed a palisade dug into the top of the earlier rampart dating to the 5th to 6th century AD (Peteranna and Birch 2019). In the Brittonic areas of southwest Scotland there are similar sites. Trusty's Hill is an early medieval fort in Galloway, southwest Scotland (Toolis and Bowles 2017: 8-9) (Figure 2). Recent excavations have suggested that early medieval occupation began here around the early 6th century AD, with this occupation argued to have ended dramatically with the destruction of the fort in the middle of the 7th century at the latest. Alt Clut, Dumbarton Rock, may have been another complex fort, but any early medieval enclosing elements have been seriously compromised by the later castle built on the double-peaked volcanic plug that guards the confluence of the Clyde and the Leven rivers (Alcock and Alcock 1990). Alcock's excavations here indicated early medieval occupation and some evidence for defences but the survival of early deposits was limited. Similar sites may be identifiable in southeast Scotland and include forts such as Dalmahoy Hill, Midlothian, and Moat Knowe, Buchtrig, Roxburghshire (Harding 2012: 170) (Figure 2). Dumyat Hill in Stirlingshire (Feachem 1955: 77), and Castle Rock, Edinburgh (Driscoll and Yeoman 1997: 228), also seem likely contenders to have been early medieval forts. Other early medieval forts have also been identified in southern Scotland. A single rampart at the Brittonic hillfort of Mote of Mark, Dumfries and Galloway, encloses an area around 0.2ha (Laing and Longley 2006: 1) (Figure 2). The site produced a large assemblage of imported pottery (55 sherds of E ware) and glass, along with moulds for making brooches, personal adornments and horse-gear.

Discussion

Chronology

<Insert Figure 5 here>

As highlighted above there are relatively few hilltop settlements or any form of enclosed settlement from the Roman Iron Age, but new discoveries such as Dunnicaer and the dates from other promontory forts are slowly changing the picture, suggesting some smaller coastal sites were occupied in this period (Figure 5). Dunnicaer was at its height in the 3rd and 4th centuries AD and other sites such as the enclosure complex at Rhynie also began in the Late Roman Iron Age in the 4th century AD. There are a number of sites whose dates fall firmly in the period 5th to 6th/early 7th century AD (Figure 5). These include generally fairly modest sites such as the ringforts at Cairnmore and Maiden Castle in northeast Scotland, but a number of the complex hilltop settlements such as Dundurn, Dunadd, Doune of Relugas and Clatchard Craig have the odd date suggesting early activity in a similar period prior to the construction of more complex defences and more intensive settlement. Mote of Mark, an elite hilltop settlement of southwest Scotland has dates centring on the fifth and sixth centuries, but there are few dates and activity may well have extended later. The majority of sites have the bulk of radiocarbon determinations post-dating c.600 AD and these are generally the more complex, larger and more heavily defended hilltop sites such as Clatchard Craig, Alt Clut, Mither Tap, Dundurn, Dunollie and Craig Phadrig (Figure 5). The largest early medieval site thus far identified, the promontory fort at Burghead seems to have major defences covering an area of over 5ha in the 7th to 8th centuries cal AD. Around the 6th to early 7th century there appears to be overlap in site types and sizes with ringforts such as Cainrmore and Maiden Castle seemingly in use in same period that the larger and more complex hilltop settlements were being consolidated. The increasing focus on the larger and more elaborate enclosures in the later centuries of the first millennium AD can be related to the appearance in certain parts of Scotland more consolidated kingdoms. For example, in Pictland in eastern Scotland the Pictish over-kingship of Fortriu appears to have been a late 7th century development (Woolf 2006: 193). A recent surprise of the more concerted dating programmes of recent years is how late occupation at some hilltop sites went. Previous commentators had suggested that the tradition of building forts declined in the late first millennium AD as power centres shifted to lowland sites (e.g. Cook 2013: 85; Driscoll 1998: 169; Ralston and Armit 2003: 225). The late dates compiled here demonstrate that fort defences were created into the late first millennium AD and may have continued to be occupied and used into the 11th century AD, a period when the first castle sites began to emerge in Britain through Norman influence.

Frequency and scale

One important thing to note about early medieval hilltop settlements and related traditions is that despite the growing corpus and a number of new discoveries the overall numbers of identified sites remain small. Hundreds of hillforts and enclosed settlements have been excavated in Scotland but very few can be attributed to the early medieval period – Iron Age sites, particularly of the period c.400-100 cal BC are much more frequently identified. Another common characteristic of early medieval hilltop sites and related promontory forts, palisaded enclosures and ringforts is how generally small these were compared to earlier, prehistoric enclosed sites, a phenomenon also found in Ireland and to an extent Wales and western England (see Seaman and O'Sullivan this volume). Early medieval enclosed sites in Scotland rarely exceed one or two hectares in total size and the modesty of these enclosure forms is in stark contrast to the much larger prehistoric forts with large middle Iron Age forts of Scotland at times exceeding 5-10 hectares or more. This might imply that different social formations influenced the phenomenon of enclosure in the prehistoric and in the early medieval periods, with rulership that was based on the immediate lineage of an individual rather than perhaps the more communal (though none the less complex) kinship links of a wider social group (a tribus, civitas or gens (cf. Moore 2011: 339–40), perhaps lying at the heart of this change to smaller sites. It is perhaps only with the more consolidated over-kingships and regional kingdoms of the c.7th century onwards in Scotland that fortified sites began to be identified as signifying wider social and ethnic identities in the early medieval period, but even then the larger sites such as the nuclear forts of Scotland remained relatively modest in size, generally suitable for containing a king, a warband and a limited clientship rather than larger population aggregations.

In terms of scale and defences, it seems likely that there was a general link between the complexity of defences and the status of the site. The few contemporary historical references we have for Scotland, for example, seem to identify enclosed sites that are likely to have been at the larger end of the scale – the nuclear forts at Dunadd and Dundurn are referenced on more than one occasion in annalistic accounts, whereas the smaller enclosures, hill or promontory forts are rarely mentioned in the sources. In Ireland, where historical sources are much more common, it is clear that the most complex enclosures were the preserve of the highest grades of kings as it is stated in the law tracts implying there was also a general concordance between complexity of defences and status: the Irish law text *Críth Gablach* stresses the importance of a king's fort having more than a single surrounding bank for example (MacNeill 1923). Certainly in Scotland, the richest assemblages of material culture do tend to come from theearly medieval forts with complex defences such as Dunadd. The link between form and hierarchy in Scotland also seems explicitly referenced in the morphology of the largest sites – both nuclear forts and occasionally promontory forts such as Burghead have hierarchical layouts with the highest status part of the site elevated above other enclosures.

Social roles

There is little doubt that hilltop settlements and enclosed sites were the focus of elite power and identity. For Scotland, sites such as Dundurn, Dunadd and Alt Clut, Dumbarton, are some of the few sites mentioned in the limited historical sources for the region. Due to this fact, from the early days of early medieval archaeology in Scotland these have been identified and interpreted as chiefly or kingly residences and the seats of *potentates* – important landholding families (e.g. Alcock 1988; Feachem

1955; Stevenson 1949). Certain sites seem to have been deeply implicated in kingship – with rulership over particular forts explicitly referenced in relation to particular kings and kingdoms. This implies that the construction and control of forts was a central means of underlining, materializing and enacting power. Enclosure was also clearly one way in which the bonds between the ruler and the ruled were fused. Irish law tracts, for example, state that clients of kings and lords were required to perform a fixed amount of labour, which included building the rampart of a fort (Kelly 1988: 30). Thus, as Gleeson notes, those involved in the construction of forts, whether as followers, prisoners or slaves of a powerful leader, were actively taking part in creating the bonds of clientship that formed the basis of the hierarchical societies that characterized the early medieval period (Gleeson 2012: 18).

The marginal nature of some of the higher hilltop sites could suggest they were in some cases places of seasonal assembly. Nonetheless, certain sites are implied to have been major settlements – Bede in AD 731 referred to Alt Clut, Dumbarton, as a strongly defended political centre - civitas munitissima Brettonum quae vocatur Alcluith, but also refers to it as an urbs – town/city – urbs Alcluith (HE: I.11 and HE: I.12). However, the hilltop settlements or enclosed settlements outlined in this chapter have few confirmed buildings or structures within. The lack of ground plans of buildings within early medieval forts in Scotland is a common feature - no clear internal structures were identified in successive excavations at Dunadd for example. Elsewhere modest structures have been found at Mote of Mark (traces of a 4m by 8.5m rectangular building built against the northern rampart) and at Clatchard Craig (a floor layer and hearth suggesting a rectangular structure measuring 9m by 5m (Close-Brooks 1986: 145), but the settlement remains thus far fail to match the Bede's description of the similar site at Dumbarton as a town, though we do not know for sure what these Latin terms meant in the 8th century when Bede was writing. At Rhynie a series of buildings have been identified, but here it seems likely that non-earthfast timbers, turf and other organic materials, made up the superstructure of these buildings as their ground plans as recognized archaeologically are only partial. Recent work at sites like Dunnicaer and Burghead has also began to flesh out the architectural details of the structures and layout of the buildings within these sites and again shows that the archaeological traces of buildings are likely to be difficult to identify without good preservation conditions. As well as being settlements themselves, in Scotland it is clear that major fortified centres also fitted into a wider settlement hierarchy, with satellite elite settlements in close proximity to others. Within the environs of Dunadd, for example, the crannogs (lake-side dwellings) at Loch Glashan and Ederline were located 10km and 15km to the east and northwest respectively of the fort. These were occupied in the same period as Dunadd, with both receiving imports of E ware, most likely redistributed from Dunadd itself (Campbell 2007: Table 19; Crone and Campbell 2005: 56-63).

Other indicators of status and the exercise of power at these fortified sites are the occurrence of large-scale evidence for crafting, long-distance trade and the presence of carved stone monuments. An obvious indicator of status at early medieval enclosures in Scotland is the presence of Mediterranean and continental imports and of metalworking (Campbell 2007: 123–4). Many of the excavated hilltop and other enclosed sites have produced extensive evidence for imports, though the numbers tend to be small in contrast to sites in southwest England, from where the trade is likely to have disseminated. Sites like Dunadd, Mote of Mark and Rhynie also have abundant evidence for craftworking, particularly metalworking. It is likely that the objects which were produced at these sites were redistributed by the elites at the site to cement social relations with their followers, thereby acting as means of creating networks of affiliation and at the same time enhancing social differentiation and the elite control of resources (e.g. Campbell 2007: 116; Nieke 1993).

One feature worthy of comment in both Ireland and Scotland is the ways in which art, monumentality, and unusual material culture were also used to highlight the pre-eminence of certain enclosed sites. In Scotland iconography clearly played a part in materializing the significance and symbolic weight of certain locations. Rock carvings of a boar, a footprint, an ogham inscription and a rock cut basin at Dunadd have been argued to have been involved in inauguration ceremonies (Lane and Campbell 2000: 251); and similar interpretations have recently been proposed for carvings at Trusty's Hill (Toolis and Bowles 2017: 83–102). Carved symbol stones including an axe-carrying human-like

figure stood at the entranceway of the enclosure complex at Rhynie (Noble $et\ al.\ 2019$) (Figure 3). Through architectural devices such as the placement of sculpture those overseeing the construction of these fortified enclosures appear to have been attempting to use material culture and architecture to foreground the exceptional qualities of places that were intimately bound into the structure and hierarchy of early medieval society. This seems to be a feature of both pre-Christian and Christian contexts. The major promontory fort at Burghead for example has a series of bull carvings that may relate to an early (and possibly pagan) phase of the site, but there is also an important collection of early Christian sculpture including fragments of cross-slabs and a shrine which indicate the inclusion of a church within the fort in the c.8th to 10th century phase of the site (Noble and Evans 2019: 46–47, 54–55). Clearly, ritual, whether pagan or Christian (or hybridisations), formed an important element of political authority and the legitimisation of rulership at these central places.

Conclusions

The landscapes and architecture of power and governance connected to the developing kingdoms of early medieval Scotland appear to have been underpinned by the construction and evolution of hilltop and other forms of defended settlement. There is increasing evidence for the construction of these sites during the Roman Iron Age, but the 5th century seems to mark a key transition when the number, diversity and scale of these sites dramatically increases. In this respect, Scotland follows other regions such as Ireland, western Britain and Wales, and many regions of the European mainland (See papers in Christie and Herold 2016) where hilltop and defended settlements played a role in the creation and maintenance of the Late Iron Age/migration period/early medieval world. In the second half of the first millennium AD hilltop settlements have dominated the study of this period in Scotland, but new work is beginning to indicate the importance of other categories of sites and flesh out the number of identified examples. Here, fieldwork on a larger scale than conducted previously and the routine use of radiocarbon dating has greatly aided the identification of an increasing dataset.

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Bibliography

Primary sources

HE = Colgrave, B. and R.A.B. Mynors. (eds and trans.) 1969. *Bede's Ecclesiastical History of the English People*. Oxford: The Clarendon Press.

Secondary sources

Alcock, L. 1988. The activities of potentates in Celtic Britain, AD 500–800: a positivist approach, in S.T. Driscoll and M.R. Nieke (eds) *Power and Politics in Early Medieval Britain and Ireland*: 22–46. Edinburgh: Edinburgh University Press.

Alcock, L. 2003. *Kings and Warriors, Craftsmen and Priests in Northern Britain AD 550–850*. Edinburgh: Society of Antiquaries of Scotland.

Alcock, L. and E.A. Alcock 1987. Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84: 2, Excavations at Dunollie Castle, Oban, Argyll, 1978. *Proceedings of the Society of Antiquaries of Scotland* 117: 119–147.

Alcock, L. and E.A. Alcock 1990. Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84. 4: excavations at Alt Clut, Clyde Rock, Strathclyde, 1974–75. *Proceedings of the Society of Antiquaries of Scotland* 120: 95–149.

Alcock, L., E.A. Alcock and S.M. Foster 1986. Reconnaissance excavations of Early Historic fortifications and other royal sites in Scotland, 1974–84: 1, Excavations near St Abb's Head, Berwickshire, 1980. *Proceedings of the Society of Antiquaries of Scotland* 120: 255-79.

Alcock, L., E.A. Alcock and S.T. Driscoll 1989. Reconnaissance excavations on Early Historic fortifications and other royal sites in Scotland, 1974–84. 3: excavations at Dundurn, Strathearn, Perthshire, 1976–77. *Proceedings of the Society of Antiquaries of Scotland* 119: 189–226.

Atkinson, J.A. 2006. *Mither Tap Fort, Bennachie, Aberdeenshire: Results of an Archaeological Watching Brief.* Edinburgh: Headland Archaeology, Unpublished Data Structure Report.

Atkinson, J.A. 2016. Ben Lawers: An archaeological landscape in time. *Scottish Archaeological Internet Reports* 62. http://archaeologydataservice.ac.uk/archives/view/sair/contents.cfm?vol=62 [Accessed 1 March 2020].

Barclay, G. J. 2001. The excavation of an early medieval enclosure at Upper Gothens, Meikleour, Perthshire. *Tayside and Fife Archaeological Journal* 7: 34–44.

Barrett, J.H. and A. Slater 2009. New excavations at the Brough of Deerness: Power and religion in Viking Age Scotland. *Journal of the North Atlantic* 2: 81–94.

Bigwood, W.F.L. 1964. Dun discovery Glenramskill, Campbeltown. *Discovery and Excavation in Scotland* 1964: 18–19.

Campbell, E. 2001. Were the Scots Irish? Antiquity 75: 285–292.

Campbell, E. 2007. *Continental and Mediterranean Imports to Atlantic Britain and Ireland, AD 400–800.* York: Council for British Archaeology, Research Report 157.

Carver, M. 2011. Lost, found, repossessed or argued away – the case of the Picts. *Antiquity* 85: 1479–83.

Christie, N. and H. Herold (eds.) Fortified Settlements in Early Medieval Europe: Defended Communities of the 8th-10th Centuries. Oxford: Oxbow Books.

Close-Brooks, J. 1986. Excavations at Clatchard Craig, Fife. *Proceedings of the Society of Antiquaries of Scotland* 116: 117–184.

Cook, M.J. 2011a. Maiden Castle, Insch, Aberdeenshire: choice and architecture in Pictland. *Tayside and Fife Archaeological Journal* 17: 25–35.

Cook, M.J. 2011b. New evidence for the activities of Pictish potentates in Aberdeenshire: the hillforts of Strathdon. *Proceedings of the Society of Antiquaries of Scotland* 141: 207–229.

Cook, M.J. 2013. Open or enclosed: settlement patterns and hillfort construction in Strathdon, Aberdeenshire, 1800 bc—ad 1000. *Proceedings of the Prehistoric Society* 79: 327–52.

Crone, A. and E. Campbell 2005. A Crannog of the 1st Millennium AD: Excavations by Jack Scott at Loch Glashan, Argyll, 1960. Edinburgh: Society of Antiquaries of Scotland.

Curle, C.L. 1982. *Pictish and Norse Finds from the Brough of Birsay 1934–74*. Edinburgh: Society of Antiquaries of Scotland Monograph Series.

Driscoll, S.T. 1998. Political discourse and the growth of Christian ceremonialism in Pictland, the place of the St Andrews Sarcophagus, in S.M. Foster (eds.) *St Andrews Sarcophagus: A Pictish Masterpiece and its International Connections*: 168–78. Dublin: Four Courts Press.

Driscoll, S.T. 2011. Pictish archaeology: persistent problems and structural solutions, in S.T. Driscoll, J. Geddes and M.A. Hall (eds) *Pictish Progress: New Studies on Northern Britain in the Early Middle Ages. Series: The Northern World*: 245–280. Leiden: Brill.

Driscoll, S.T. and P. Yeoman 1997. *Excavations within Edinburgh Castle in 1988–91*. Edinburgh: Society of Antiquaries of Scotland, Monograph 12.

Evans, N. 2014. A Historical Introduction to the Northern Picts. Aberdeen: University of Aberdeen.

Fairhurst, H. 1939. The galleried dun at Kildonan Bay, Kintyre. *Proceedings of the Society of Antiquaries of Scotland* 73: 185–228.

Fairhurst, H. 1956. The stack fort on Ugadale Point, Kintyre. *Proceedings of the Society of Antiquaries of Scotland* 88 (1954-56): 15–21.

Feachem, R.W. 1955. Fortifications, in F.T. Wainwright (ed.) *The Problem of the Picts*: 66–86. Edinburgh: Nelson.

Forsyth, K. 1997. Some thoughts on Pictish symbols as a formal writing system, in D. Henry (ed.) *The Worm, the Germ, and the Thorn*: 85–98. Balgavies: Pinkfoot.

Foster, S.M. 2004. Picts, Gaels and Scots. London: Batsford/Historic Scotland.

Fraser, J.E. 2009. From Caledonia to Pictland: Scotland to 795. Edinburgh: Edinburgh University Press.

Gleeson, P. 2012. Constructing kingship in early medieval Ireland: power, place and ideology. *Medieval Archaeology* 56: 1–33.

Goldberg, M. 2013. Ideas and ideology, in D. Clarke, A. Blackwell and M. Goldberg (eds) *Early Medieval Scotland: Individuals, Communities and Ideas*: 141–204. Edinburgh: National Museums Scotland.

Gondek, M. and Noble, G. 2011. Together as one: the landscape of the symbol stones at Rhynie, Aberdeenshire, in S. Driscoll, J. Geddes and M. Hall (ed.) *Pictish Progress: New Studies on Northern Britain in the Early Middle Ages*: 95–110. Leiden: Brill.

Greig, J.C. 1970. Excavations at Castle Point, Troup, Banffshire. *Aberdeen University Review* 43: 274–283.

Greig, J.C. 1971. Excavations at Cullykhan, Castle Point, Troup, Banffshire. *Scottish Archaeological Forum* 3: 15–21.

Harding, D. 2012. Iron Age Hillforts in Britain and Beyond. Oxford: Oxford University Press.

Heidinga, H.A. 1990. From Kootwijk to Rhenen: in search of the elite in the central Netherlands in the Early Middle Ages, in J.C. Besteman, J.M. Bos and H.A. Heidinga (eds) *Medieval Archaeology in the Netherlands. Studies Presented to H.H. van Regteren Altena (Studies in Prae- en Protohistorie 4):* 9–40. Amsterdam, Assen and Maastricht: Universiteit van Amsterdam.

Henderson, G. and I. Henderson 2004. *The Art of the Picts: Sculpture and Metalwork in Early Medieval Scotland*. London: Thames & Hudson.

Hingley, R., H. Moore, J. Triscott and G. Wilson 1997. The excavation of two later Iron Age homesteads at Aldclune, Blair Atholl, Perth and Kinross. *Proceedings of the Society of Antiquaries of Scotland* 127: 407–466.

Hunter, F. 2007. *Beyond the Edge of the Empire: Caledonians, Picts and Romans*. Rosemarkie: Groam House Museum.

Kelly, F. 1988. A Guide to Early Irish Law. Dublin: Dublin Institute for Advanced Studies.

Laing, L. and D. Longley 2006. *The Mote of Mark: A Dark Age Hillfort in South-West Scotland*. Oxford: Oxbow.

Lane, A. and Campbell, E. 2000. Dunadd: An Early Dalriadic Capital. Oxford: Oxbow.

MacDonald, J. 1862. Notes on further excavations at Burghead. *Proceedings of the Society of Antiquaries of Scotland* 27: 86–91.

MacKie, E. 2000. Excavations at Dun Ardtreck, Skye in 1964 and 1965. *Proceedings of the Society of Antiquaries of Scotland* 130: 301–411.

Macnaughton, A. 1893. Notes on further excavations of the South Fort, Luing, Argyllshire. *Proceedings of the Society of Antiquaries of Scotland* 27 (1892-93): 375–80.

MacNeill, E. 1923. Ancient Irish law: the law of status or franchise. Proceedings of the Royal Irish Academy 36: 265–315.

Maldonado, A. 2013. Burial in early medieval Scotland: new questions. *Medieval Archaeology* 57: 1–34.

Mitchell, J. and G. Noble 2017. The monumental cemeteries of northern Pictland. *Medieval Archaeology* 61, pp. 1–40.

Moore, J. 2011. Detribalizing the later prehistoric past: Concepts of tribes in Iron Age and Roman studies. *Journal of Social Archaeology* 11: 334–360.

Morris, C. 1996. *The Birsay Bay Project Vol 2: Sites in Birsay Village and on the Brough of Birsay, Orkney*. Durham: University of Durham.

Nieke, M.R. 1993. Penannular and related brooches: secular ornament or symbol in action?, in J. Higgitt and R.M. Spearman (eds) *The Age of Migrating Ideas: Early Medieval Art in Northern Britain and Ireland*: 128–134. Edinburgh: National Museums Scotland.

Noble 2016. Fortified Settlement and the Emergence of Kingdoms in Northern Scotland in the First Millennium AD. in N. Christie and H. Herold (eds.) Fortified Settlements in Early Medieval Europe: Defended Communities of the 8th-10th Centuries: 26–36. Oxford: Oxbow Books.

Noble, G and Evans, N 2019. *The King In the North: The Pictish Realms of Fortriu and Ce*. Edinburgh: Birlinn.

Noble, G., M. Gondek, E. Campbell and M. Cook 2013. Between prehistory and history: the archaeological detection of social change among the Picts. *Antiquity* 87: 1136–1150.

Noble, G, M. Gondek, E. Campbell, N. Evans, D. Hamilton, D and S. Taylor. 2019. A Powerful Place Of Pictland: Interdisciplinary Perspectives On A Power Centre of the 4th to 6th Centuries AD. *Medieval Archaeology*. 63, 59–64.

Noble, G. and J. O'Driscoll 2019. Fortified settlement in early medieval Northern Britain and Ireland, in G.Lock and I.B.M. Ralston (eds.). Hillforts: Britain, Ireland and the Nearer Continent: Papers from the Atlas of Hillforts of Britain and Ireland Conference, June 2017: 97–116. Oxford: Oxbow.

Oram, R. 2007. Capital tales or Burghead bull?, in S. Arbuthnot and K. Hollo (ed.) *A Grey Eye Looks Back: A Festschrift in Honour of Colm Ó Baoill*: 241–62. Clann Tuirc: Ceann Drochaid.

Peltenburg E.J., L. Barnetson and M. Turner 1984. Kildonan dun (Campbeltown p). *Discovery and Excavation in Scotland* 1984: 23.

Perry, D.R. 2000. *Castle Park, Dunbar: Two Thousand Years on a Fortified Headland*. Edinburgh: Society of Antiquaries of Scotland Monograph 16.

Peteranna, M. and S. Birch 2018. Storm damage at Craig Phadrig Hillfort, Inverness: results of the emergency archaeological evaluation. *Proceedings of the Society of Antiquaries of Scotland* 148: 61–81.

Ralston I.B.M. 1980. The Green Castle and the promontory forts of north—east Scotland. *Scottish Archaeological Forum* 10: 27–40.

Ralston, I.B.M. 1987. Portknockie: promontory forts and Pictish settlement in the North–East, in A. Small (ed.) *The Picts: A New Look at Old Problems*: 15–26. Dundee: University of Dundee.

Ralston, I.B.M. 2004. *The Hill-forts of Pictland Since 'The Problem of the Picts'*. Rosemarkie: Groam House Museum.

Ralston, I.B.M. and I. Armit 2003. The Early Historic Period: an archaeological perspective, *in* K.J. Edwards and I.B.M. Ralston (eds.) 2003 *Scotland After the Ice Age: Environment and Archaeology*, 8000 BC to AD 1000: 217–40. Chichester: John Wiley & Sons.

RCAHMS Royal Commission on the Ancient and Historical Monuments of Scotland 1971. *Argyll. An Inventory of the Ancient Monuments, Volume 1: Kintyre.* Edinburgh: HMSO.

RCAHMS Royal Commission on the Ancient and Historical Monuments of Scotland. 2007. *In the Shadow of Bennachie: A Field Archaeology of Donside, Aberdeenshire*. Edinburgh: RCAHMS and Society of Antiquaries of Scotland.

Ritchie, J.N.G. 1971. Iron Age finds from Dun an Fheurain, Gallanach, Argyll. *Proceedings of the Society of Antiquaries of Scotland* 103: 100–112.

Samson, R. 1992. The reinterpretation of the Pictish symbols. *Journal of the British Archaeological Association* 145: 29–65.

Shepherd, I.A.G. 1993. The Picts in Moray, in W. D. H. Sellar (ed.) *Moray: Province and People*: 75–90. Edinburgh: Scottish Society for Northern Studies.

Small, A. 1969. Burghead. Scottish Archaeological Forum 1: 61–69.

Small, A. and M.B. Cottam 1972. *Craig Phadrig*. Dundee: University of Dundee Department of Geography Occasional Paper 1.

Smith, I.M. 1991. Sprouston, Roxburghshire: an early Anglian centre of the eastern Tweed basin. *Proceedings of the Society of Antiquaries of Scotland* 121: 261–294.

Stevenson, R.B.K. 1949. The nuclear fort at Dalmahoy, Midlothian, and other Dark Age capitals. *Proceedings of the Society of Antiquaries of Scotland* 83: 186–98.

Strachan, D. 2013. Excavations at the Black Spout, Pitlochry and the Iron Age Monumental Roundhouses of Northwest Perthshire. Perth: Perth and Kinross Heritage Trust.

Taylor, D.B. 1990. *Circular Homesteads in North—west Perthshire*. Dundee: Abertay Historical Society Publication 29.

Toolis, R. and C. Bowles 2017. *The Lost Dark Age Kingdom of Rheged: The Discovery of a Royal Stronghold at Trusty's Hill, Galloway*. Oxford: Oxbow.

Warner, R.B. 1988. The archaeology of Early Historic Irish kingship, in S.T. Driscoll and M.R. Nieke (eds) *Power and Politics in Early Medieval Britain and Ireland*: 47–68. Edinburgh: Edinburgh University Press.

Woolf, A. 2006. Dun Nechtain, Fortriu and the geography of the Picts. *Scottish Historical Review* 85(2): 182–201.

Woolf, A. 2007. From Pictland to Alba, 789–1070. Edinburgh: Edinburgh University Press.

Young, H. W. 1890. The ancient bath at Burghead, with remarks on its origin, as shown by existing baths of the same shape and design. *Proceedings of the Society of Antiquaries of Scotland* 24, 147–156.

Young, H. W. 1891. Notes on the ramparts of Burghead, as revealed by recent excavations. *Proceedings of the Society of Antiquaries of Scotland* 25: 435–447.

Young, H. W. 1893. Notes on further excavations at Burghead. *Proceedings of the Society of Antiquaries of Scotland* 27: 86–91.

Figure captions

Figure 1 Map showing the major early medieval polities of Scotland with all sites shown in Figure 2 and select others referenced in text.

Figure 2 Examples of hilltop/enclosed/promontory settlements of the early medieval period in Scotland

Figure 3 The enclosure complex at Barlfat, Rhynie with Pictish symbol stones from the Rhynie environs.

Figure 4 The Burghead promontory fort as it survives today. Upper citadel to right, lower citadel to left and modern town of Burghead overlying parts of the fort in the background.

Figure 5 Oxcal v.4.3.2 plot of radiocarbon dates from first millennium AD enclosed sites in Scotland.