

Early Medieval

Early Medieval Research Agenda

The archaeological resource for southeast Scotland is brimming with untapped potential. There are historical sources to offer a reasonable map of early medieval activity across the region, alongside a wealth of understudied stone sculpture covering the full chronological range from fifth to eleventh centuries. Burial evidence and material culture fill in the gaps between these places, but each category of evidence has its own limitations. Regional studies have previously shown the value of interdisciplinary approaches to the early medieval landscape but have suffered from a lack of close chronological control due to lack of fieldwork. Standing at the interface between kingdoms, and at times taking centre stage at pivotal moments in the histories of both Scotland and England, the study area is well-placed for work of national significance.

Historical narratives

The relative abundance of contemporary documentary evidence provides ample opportunities to target future fieldwork, but only if approached with care. The real value of the source material is in the way it creates historical narratives that we can subject to critique with archaeological evidence.

Key amongst these historical narratives are:

- Local interaction with the late Roman Empire beyond the frontier
- Transformation of the Roman frontier zone after AD 400
- Adoption of Christianity, and the spread of monasticism
- The emergence of Anglo-Saxon language and culture
- Rise and fall of British polities and linguistic zones
- The Viking-age decline of monasteries and foundation of local churches
- The establishment of the Tweed as a border between the kingdoms of England and Scotland
- The pre-Davidian/pre-Norman foundation for the formation of parishes, power centres, burghs and towns

However, the entrenched use of historically-loaded cultural labels to people, places and process, including the very labels used above (Romans, Britons, Anglo-Saxons/'Anglians', Vikings and Normans) may instead be a major stumbling block to progress. Increasingly, new research has shown how central the SESARF region is in the very formation and transformation of these kinds of identities, in particular those of 'British' Gododdin and 'Anglian' Bernicia. Future work should begin from the premise that we have very little reliable information for the existence, let alone geographical location and extent, of these entities outside of the testimony of the few surviving documentary sources. We should treat them as hypothetical models to be tested, rather than assigning them to specific objects and settlement types.

From the ninth century onward, documentary sources for this region begin to dwindle, but recent discoveries like the weapon burial at Auldham are a reminder that this region remained important to the rise and fall of the Danelaw and the Viking kingdom of Dublin. Recent historical work around the Battle of Carham has emphasised the diverse nature of the political entities in the SESARF region, including the expansion of Gaelic under the kings of Alba, the re-introduction of British elements during the expansion of the kingdom of Cumbria, and the power struggles between Danish Northumbria, the remnant Northumbrian dynasty of Bamburgh, and the emergent English kingdom.

As with anything else, the testing of these historical models must be a cross-border exercise. The Gododdin poetry, the documents relating to St Cuthbert's diocese, and Bede's accounts of Northumbria all reveal a connected cultural province centred on, not divided by, the Tweed valley. Artistic links across Northumbria already apparent in the art historical study of stone sculpture may also be apparent in other ways, including in material culture and settlement types, but it would be a mistake to assume these are simply either British or Anglo-Saxon – we should instead use the archaeology to deconstruct such ethnic labels.

In the later part of the period, some of the earliest shires, parishes and burghs in Scotland were established in this area. Tracing these processes will shed light on the creation of the settled landscape of roads, towns and cities which survive to this day, both in this region and nationwide.

Settlement patterns

Rural and agrarian settlement

Research excavations have more often been targeted on power centres, cemeteries and monasteries, but this review highlighted the potential from large-scale development-led excavation to discover landscapes of early medieval settlement, including evidence for agrarian and domestic production, through programmes of radiocarbon-dating of ephemeral features. There are now a number of sites, particularly around Edinburgh and Midlothian, with confirmed early medieval occupation, particularly centred on the seventh and eighth centuries. As they largely stem from development, however, they remain a scattered and piecemeal resource, and heavily weighted toward the Lothian plain, but would work well as a way of targeting future excavation. Through this work there are now a number of corn-drying kilns, sunken-featured buildings and new kinds of structure including stone platforms which are less well understood. It is often supposed that these ephemeral traces of settlement relate to lower-status farmsteads supplying the higher-status power centres and monasteries, but excavations at the *urbs regis* of Dunbar revealed the same kinds of structures, and it may instead be that all forms of archaeologically visible settlement in this period relate to the system of tribute, redistribution and conspicuous consumption that characterises the early medieval economy.

Questions, gaps, opportunities:

- There remains a real absence of settlement evidence in the first part of the period, the fifth to seventh centuries. Where and how did people live, and how does this relate to other evidence of occupation from hillforts, inscribed stones and cemeteries?
- How can we explain the proliferation of evidence for agrarian settlement in the seventh and eighth centuries? Does it relate to migration or population expansion?
- Does the construction of corn-drying kilns and sunken featured buildings relate to agricultural specialisation? Is this to do with the establishment of nearby power centres, or is it part of a 'long seventh century' transformation of the rural landscape as seen elsewhere?

Land-use, environment, food production and consumption

There is a dearth of environmental evidence available for the early medieval period in this region. However, surveys of coastal erosion and coastal settlement are available which help shed light on maritime resource exploitation. Stable isotope analysis of early medieval human remains still shows relatively little marine dietary intake across the individuals tested so far, and it would be important to key these studies in with excavated faunal assemblages for this region. Questions still remain about the use of harbours and tidal flats in the early medieval period (see below, **Industry and Trade**), and the relative importance not only of fishing but also seabirds to the early medieval diet and economy.

The faunal assemblage from Castle Park, Dunbar is the largest in Scotland, and provides critical information on food production and consumption over time. Along with more limited assemblages from Auldham and Edinburgh Castle, it is clear that hunting and wild game remained significant parts of the food economy, and work targeting biodiversity and habitats over time would be as important as tracking the expansion of arable and pastoral agriculture. The retrieval of cereals from corn-drying kilns is adding to our knowledge of arable, with barley dominant across the period, with the addition of wheat and oats still very patchy.

Surveys of upland settlement are also advanced and well-published for this region, though excavation of these is relatively limited, and has thus far produced relatively little in the way of early medieval land-use. Large-scale LIDAR surveys incorporating citizen-science methods of interpretation such as the Whiteadder project might be another way forward, but with more resources allocated towards ground-truthing, dating and environmental sampling. Questions still remain about tree cover, coppicing and sourcing of wood, peat and other natural resources.

Questions, gaps, opportunities:

- Can we track the expansion and relative balance of arable and pastoral agriculture over the early medieval period? Is there evidence for specialisation of food production?
- Are there new biomolecular analyses of faunal and cereal assemblages which can help shed light on questions of resource exploitation and dietary change?

- To what extent is there evidence for fishing and marine exploitation, and how does this change over time?
- What is the evidence for woodland management regimes? Is there evidence for other natural resource management (peatlands, stone, etc)?

Power centres

This review of the evidence for power centres showed that, perhaps surprisingly given the number of hillforts surveyed in this region, that defended settlements were only rarely built and reoccupied in the early medieval period. However, there are now several cases where hillforts occupied in the later Roman Iron Age continued in use further into the fifth and sixth centuries, most notably at Traprain Law, but also now at Eildon Hill. Promontory forts reused for ecclesiastical settlements like Auldham and St Abb's Head are a related phenomenon, but like evidence of early medieval occupation of Roman forts, as shown at Cramond, these seem like reoccupation of abandoned sites rather than continued use.

Open settlements, including those centred on timber halls and related settlement complexes, are just as significant. The important sixth to seventh century sequence of structures at Yeavinger just outside the study area has long coloured perceptions of early medieval royal centres in southeast Scotland, but parallels at Sprouston and Philiphaugh remain unexcavated, and the proposed timber hall site at Doon Hill, East Lothian has been proven to be prehistoric. Remains of comparable structures at Whitekirk and Aberlady show there is more variety in the types of elite settlements we might find in this region, but these are only partly excavated. Still more elusive power centres have been proposed based on the distribution of deluxe gold stray finds of seventh-century Anglo-Saxon type from around Dalmeny, or on the distribution of cemeteries and settlement evidence around Kirkliston and Gogar.

Into the later part of the period, power seems to shift toward the sites which would come to be occupied by burghs, motte castles and reformed monastic houses. The location of royal and other elite residences during this period remains obscure. In both the earlier and later parts of the period, it may be that we have better hope of reconstructing them based on other proxies for settlement: the distribution of cemeteries, the placement of satellite farmsteads for supplying the main settlement, and the layout of roads, but all this must be backed with rigorous dating programmes.

Questions, gaps, opportunities:

- Are hillforts like Edinburgh and Traprain Law exceptional in their early medieval occupation? When do hillforts go out of use in this region?
- Is unenclosed lowland settlement more common for power centres in this period?
- Can we locate proposed power centres at Tynninghame, Dalmeny, Kirkliston, and around Eildon Hill/Melrose?
- Does the concentration of deluxe gold fittings, including gold and garnet mounts and pendants, reveal the Lothian plain as a core, not fringe, part of the kingdom of Bernicia?

Industry and trade

The coastal zone appears to have the most evidence for long-distance trade and elite settlements (see above, **Power Centres**) and it is here where coins and relief-carved sculpture also concentrate. This region does not seem to take part in the trade in wine and other exotic goods from Mediterranean and Gaulish sources as seen in the west of Britain (Campbell 2007), but the gold-and-garnet mounts found in the Lothians show direct links with the trappings of the elites of conversion-period Kent and East Anglia (Blackwell 2018).

The distribution of coins in this region is relatively small, but in a Scottish context represents the majority of the evidence. These are dominated by Northumbrian issues up to the end of the ninth century, which suggests controlled circulation rather than use as bullion. After the hiatus of minting in York due to the Danish conquest, stray finds and hoards of English coins continue to appear in this region, but not Anglo-Scandinavian issues. This suggests a complex relationship with the kingdoms of Dublin and York.

Only limited but suggestive evidence of the Hiberno-Norse hacksilver economy appears in the SESARF area, including a small hoard from Gordon, Berwickshire and a growing number of silver ingots and lead weights.

Metal-detecting and limited excavations in the Glebe Field, Aberlady have turned up the first 'productive site' of the region, with a large assemblage of coins alongside stray finds of dress items and other rare items, including an Anglo-Scandinavian sword pommel and a fragment of a crozier. Altogether, the items seem to date this activity from the eighth to the eleventh centuries, making it likely this has been a thriving waterfront trading site for an extended period of time.

At the end of the period, there are signs of incipient market activity around the locations of later burghs, castles and reformed monasteries, including North Berwick, Dunbar, Roxburgh, Melrose and Jedburgh, in the form of stray finds including coins as well as imported objects.

This review highlighted the dearth of evidence for the infrastructure of trade in the form of roads and harbours, which we know must have been used in the early medieval period. Questions still remain about when we can begin to see this infrastructure taking shape, and to what extent these processes began before the twelfth century.

Beyond the evidence for trade, there are also many questions remaining about sources of wealth in this region. Largely through lack of excavations at power centres, there is a lack of evidence for craftworking generally, outside the large-scale excavations at Castle Park, Dunbar. Outside of the late and post-Roman sequence at Traprain Law, there is as yet no strong evidence for non-ferrous metalworking so typical of hillfort and monastic assemblages elsewhere in Scotland. The best evidence for regional crafts was in the spread of clay loomweights, which shows the adoption of upright looms, at a number of sites across the region from about the seventh century.

Questions, gaps, opportunities:

- Can we identify with confidence roads and routes used in the early medieval period?
- How important were ports and harbours to the layout of early medieval settlement?
- What are the economic bases of power in the early medieval period in this area?
- To what extent was the Northumbrian coinage economy in operation in this region? What happens to this after the disruption to coin supply in the Viking Age?
- What is the evidence for market-based trade, and how early can we discern the rise of permanent market sites?

Religion and ritual

Burial practice

This review found only sparse evidence for pagan or pre-Christian practices in the early medieval period, but highlighted proxy evidence from small finds and historical sources to show that it is still a subject worth exploring. Furnished burials considered to be 'Anglo-Saxon' or 'Viking' as at Hound Point, Dalmeny and Auldhame, East Lothian, are not straightforwardly pagan: the former in a cist, the latter in a Christian burial ground, both facing east.

While the evidence for Christianity in this area goes back to the fifth century, the earliest evidence for religious and funerary practice in this region is more likely to be found outside of churches and monasteries. The Latin-inscribed stones reveal a Christian, Latinate elite community across the Lothian and Borders regions from the fifth century, who were burying their dead in long cist cemeteries which survive mainly on the edges of later settlements. The majority of cemeteries from Scotland are found in this region and others are visible in the cropmark record, yet relatively little research has been done to establish their relationship to settlement and early medieval territorial organization (Maldonado 2011, 146-52).

Re-examination of skeletal remains held in museum collections would be ongoing within the National Museum of Scotland (see annual roundups in DES), but a wider survey of human remains collections in Scotland is still needed. Recent isotopic work on burials from Auldhame, Cramond and, outside the study area, the Isle of May and Bamburgh Bowl Hole, has shown a largely settled population, contrary to historical notions of waves of Anglo-Saxon invaders. However, while numerically small thus far, the detection of incomers from the west of Scotland in the Cramond assemblage, coupled with the far-flung origins of the Bamburgh Bowl Hole individuals (including the west of Scotland, Scandinavia and continental Europe), complexifies our simplistic narratives of power struggles between Britons and Anglians.

The long cist cemeteries of the region were formerly seen as evidence for either missionary work or continuing Roman influence, but they are best understood as a continuation and expansion of Iron Age burial forms. Their distribution and dating (mainly to the fifth to seventh centuries, and at monastic sites, continuing to the end of the period) mean we cannot simply deem them 'British'. They are critical evidence for local forms of settlement and belief, and could provide a window on the transformation of this region from clients of Rome to Latin-speaking Christians as attested in the Latin-inscribed stones from Kirkliston (Catstane), Brox, Manor, Yarrow and Peebles (Forsyth 2005). Like the massive silver chains, the majority of which were found in East Lothian and the Borders, these stones represent the complicated way in which the people of this area were shaped by the frontier politics of the Roman Empire (Blackwell, Goldberg and Hunter 2017). Re-dating of these cemeteries alongside targeted stable isotope and genetic sequencing will help trace these broader political and religious transformations at family and community level.

Questions, gaps, opportunities:

- Do stray finds of Anglo-Saxon and Viking-age type relate to furnished burials disturbed by the plough?
- Did inscribed stones and cemeteries deliberately mark out the edges of territories, or is it a bias of survival that they are now on the fringes of settled land?
- Could the shift in ritual and funerary practice from field cemeteries to churches be part of wider shifts in settlement seen in the seventh century (see above, **Settlement patterns**) rather than religious changes?
- Can stable isotope analysis and paleogenetic (aDNA) analysis reveal mobility and migration in this region?

Church archaeology

Only two major excavations centred on ecclesiastical sites have been published in the area: The Hirsell, a rural proprietary church which is largely now dated to the later medieval period, and the early monastery of Auldham. The Auldham project revealed a wealth of data about demography, monastic burials and an unexpected Viking-age weapon burial, but the excavation of the church itself was sadly left incomplete. Piecemeal work over decades in and around the monastic landscape of Coldingham Priory has revealed a multifocal landscape with separate burial grounds, and possibly a hermitage at St Abb's Head separate from the 'mother church' (yet to be found) at Coldingham itself. A potential stone minster church was glimpsed in excavations at Castle Park, Dunbar, but the nature of the mortared stone structure remains unclear. We can also look to large-scale monastic excavations in the surrounding areas at the Isle of May and Lindisfarne for a sense of what to expect, and in both cases, including pre-conquest church foundations and a surprising continuity of burial and investment in the ninth to eleventh centuries, when it is commonly supposed that monasteries were in decline.

What this region does have is a wide and varied corpus of early ecclesiastical stone sculpture. They include major collections of free-standing crosses and grave markers at sites like Abercorn, alongside ambitious relief-carved crosses at Aberlady, Morham, Tynninghame and more. In addition, there are enigmatic architectural carvings at Ancrum and Jedburgh, and later first-millennium crosses at a number of sites, including an important series of hogbacks. At sites like Abercorn, Ancrum, Tynninghame and St Helens, Cockburnspath, there are links between these late carvings and the earliest examples of romanesque sculpture in the region which are tantalising. Unfortunately, as the Corpus of Anglo-Saxon Sculpture has not extended across the border, there has been limited cataloguing and analysis of this material (but see now Christina Smith 2017 and in prep, and new entries on Canmore as part of the Early Medieval Carved Stones Project, Ritchie 2016).

Early medieval settlement around monasteries is becoming better understood with the excavations at Old Melrose, Jedburgh and Auldham (Crone and Hindmarsh Hindmarch 2016); however, the overall settlement hierarchy and interplay between monastic, royal and urban centres, such as they are during this period, and the relationship between these and their hinterland remains poorly understood. The foundation of monasteries seems to be intimately tied to the expansion of Northumbrian hegemony in this area, and both should be considered on a wider landscape basis. Recent work collecting the evidence for Anglo-Saxon small finds in this region, greatly expanded through responsible metal detecting activity, is helping flesh out cross border entanglements with regard to settlement, craft production, dress styles and consumption patterns (Blackwell 2018).

Excavations at the May, Lindisfarne and Auldham show the potential for continuity and rebuilding on site crossing the transition from early to late medieval church sites. More exploration of local and parish churches is critical to establishing the timing and nature of parochialisation in this region, and in Scotland as a whole.

Questions, gaps, opportunities:

- Where might we find the earliest church structures in this region?
- Where did Christian worship take place before the expansion of monasteries in the region from the seventh century?
- Can we find traces of 'British' christian sites, for instance at sites with early inscribed stones like Peebles or Kirkliston?
- Is there potential to complete the excavation of the early church at Auldham?
- Can we confirm the supposed vallum seen by Charles Thomas at Abercorn?
- Targeted work at sites with Northumbrian relief sculpture, including Jedburgh, Ancrum and Coldingham
- A corpus of all early medieval sculpture, not just 'Anglo-Saxon' stones, badly needed
- What is the significance of harbours to the location of early monasteries, eg Aberlady, Auldham, Tynninghame, St Abb's Head, North Berwick?
- How early do parish churches begin to be built in this region?
- What is the cultural context of the 'hogback' stones? Can we date these sites any closer?

- How did pre-existing ecclesiastical centres influence the location of twelfth-century reformed monasteries at Melrose, Jedburgh, Kelso, etc?

Material culture of identity

The case study area has a limited but very specialised range of material culture finds. Rare high-status gold objects of seventh-century Anglo-Saxon type from the Lothians indicate long-distance links to the emerging kingdoms of Kent and East Anglia, and suggest this was a core territory of the kingdom of Bernicia. More mundane finds, including dress pins, strap ends, loomweights and glass beads, further flesh out the Northumbrian element of the material cultural zone this region falls into. However, given the diversity of the political situation in this region (see above, **Historical narratives**), we should not deduce from this that they exclusively reveal the presence of 'Anglo-Saxons'. The lack of diagnostic forms of 'British' material culture continues to be a problem, but the massive silver chains which are predominantly found in this region would appear to be a good candidate. The Fowler-type brooches and handpins being made and used at Traprain Law are also found across northern and western Britain and Ireland. They are not straightforwardly 'British' objects, but instead speak of growing networks among Celtic-speakers with complex relationships to late Roman military styles. Still, the ease with which we assign labels to 'Anglo-Saxon' objects contrasts with the difficulty we have in using the label 'British', rendering the latter archaeologically invisible. This is an issue not easily resolved but worth continuing to explore.

The appearance of gold objects is not limited to the early Anglo-Saxon period, with a Trewhiddle-style gold and niello finger-ring from Selkirk and a lost gold neck-ring of Scandinavian type from Braidwood, Midlothian being rare examples of their form anywhere. Indeed, amongst the few Viking-age objects in this region, there are some very interesting types, including a carnelian bead likely imported through Scandinavia from Coldingham, a penannular brooch of Baltic type from Gogar and several types of ringed-pin from the Lothians. The single Scandinavian-style hoard of hacksilver and gold objects from Gordon, Berwickshire was also a rare outlier for southern Scotland until the discovery of the Galloway Hoard in 2014. The belt set from the weapon burial at Auldham is well out of the usual distribution of these types in the Irish Sea zone, and the set of spurs are the only example yet found in Scotland. Despite the relative dearth of Viking-age activity in the area from historical sources, these finds indicate a diversity of Scandinavian, Anglo-Scandinavian and Hiberno-Norse activities. The appearance of hogback grave markers appears to be much later, some as late as the eleventh or twelfth centuries, and may not relate to Viking-age activities or Scandinavian identity in a straightforward way.

Aside from the important sculptural corpus, there are important elements of early Christian material culture found in this region, including the fragment of a gold and garnet pectoral cross from Dunbar, and a cross-shaped setting in the East Linton gold and garnet mount. A fragment of crozier from the Aberlady Glebe Field assemblage is tantalising. The glass inkwell from Auldham is one of the few finds of imported glass vessel in the region, and suggests the production of manuscripts at this monastery. Brazed iron handbells from Dunbar, Ednam/Hume Castle, and

Minchmoor may relate to liturgical practices as with many other retained as relics elsewhere in Scotland and Ireland, though in the case of the very small bells from Minchmoor and Dunbar, their use as animal bells cannot be ruled out.

Questions, gaps, opportunities:

- Relative invisibility of 'Britons' in material culture
- New finds of early Anglo-Saxon brooch types in the region may push back the arrival of Northumbrian influences
- Diverse nature of Viking-age finds
- Evidence for specialised craftworking in this area?
- Relative lack of mundane and everyday finds including tools and ceramic

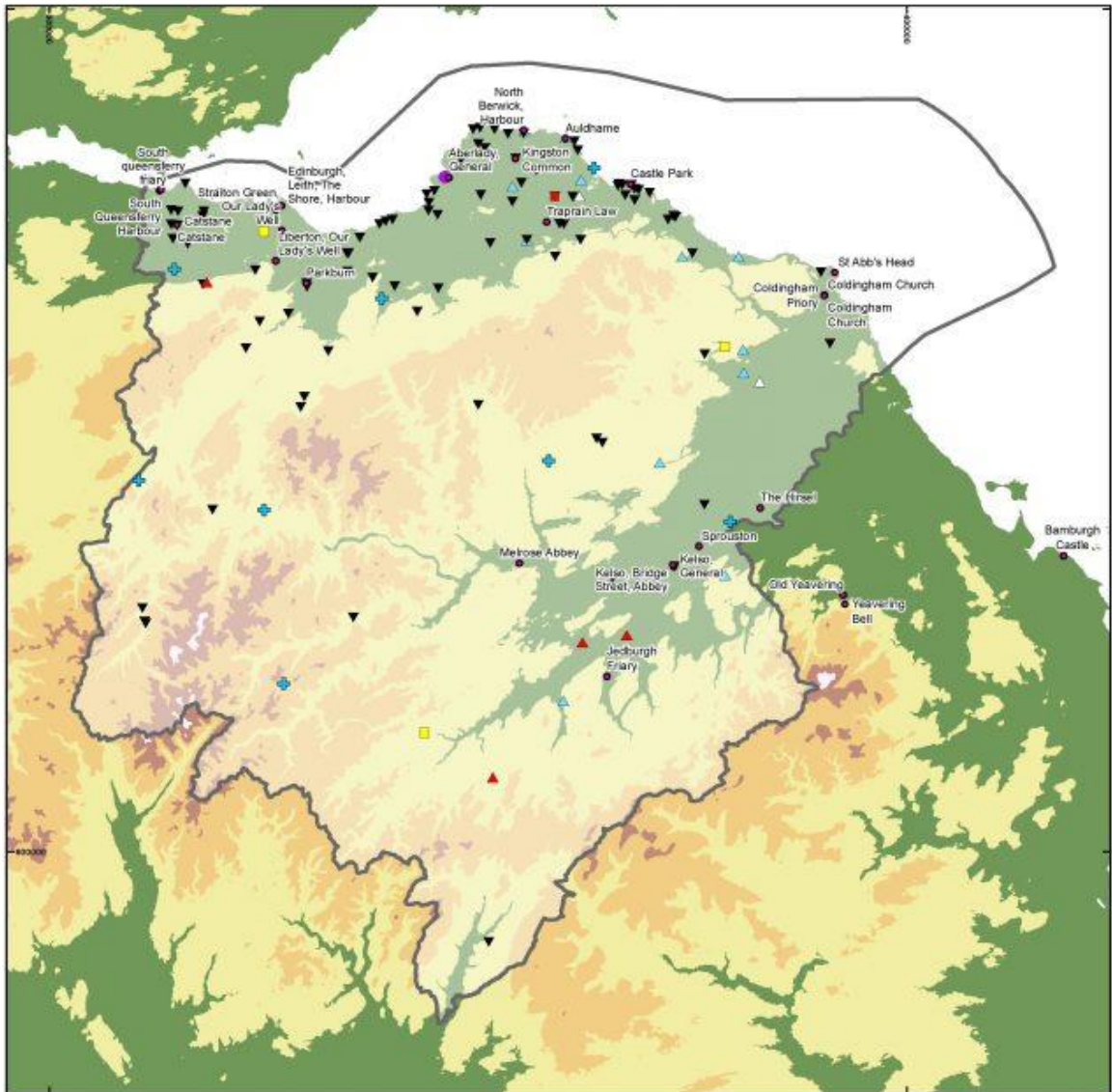
Individuals

Demography, health, diet, identity, kinship, conflict, violence

Section still to be fleshed out in main report

Case Study Suggestions

- Urban excavations and early burghs: North Berwick, Edinburgh, Dalmeny
- Auldham and Aberlady
- Abercorn sculpture
- Cat Stane
- New isotope analysis of long cist cemeteries
- Jedburgh and Ancrum
- Coldingham recent excavations
- Post-Roman Cramond and Inveresk
- Whiteadder project
- Dalkeith Old Oaks
- Eildon Hill recent excavations
- Recent early Anglo-Saxon finds
- Corpus of Romanesque Sculpture?



- SESARF Study Area
- Early Medieval sites
- Pictish
- ✚ Carved Stone
- Castle
- Kiln
- ▲ Church
- △ Hogback
- ▲ Burial Ground
- ▼ Long Cist
- COASTAL PLAIN / TWEED-TEVIOT LOWLAND
- RIVER VALLEYS - UPLAND MARGINS
- UPLANDS (>300 mOD)
- UPLANDS (500 - 750 mOD)
- UPLANDS (750 - 840 mOD)



Coordinate system:
OSGB36 (OSTN15/OSGM15)



Jarvis A., H., Reuber A., Nelson, E. Guirens, 2005. Geo-Referenced OS TM data for International Centre for Tropical Agriculture (CIAT), available from <http://ictr.ox.ac.uk/>
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Early Medieval baseline data

Figure 9

Introduction

Aims and Objectives

The aim of this chapter is to set out a Research Strategy to guide the future research into Medieval archaeology within the SESARF region.

The general objectives of the chapter are:

- to identify the known baseline of archaeological data for the early medieval period within the Study Area;
- to integrate the historical and archaeological records where possible;
- to infer where data gaps are present in chronological, spatial and thematic terms through a Research Agenda; and
- to propose a Research Strategy for removing these data gaps

Further period specific objectives are:

- To investigate how the archaeological record is shaped by the various groups of people who inhabited this area;
- to trace the economic transformations from a Roman frontier zone, to a tributary society based around hillforts and halls, to the development of the earliest burghs;
- and to investigate the social and physical changes that occurred within the region through the development of Early Christianity, from early burials, to pioneer monasteries to Anglo-Norman reforms and the development of the parish system.

Chronology and terminology

This chapter covers the period AD 400 – AD 1100, relating to the earlier part of the Medieval panel report set out in the Scottish Archaeological Research Framework (ScARF).

The original ScARF period range, defined on a national scale, included the last 500 years of the “Long Iron Age”, based on the Scandinavian system. There is clear evidence that this approach works best for much of north and west Scotland, but in the SESARF area, the sequence is more like that used in England which sees clear and easily definable breaks between the Iron Age, Roman and Early Medieval periods.

However, the SESARF region is also one of the most diverse parts of northern Britain, where various ethnic groups vied for control over these dramatic centuries. Within the SESARF region we need to define a more regionally-specific chronology using consistent terminology. Throughout the early medieval period, the kingdoms and communities in question spanned across the modern border, so linking to the North East Research Framework (NERF) will be essential.

There has been considerable debate in recent years over the political ramifications of the term 'Anglo-Saxon' for the early medieval period, which extends to the term 'Anglian' and reflects the difficulties with applying any ethnic labels to archaeological remains. Best practice may be to refer to political entities and language groups which we know were used at the time period, allowing us to be specific in our terminology while not imposing cultural affiliations onto a period where we know identities were very much in flux.

In the fifth century, the SESARF region was controlled by people referred to as Britons, whose interactions with the Roman Empire added Latin alongside the Brittonic language at least for some inhabitants. Later Welsh literary sources refer to a kingdom called the Gododdin, presumed to be centred around **Edinburgh** in the Lothians, but this is bound to have been just one of several British-speaking communities in the SESARF area (eg Fraser 2009; Driscoll 2013). It may also be that the Roman term *Picti*, or painted people, could have referred generically to any warbands north of the frontier, and not just the area north of the Forth now most strongly associated with the Pictish kingdoms (Halsall 2012).

From the sixth century, a group of people often called 'Anglians', or Anglo-Saxons, appeared in the north. They are characterised by new settlement types and artefactual evidence, along with the emergence of place-names in the Old English language. However, as with the Gododdin, we only have later sources to tell us how these people referred to themselves. For instance, the historian Bede, writing in the early eighth century, records that this northern realm was known as *Bernicia*, which notably derives from a British rather than an English root word. Much more widely attested is the term Northumbria, referring generally to English-speaking realms north of the Humber, and it may be best to use this territorial term to discuss areas under Anglo-Saxon control. The emergence of Northumbria as a powerful player north of the modern border can be detected by at least the seventh century, with administrative structures reaching as far as Abercorn on the Forth by 681 (Fraser 2008a).

The later part of the period (800-1100) is often referred to as the Viking Age in Scotland, or the Late Saxon period in England, but neither term captures the diversity of the SESARF region in these years. By c. 900, the kingdom of Northumbria had been divided in two by Viking armies, with a Danish-controlled territory centred on York, and Northumbrian dynasty clinging on in Bamburgh with notional control over Lothian and the Borders (McGuigan 2015, 2022). In the aftermath of Scandinavian settlements spreading across the northern and western seaboard, the SESARF area now sat between several new political entities. To the north was the Gaelic-speaking kingdom of Alba, which would soon come to be known as Scotland. To the west, the British kingdom of Cumbria (also called Strathclyde) took shape after the siege of Alt Clut (Dumbarton Rock) in 870, and by c 900 was expanding into Northumbrian territories. Further south, the kingdom of England began coalescing in Wessex and Mercia, gradually expanding its influence into the Danelaw and Northumbria. Therefore by the early tenth century, what is now southeast Scotland was heavily contested by all these neighbouring kingdoms (Woolf 2007), and we must proceed with care when applying ethnic labels to people, places and things in this region.

Matters came to a head at the Battle of Carham on the Tweed in 1018, in which the king of Alba had the victory. This is traditionally seen as the moment in which a border between the English and Scottish kingdoms was first established, but it is more accurately seen as a regional rather than a national drama. It represented the last gasp of the Northumbrian dynasty based at Bamburgh, and it is one of the last times we hear of a king of the Cumbrians (Woolf and McGuigan 2018). While the study area was thereafter under the effective control of the kings of Scots, its inhabitants remained as diverse and multilingual as ever. The SESARF area was paradoxically still seen as part of 'England' as late as the thirteenth century, despite being under Scottish control.

By the end of the eleventh century, the kingdom of England was controlled by an Anglo-Norman elite which had established rulership through earldoms as far north as Cumberland and Northumberland. The kingdom of Alba managed to remain independent of English control, but at the cost of paying homage to the Anglo-Norman court. Subsequent kings of Scots, especially David I, expended much effort building up power centres, monasteries and burghs in Lothian and the Borders, but the region would be fought over for centuries thereafter.

Previous resource assessments and regional studies

- Frontiers of the Roman Empire resource assessments? (esp on the need to explore post-Roman legacies)
- ScARF medieval panel: <https://scarf.scot/national/medieval/>
- North East Research framework (early medieval)
<https://researchframeworks.org/nerf/early-medieval/>
- Exploring our Past: Essays on the Local History and Archaeology of West Central Scotland (specifically essay by S Driscoll)
<https://scarf.scot/regional/clyde-valley-archaeological-research-framework/exploring-our-past/>
- Atlas of Hillforts <https://hillforts.arch.ox.ac.uk/>
- Notable PhD theses:
 - Buchanan, C.H. 2012. Viking Artefacts from Southern Scotland and Northern England: Cultural Contacts, Interactions, and Identities in Peripheral Areas of Viking Settlement. Ph.D, University of Glasgow. <http://theses.gla.ac.uk/3391/>
 - Blackwell, A. 2018. A Reassessment of the Anglo-Saxon Artefacts from Scotland: Material Interactions and Identities in Early Medieval Northern Britain. Ph.D, Glasgow: University of Glasgow. <http://theses.gla.ac.uk/30708/>.
 - Smith, I.M. 1990. The archaeological background to the emergent kingdoms of the Tweed Basin in the Early Historic period. Ph.D., Durham University. <http://etheses.dur.ac.uk/1431/>.

Key observations from previous work

Given the above discussion of terminology, it is essential to use the overarching chronological term 'early medieval' where possible for the period 400-1100. However, from a heritage management perspective, the early medieval period is still

particularly difficult to extract in terms of HER data, many records subsumed under the more generic 'Medieval'. Centres of power such as hillforts also do not lend themselves to specific queries, as they can span from the Bronze Age to the early medieval period in the study area. Queries for thesaurus terms such as 'long cist' and 'monastery' were utilised as a proxy to extract further sites but it means that records that could be identified as Early Medieval fell primarily under the Religion and Ritual theme, biased towards sites of burial and carved stones. These categories create their own chronological biases, in that burials are most often encountered from the earlier part of the period, while churches and carved stones most often date to later in the period.

Much of the evidence for the various peoples which inhabited the region in the early medieval period comes in the form of individual artefacts rather than at site level. However, HERs have not traditionally been comprehensive at incorporating evidence from museums and metal detecting as reported through the Treasure Trove process, meaning these data are often left out of the discussion.

When objects are encountered and labelled, they are far more likely to be given a specific cultural label when they pertain to Roman, Anglo-Saxon or Viking-age styles, which are relatively well-attested and documented elsewhere. Sites with these objects are themselves then labelled Romano-British, Anglo-Saxon or Viking, on the basis that the objects attest to the presence of specific communities. The term 'British', on the other hand, is rarely used, and then most often as a blanket term referring to settlement and burial types used in the fifth and sixth centuries, such as hillforts and long cists, even though both continued in use thereafter. There are few 'British' object types (eg Cessford 1999; Collins 2010); and no diagnostically 'British' art style present in the north until the advent of Viking-age schools of sculpture based at Govan and Whithorn (eg Craig 1991; Driscoll et al 2009). The above discussion of the term 'Anglo-Saxon' reminds us of the problems with applying ethnic terms onto objects, but the impulse to use terms like sub-Roman and Romano-British for fifth to sixth-century archaeology tends to leave the Britons much less visible (eg Cessford 1999; Driscoll 2013), and could reinforce an inaccurate view of peoples being 'replaced' by waves of migrants or invaders.

The result of extracting from the HER is a distribution of sites with particular concentrations in the fertile lowlands with almost no sites being situated in the uplands of the region. Whether or not this is representative of a genuine shift from upland to lowland settlement, or a by-product of archaeological bias, is a question to be explored. These biases make it difficult to trace changes in agricultural practice, and consequently diet and subsistence patterns across the period are relatively understudied for the region. Patterns of settlement including urbanisation, the establishment of markets, and the critical infrastructure of roads, bridges and harbours, must be seen in tandem with changing agricultural regimes needed to support them, including large-scale food processing sites, crop specialisation and storage facilities.

Therefore some areas to be explored for this period include:

- the apparent lack of settlement sites outside of hillforts;

- the relative lack of upland settlements;
- matching up distributions of artefacts from excavations, fieldwalking and metal detecting;
- the relative invisibility of the Britons;
- the relationship of early burial grounds with the Church, eg, through their relationship with ecclesiastical sites;
- the absence of pre-Northumbrian period ecclesiastical sites;
- evidence for sites of trade and exchange before the establishment of burghs;
- evidence for craft and agricultural specialisation as detected in contemporary Ireland and England;
- evidence for maritime trade and infrastructure;
- evidence for dietary and subsistence strategy changes over time.

Settlement and daily life

Named places

We are fortunate in the SESARF region to have a relative abundance of historical and toponymic information for early medieval settlement. Late Roman sources provide us with some names of places and peoples, which can sometimes be shown to have survived into the medieval period ([cross-ref to Roman SESARF?](#)).

Compilations of genealogies, historical writings and literary works surviving in Old Welsh, such as *Y Gododdin* and the *Historia Brittonum* provide glimpses of the 'Old North', but their historicity is heavily debated (Koch 1997; Clancy 2000). Some of the place-names and events can be corroborated with contemporary reporting of events in the Irish or English annals, such as a siege at *Din Eitin* (**Edinburgh**) in the *Annals of Ulster* for 638, or *Coludesburh* (Coldingham) in the *Anglo-Saxon Chronicle* for 679.

Various Northumbrian textual sources of the eighth century onward also provide accounts of events in the SESARF region, though weighted primarily toward ecclesiastical sites and the activities of clergy. For instance, the *Vita Sancti Cuthberti* describes the movements of the titular missionary-saint through the Borders region and as far as Fife, while *Vita Sancti Wilfrithi* shows the presence of bishops at *Dynbaer* (Dunbar) (Fraser 2009). Bede's *Historia ecclesiastica gentis anglorum*, completed in 731, adds many more early names such as *Mailros* (Melrose), *Coludanae urbis* (Coldingham), *Aebbercurnig* (Abercorn), and a fortified place named *Giudi*, which has been located variously at Cramond, Blackness, or Stirling. The ninth-century list of properties belonging to Lindisfarne adds still more church names in the SESARF region, including *Gedwearthe* (Jedburgh), *Pefferham* (Aberlady), *Aldham* (Auldham) and *Tiningham* (Tynninghame).

It is worth noting what these names tell us about language in the early medieval period – even under the period of Northumbrian control, when Old English would have been the language of power, important churches and royal residences retained British names or elements (eg Fraser 2008). Names like *Pefferham* capture a mixture of Celtic and Germanic elements, but it is not always the case that one

always replaced the other; the church at Pefferham would later be known as Aberlady, a Brittonic name.

Demography, mobility and migration

Overviews of cemeteries in the region here: sex, age, health and disease.

Isotope evidence for mobility? Cramond mass grave only has 2 of 9 non-locals, while Auldhame also has no early medieval outliers – even the viking burial is local according to isotopes. But compare to Bamburgh Bowl Hole just outside the study area, which shows evidence of people coming from west Scotland, Mediterranean and Scandinavia in early medieval period; Isle of May has one outlier from Central highlands of Scotland among the few tested (Willows 2016, 351), but more isotopes are forthcoming from Thornybank and other sites in the study area?

Centres of power

The place-names in our historical sources invariably record mainly the elite settlements of their times, the power centres and the famous churches. Yet the archaeological traces of these early settlements are still very limited. The reuse or continuation of occupation of Iron Age hillforts into the early medieval period is most clearly seen at Traprain Law, the power base of the Votadini in the Roman Iron Age, and new work on the silver hoard deposited there has pushed dating into the mid-5th C (Hunter et al 2022). The discovery of a child's long cist grave on the summit also suggests an early medieval burial ground and potentially a centre of occupation at the site, which is now quarried away (refs needed). UPDATE NEEDED from recent work by the University of Aberdeen on Eildon Hill – Gordon Noble. However, at Traprain and Eildon, this activity does not seem to continue past the 5/6th century.

Roman forts rarely remained occupied after their military functions ceased. Despite extensive excavations, there are only very few traces of early medieval activity within Roman forts in the area (Masser 2006; Maldonado 2015, 227-228; Blackwell 2018, 107-8). However, a notable exception now comes from Cramond, where a mass grave from the infill of the derelict Roman bathhouse latrine was confirmed to date to the 6/7th centuries (SEE BELOW, CONFLICT). The bathhouse was outside the fort itself, some 200m north of the modern church. This unique and violent deposit tells us, amongst other things, that the ruins of old Roman forts and outlying structures were still clearly visible in the early medieval period. Two other stray finds from the churchyard at Cramond are also suggestive: an enamelled mount of 8/9th century type (NMS X.FC 302), and a rare finger ring inscribed with Anglo-Saxon runes possibly dating 9/10th C (NMS [X.NJ 19](#)), both suggest later occupation, if not necessarily ecclesiastical in nature. The discovery of a small group of long cist burials on [Abbey Knowe](#), a natural hillock overlooking the Roman fort at Lyne, Scottish Borders, is worth mentioning here; a [chapel](#) is attested at Lyne since at least the 12th century, and these burials suggest even earlier settlement nearby.

The Atlas of Hillforts in Britain and Ireland database lists only 5 sites with evidence for early medieval occupation in the SESARF area: **Edinburgh Castle** (Driscoll and Yeoman); Auldhame (reused as a monastery and long cist cemetery: Crone and Hindmarch); Castle Park Dunbar (Perry 2000); St Abb's Head, Coldingham (Alcock

et al 1986); Rubers Law (which incorporates reused Roman masonry, but is otherwise undated); and Moat Knowe, Buchtrig (proposed as a nuclear fort but undated). Dalmahoy, MLO is also suggested to be of 'nuclear' early medieval form, but the Atlas rules it out on lack of evidence (see below). Although it is just outside the study area, the Great Enclosure of Yeavering, Northumberland is a related site with confirmed early medieval royal settlement (see below).

Hillforts in neighbouring regions, including Dumbarton Rock on the Clyde and Bamburgh in Northumberland, were early capitals of their respective kingdoms, and it is often assumed that **Edinburgh** was the equivalent for the Lothians; the earliest record of it is from a siege by Northumbria in 638, which is usually seen as the formal takeover of the area from the Britons. Severely truncated early medieval layers were detected in excavations at **Edinburgh Castle**, but not enough survived to make out any of the early defences (Driscoll and Yeoman 1997). Early medieval finds were also few, but enough to establish early medieval occupation, including a 7/8th century decorated bone comb and a spearhead.

In **Edinburgh** as elsewhere, it is easier to discern occupation from the seventh century onwards, when there are diagnostically Northumbrian finds such as styca coins and bone combs. The Northumbrian settlement at Dunbar, described as an *urbs* in the seventh century, is presumed to have been occupied prior to the Northumbrian invasions, but the sequence of settlement is more secure from the seventh century with finds such as a continental sceat coin and a gold-and-garnet pectoral cross (NMS [X.1997.529](#)), but the nature of the settlement, with a possible minster church, is still debatable (Perry 2000; Alcock 2003, 212-17).

Other tantalising finds hint at early medieval phases at other unexcavated hillforts in the region. A gold stud with Anglo-Saxon parallels (NMS X.FE 86) and ceramic moulds for metalworking from Dalmahoy (Stevenson PSAS 1948; Blackwell 2018, 206-7), and an 'annular twist' glass bead from Denholm Hill, Borders (NMS X.FJ 120), provide evidence for Northumbrian-period occupation at these two hillforts. They may not have been used as forts; defended enclosures were reused as cemeteries in the early medieval period, as seen at Castle Park, Dunbar and Auldham ELO; a "great number of human skeletons" in cists were found during clearance of the promontory fort at [Castle Dykes](#) in 1831, which may be another example.

Rather more well-attested in the study area is the use of lowland enclosures as power centres. The *villa regis* or royal 'villa' of the Northumbrian King Eadwine (r. 616-633) was named by Bede as *Ad gefrin* (Yeavering). While it stands just outside the SESARF study area, it provides an important model for unenclosed high-status settlement in the area. Excavations by Brian Hope-Taylor (1977) revealed a sequence of timber structures and burials, in a landscape dominated by prehistoric monuments which were reoccupied from the sixth century. Dating was difficult owing to the lack of diagnostic finds, but at its height, the settlement included a series of timber halls, a unique timber 'grandstand', a palisaded 'Great Enclosure' and a possible *beam* or *stapol* (a pre-Christian carved timber post) in a square enclosure which formed the focus for cultic activity. In a later phase, a possible

minster church with an enclosed cemetery was added to the site. It seems likely that the settlement predated and post-dated the reign of Eadwine.

There are at least two and as many as five more postulated royal hall complexes similar to that at Yeaveering in the SESARF study area. Three are known only as cropmarks and remain unexcavated, so plausibly contain numerous superimposed phases of settlement. Two are in the Scottish Borders region, at Sprouston on the Tweed near Kelso, and Philiphaugh on the Ettrick Water near Selkirk (Smith PSAS 125 1991). Sprouston has a series of timber hall-like structures, rectangular post-built structures, sunken-featured buildings and a cemetery of at least 380 graves. Another complex of cropmarks at Philiphaugh revealed several more rectangular structures and square enclosures, as well as another very large, enclosed cemetery. Both seem to be parallel counterparts to the hall complex at Yeaveering, and presumably fall within the 6-7th centuries, with possible extended use represented by the burial grounds. All three complexes include large palisaded enclosures which were presumably used for large gatherings and/or livestock enclosures, and have been interpreted as places where food renders were collected and redistributed alongside other assembly-related functions. Stray finds have not yet shed much light on either site; a silver ingot from near Sprouston might indicate activity continuing into the Viking Age (NMS X.2005.6); and a blue glass lobed bead of 6/7th century type from near Philiphaugh supports the presumed date of the settlement, but otherwise has no known context (Blackwell 2018, 99).



Two further examples of possible hall-complexes are in East Lothian, at Whitekirk and Aberlady. At [Whitekirk](#), cropmarks revealed two rectangular, hall-like structures with annexes, amidst other rectilinear enclosures of unknown date. Even if all of these are early medieval structures, the site is difficult to compare with the sprawling hall-complexed at Yeaveering, Sprouston and Philiphaugh, and it may be that this is a farmstead or other ancillary settlement serving the monastic centre at nearby

Tynninghame (Lowe 1999). At [Aberlady](#), geophysical survey in the area of Kilspindie Castle (now the Glebe Field of Aberlady) had indicated the presence of two superimposed timber halls. Trial excavations in 2016 (DES 1998; DES 2017; [AOC blog](#)) revealed these to be stone-built structures, including a large paved area 40 x 20m across was dated to after the 7-9th centuries, and was associated with bone and metal finds characteristic of the Northumbrian period, including a 9th-century styca coin and decorated bone combs ([see below for evidence for trade and craftworking here](#)). These two examples show how little we know about the nature of early medieval settlement without large-scale excavations with rigorous dating programmes in place.

Finally, a fifth possible hall-complex may have been glimpsed in excavations at Dunbar. The settlement of Dunbar was referred to in Northumbrian sources as an *urbs regis*, a related term referring to royal centres, including hillforts. A mortar-mixer dated to the late 8th to 9th centuries indicates a mortared stone building of some significance, even though it was difficult to link conclusively to any particular structure. The only stone-built hall (or less likely, a minster church) was difficult to date closely as only a short section of wall was glimpsed in excavations, but it seems to have been abandoned in the 9th century, based on a single coin of Eanred (837-41) from a later posthole (Perry 2000, 73). The excavations here captured only part of a much wider important royal settlement, but whether it could be defined as a hall-complex remains up for debate.

A cautionary tale in this regard is the presumed hall of Doon Hill. A putative early medieval palisaded enclosure and hall complex at Doon Hill, East Lothian has long been part of the discussion, situated at the heart of the distribution of sunken-featured buildings and Anglo-Saxon place-names. Excavations by Hope-Taylor built up an elaborate narrative of elite takeover, in which an early 'British' timber hall on the site of a Neolithic mortuary complex was destroyed by fire and replaced by an 'Anglian' hall with its own palisaded enclosure, providing a model for the conquest of the Britons more generally. These events were dated to the mid-7th century and presumed to be the residence of a thane or other nobleman tributary to a king (Hope-Taylor; Smith 1990; Alcock 2003). All of this was based on comparisons with Yeavinger, despite the lack of any diagnostic early medieval finds (only Neolithic ceramic was encountered) and the absence of any C14 dates. Sadly for fans of a tidy narrative, a recent reassessment backed with C14 dates and a critical review of the excavation archive has overturned the interpretation of this site; the hall and its associated structures are resolutely prehistoric (Ralston 2019).

Rural and agrarian settlement

A key marker of rural settlement in this period is the *grübenhaus* or sunken-featured building (SFB). They are the most abundant form of settlement structure in early medieval England, used for a variety of purposes, but mainly grain storage and weaving or other textile production (Hamerow 2012, 53-66). About a quarter of all SFBs from Scotland fall within the SESARF area: Canmore lists 19, with another excavated as part of the Castle Park, Dunbar settlement.

SFBs can be mapped alongside Anglo-Saxon place-names (**example?**), offering a plausible index to the extent of 'Anglian' expansion in the area. However, only two have been excavated, at Ratho and Dunbar. The example from Dunbar dates to the seventh to ninth centuries (Perry 2000, 48), while Ratho was dated to the sixth to eighth centuries. In both cases, they contained loomweights, as is frequently the case across England in the early Anglo-Saxon period. It is clear, however, that in the absence of excavation, the remaining SFBs identified as cropmarks are not all certainly early medieval, and may cover a range of different uses depending on when they were built; indeed, other related sunken-featured structures have been identified in Pictish areas of Scotland, which do not seem to owe much if any cultural affinity to continental *grübenhauser* (Driscoll 1997; Noble and Evans 2022). In addition, the cluster of SFBs in the SESARF region, and those from just across the modern border, form a distinct regional grouping in an otherwise sparse distribution north of the Humber; in other words, they are not indicative of a wider 'Northumbrian' style of settlement, but something rather more specific to northern Northumbria. Lumping them into the period of Northumbrian 'colonisation' is therefore somewhat premature without more dating evidence. Therefore, the use of the more neutral term SFB is to be preferred over the German term *grübenhaus* which presupposes a specific cultural affinity.

Aside from fortified enclosures and royal hall complexes, development-led work has begun identifying smaller scale rural farmsteads, particularly in the sprawl on the outskirts of **Edinburgh at Ratho, Gogar Mains, Gogarburn, Newbridge, Burdiehouse and Newmills Road**. Excavations at **Gogar Mains** revealed two corn-drying kilns (see below, **Food production**) and related features C14-dated to 7/8th centuries (James and Will 2017). This complements more fugitive evidence at nearby **Gogarburn, Burdiehouse and Newmills Road**, in the form of features with C14 dates spanning the seventh to tenth centuries (Morrison et al 2009, 237-239; Maclver and Paton 2023; **Shaw forthcoming**). At **Ratho**, a sunken-featured building of likely Northumbrian type was excavated with clay loomweights in situ, again with c14 dates centred on the 7/8th C (Smith PSAS 1996). At **Newbridge**, two grain-drying kilns were dated to the 11/12th centuries (Engl and Dunbar 2016).

There is also a growing archaeological record of rural settlement in the coastal zone of the Lothians. At Eldbottle, East Lothian, excavation of a medieval rural settlement revealed at least two phases of early medieval occupation, dated to the 5-7th and 8-11th centuries (Hindmarch and Oram 2012). As with several new sites around Edinburgh, they were only cut features and gullies with no diagnostic artefacts, but show the potential for early settlement beneath sites of later medieval occupation. Recent unpublished excavations of settlements and occupation at Aberlady and Dalmeny (<https://www.aocarchaeology.com/news/article/early-medieval-dalmeny>) are beginning to add rich detail to the kinds of building types and craftworking activities going on in undefended Northumbrian-period settlements. At Dalmeny, butchered bone and other domestic midden material adds to an assemblage of metalworking dated to the 7-9th centuries. Similar finds were found in association with the large stone structure at Aberlady described above, which relates to a higher-status form of settlement, but another, as yet undated, stone platform was encountered in excavations at Maybury Park, South Gyle, Edinburgh, and it is likely now that this is a related form of early medieval structure (Moloney and Lawson

2006). All of these fleeting glimpses of settlement show a vibrant rural economy in the Lothian lowland zone.

Other than these glimpses from development-led excavations, there is only scattered evidence for the nature of early medieval settlement relating to later medieval burghs and towns. The evidence is largely in the form of early Christian sculpture (notably at Jedburgh, Ancrum, Lasswade, Aberlady, Abercorn, etc SEE BELOW), stray finds of Northumbrian coins (as at Jedburgh and Auldham SEE BELOW), or other stray finds in the fringes of medieval settlements identified largely through metal detecting (as at Roxburgh, Coldingham, Sprouston and Melrose – see Sheils and Campbell 2011; Blackwell 2018).

Organisation of communities

The potential of multidisciplinary approaches to the early medieval period has long been recognised but the challenge of integrating this with a coherent archaeological programme has not yet been realized. Ian Smith (1990) undertook a major reassessment of the historical and archaeological sources for early medieval settlement in the Tweed basin but sadly died in 1994. The major outcome of this was demonstrating long-term continuity of settlement and landholding throughout the formation of British and Northumbrian kingdoms. This is seen most clearly in the retention of British-language place names for Northumbrian royal and monastic centres, such as *Dynbaer* (Dunbar) and *Mailros* (Melrose).

Smith observed that the line of the Roman road of Dere Street remained a persistent boundary in subsequent centuries, finding that evidence for Anglo-Saxon place-names and archaeology largely remained to east of it, a conclusion that has not much changed in the intervening decades (cf Blackwell 2018, 99). Using this insight, he further postulated the sub-Roman Tweed basin to have been divided into three putative kingdoms: Anglo-Saxon *Bernaccia* (Berwickshire) to the east of Dere Street, and to west, British *Godeu* (Tweeddale) and *Calchvynydd* (Kelso/Roxburghshire); but this model has been less influential.

Smith and others have also explored the possibility that the numerous upstanding linear earthworks of southeast Scotland could have been erected or reused as borders between the British and Northumbrian kingdoms (Barber 1999, 79). The largest of these, referred to as the [Catrail](#), has been proposed as a continuous linear earthwork some 86 km in length, but is in fact a series of discontinuous earthworks (RCAHMS 1956, Vol.2, 479-80 Fig.613). Part of the supposed Catrail is in fact a wholly separate earthwork referred to as the [Picts' Work Ditch](#) in Selkirkshire (RCAHMS 1957, 120, 127). Where dated, these and other earthworks appear to belong to the end of the first millennium BC (Smith 1990, 315-6; Barber 1999). That does not exclude their use as boundaries in later centuries, but the evidence for their active use as territorial boundaries in the early medieval period is currently still negative.

O'Brien (2002) used similar multidisciplinary methods to argue that early medieval north Northumberland had been divided into shires each with its own royal manor during the early medieval period. The historical basis for the 'shiring' of southeast Scotland is well established, but the written evidence only dates back to the eleventh century, and then only in exceptional circumstances (Barrow 1973). Smith's (1990)

detailed case study in the Manor valley still serves as a useful model, as does an exercise in reconstructing 'multiple estates' in the Lothians combining map regression, place-names and the locations of churches and long cist cemeteries (Proudfoot and Aliaga-Kelly 1997). However, as these studies acknowledge, there are obvious disconnects in that the long cists date to a period before there is any evidence for the establishment of 'shires' (see below, **Burial traditions**). The excavation of the centre of such a royal estate at Dunbar showed lots of continuity throughout the period with regard to subsistence and consumption, but a dramatic sequence of changes to the site's layout across the early medieval period, showing that these 'estates' will look dramatically different (and at times, archaeologically invisible) at different times.

Overall, it is perhaps more realistic to try and track small-scale estate organisation over time before attempting to extrapolate out to the level of entire kingdoms, with the excavations at Castle Park, Dunbar as a good example tracking the evidence from one site over a thousand years. Excavations revealing food production at the Grassmarket and Burdiehouse have been argued to be the kinds of satellite settlements which supplied renders to the nearby power centre on Edinburgh's Castle Rock (Maclver and Paton 2023; McMeekin 2010, 111). Excavations at the presumed estate centre or *urbs regis* of Dunbar support this model of a tribute-based economy holding stable for centuries despite changes in political power (Perry 2000).

For the earliest part of the period, where there is a real dearth of settlement evidence, there is much to be learned about community formation through the abundant burial evidence. Maldonado (2011) showed that at fifth to seventh-century sites like Thornybank, Lasswade and the Catstane (see below, **Burial traditions**), there was evidence that long cist cemeteries built up in clusters, almost like family plots, rather than in long, managed rows like modern cemeteries. It suggests that scattered rural communities gathered together only infrequently for rituals such as funerals. At Thornybank and Catstane, the cemeteries were aligned on prehistoric monuments which will have been prominent local landmarks ideally suited for such gatherings. Katherine Forsyth (2005) observed that other cemeteries associated with Latin-inscribed stones were also associated with territorial boundaries, as the Catstane stands at an important crossing place over the River Almond, as well as being at the edge of the later medieval parish of Kirkliston. The place-name Kirkliston seem to incorporate a British cognate of old Welsh *lys* meaning court, showing the cemetery to be marking the entrance to an important royal district.

With regard to the possibility that these early cemeteries were assembly places, it is interesting to note the occurrence of rotary stone querns for grinding cereal into flour at several long cist cemeteries (eg Cowie 1980; Henshall 1958; Perry 2000, 283). This may suggest these early cemeteries were used for multiple kinds of gatherings aside from just funerals, as has been argued elsewhere in Britain and Ireland (eg Shiner 2021).

By the eleventh century, it is clear that communities had begun to agglomerate into small settlements, though there is no evidence for the emergence of towns in this area until the twelfth century. However, the proliferation of Romanesque church architecture (see below) and expansion of burial grounds (as at Dunbar, 11/12th century) suggests some clustering of settlement around this time. The origins of

towns and burghs is discussed further below (**Pre-burghal markets and townships**).

Overall, there is considerable potential to carry out archaeological work on the organisation of communities across the SESARF area. A recent multidisciplinary project based on the catchment of the Whiteadder, extending from the Lammermuirs in East Lothian to the Tweed in the Scottish Borders, incorporated a complete LIDAR survey, citizen science to help target new sites and limited excavations to test newly-identified features (<https://whiteadder.aocarchaeology.com/>).

Food production

The nature of sites investigated for this period are heavily biased toward elite settlements including forts and monasteries, and so we cannot yet form a complete picture of subsistence and food production in the early medieval period. Further discussion on long-term trends in land use during this period can be found in the [Landscape and Environment chapter](#).

With regard to arable agriculture, barley is by far the dominant cereal on most sites analysed. Only at Newbridge, where two corn drying kilns were dated to the 11/12th centuries, was oat the dominant grain (Engl and Dunbar 2016). Consumption of wheat and oats were either introduced or amplified during in the Roman Iron Age, but wheat in particular became rarer thereafter, with the notable exception of Edinburgh Castle (Driscoll and Yeoman 1997, 198). Elsewhere, bread wheat is only a minority where it appears at all, but can be seen from a wide array of sites, particularly in the fertile Lothian plain, where it is detected even at lower status settlements like Ratho (Smith 1996, 120).

Cereal was ground into flour using stone rotary querns. They are attested from a wide array of sites, but notably also from long cist cemeteries in the fifth to seventh centuries (see above, Organisation of Communities), and thereafter at the kinds of rural settlements discussed previously.

There is also now evidence for corn drying kilns dated to the early medieval period at Gogar Mains, among the earliest dated from Scotland (Will and James 2017), and two more from Newbridge were dated to the 11/12th centuries (Engl and Dunbar 2016). These structures come in a variety of forms, but together they represent an important marker of increased crop-processing capacity, indicating processing for redistribution or feasting activity. Where preservation is good enough, they can reveal more specialised activity such as malting for beer. One high priority will be to align the study of these and future kiln finds to ongoing work tracking their use in early medieval Wales and Ireland (eg Comeau and Barrow 2021).

Well-dated faunal assemblages are limited for the region, and again heavily biased toward high-status settlements. The most extensive early medieval sequence comes from Castle Park, Dunbar, where the early medieval assemblage was 57% cattle, 31% sheep/goat, 9% pig, 2% horse and a negligible amount of deer (Perry 2000, 202, table 8). In addition, the long sequence of occupation showed that this ratio stayed remarkably stable throughout the early to later medieval period, suggesting a

stable and sustainable regimen of food renders to this royal site through several changes of management from the Britons to the Northumbrians to the Scots.

At Edinburgh Castle, the assemblage was assessed as 28.2% cattle, 24.3% sheep/goat, 25.2% pig, 4.9% horse and 8.7% deer. A cattle-based economy is therefore attested on both sites, though hunting was of much greater significance here than at Dunbar. The evidence for consumption of horse here and at Dunbar suggests that it was not merely used in straitened times or as a low-status alternative to beef, pork and mutton.

Seabirds were also routinely consumed at Dunbar, where large colonies such as that at the Bass Rock were nearby. Importantly these include the Great Auk, a species of flightless bird which went extinct in Scotland in the nineteenth century, and attested here in the Iron Age and sub-Roman phase (Perry 2000, 202).

Marine resources were also exploited at Dunbar, with fish bones present at all phases of occupation, as well as shellfish such as periwinkle (likely for consumption) and limpet (possibly as bait). Molluscs were also exploited at Auldhame, where in addition the appearance of dog whelk suggests use for the preparation of purple dye (Crone and Hindmarch, 123).

However, emerging evidence from stable isotope analysis, revealing minerals absorbed into bone, has shown only limited consumption of marine foods, even at coastal Auldhame. In the Scandinavian-controlled regions of northern and western Scotland, a “fish event horizon” has been detected from the tenth century onward in which its stable isotope analysis joins other archaeological evidence for the ramping up of both production and consumption of fish and other marine resources (Barrett). However, a similar population studied at Auldhame showed a mainly terrestrial diet for everyone tested from both the early to later medieval phases. The same was the case from the limited amount of early to late medieval individuals sampled from the Isle of May monastery (Willows 2016, 321). Nine individuals tested from 6th-century Cramond also show little to no marine component to their diet (Czere et al).

However, there are still very few published studies of dietary intake according to stable isotope analysis in the SESARF region to date. Excavations at Dunbar show the potential for more marine exploitation in future studies. While fish bone was present at all phases of occupation, it is not until Phase 11 (8/9th c) that fish bones began to appear in any great quantities, and the real “fish event horizon” according to bulk finds of fish bone begins with the earliest Viking-age deposits in phase 13 (table 6, p 199). Changes in diet as seen through multivariable population-level isotope analyses are the subject of ongoing research by Sam Leggett at the University of Edinburgh.

Industry and Trade

Understanding the early medieval economy

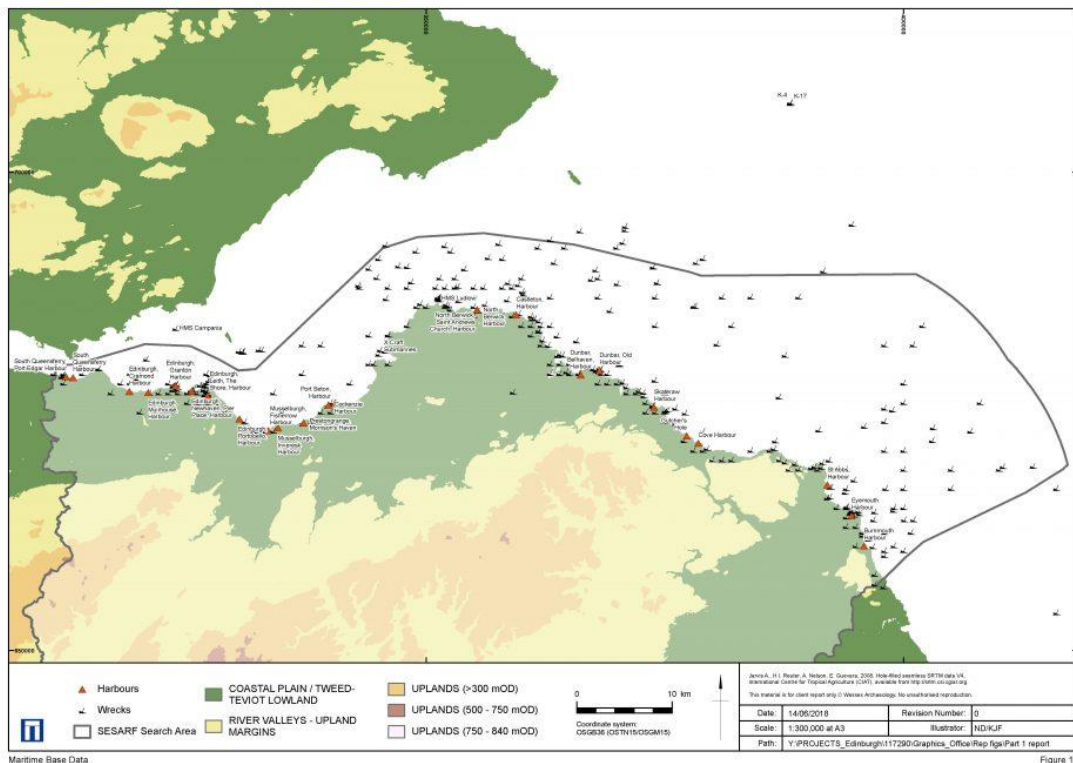
As discussed above (Rural and agrarian settlement), the early medieval economy in the study area is dominated by agrarian production and a tribute economy, becoming increasingly monetised and urbanised by the end of the period. Understanding economic changes over time requires a detailed chronology of settlement and infrastructure, which is still to be established in the study area (see above, Organisation of Communities). The focus of excavation and historical source material on centres of power (secular and religious) means we can see most clearly the places where wealth was accrued and displayed, and less clearly the places where food and labour was sourced. Food processing and supply sites for these putative estate centres is gradually being identified at settlements such as the Grassmarket and Burdiehouse (see above, Food Production).

It is not until the twelfth century that a royal mint was established in Edinburgh, and even then it took time for the Scottish economy to be monetised. It is similarly in the twelfth century that we have the first clear evidence for the establishment of burghs, markets and towns. Yet there is evidence for long-distance trade and even the circulation of coins in the SESARF region through the early medieval period. The evidence from stray finds is beginning to extend the origins of these economic changes into the early medieval period, but there is no denying that the twelfth century marks a period of rapid and revolutionary economic watershed in the study area.

Roads, harbours and infrastructure

Understanding of the infrastructure of the early medieval economy is still in its infancy, such as the development and operation of ports and harbours, and the transportation of goods and people over land and sea (see also above, Demography, migration and mobility). It has been suggested that the coastal location of Northumbrian monasteries in north-east England, strongly associated with good harbours and river mouths, may indicate the presence of beach markets and riverine routes inland which could support long-distance trade links (NE Research Framework). There are numerous sand-dune sites in the study region which would be suitable in this regard. Among sites located near good harbours, Aberlady has already been mentioned as a productive site with numerous coin and other trade finds.

Excavated Northumbrian settlements like Dalmeny, Aberlady, Dunbar, and Auldham (Crone and Hindmarch 2016) suggest these coastal settlements were occupied during the 8th, 9th and 10th centuries. These sites, along with the monastic remains at Coldingham and St Abbs, suggest that much of the most high-status Northumbrian occupation (including monasteries) was at or near the coast, potentially looking for sites close to good harbouring locations, as seen at Bamburgh and Lindisfarne just outside of the study area (Petts 201x).



More detailed records of ports and harbours are noted from the eleventh and twelfth centuries. The map above shows the location of some of the harbours that are known to be from this period from across the SESARF region. **South Queensferry** has a long-established history as a port. There were linear rock formations of the foreshore which likely created natural landing points, later enhanced by the construction of piers and the early harbour (The City of Edinburgh Council 2015). During this period, it served as the south terminal of the *Passagium Reginae*, Queen Margaret's Ferry, which served to give both the north and south terminals their names. Queen Margaret was wife of Mael Coluim III, king of Scotland from 1057 to 1093 AD, and she gifted the ferry crossing with 'boats, hostels and a right of free passage for pilgrims travelling to St Andrews and Dunfermline Abbey' (The City of Edinburgh Council 2015). Since then however, the harbour has undergone extensive alterations and nothing now remains of the early medieval harbour.

Another harbour with a long-established history probably originating in the early medieval period is that of **North Berwick**, previously a tidal island. The island was home to the old church of St Andrew and a hospital for pilgrims, founded in the 12th century by Duncan, Earl of Fife. It is thought that use of the harbour dates also to the 12th century as mention of 'ports' at each end of the pilgrims' ferry to Fife are mentioned in a charter of 1177 (Graham 1969).

The mouth of the **Water of Leith** would have been an ideal landing place for craft servicing visitors and traders to the power centre of *Din Eidyn* from very early times, and available geoarchaeological information suggests the coastal area at Leith has changed markedly, likely building-out (prograding) seaward since the mid-Holocene (i.e. from the later Mesolithic). Leith is first recorded, or at least implied, as being a

port by the charter of Holyrood Abbey in 1128 when the existing port was given to the Abbey resulting in a new harbour being established for the crown. Excavations along Sandport Street in 1997 by CECAS uncovered evidence of timber framed buildings predating the creation of 12th century burgh plots and thought to extend back to the 10th/11th centuries (Reed D & Lawson J A 1999). Shore is still a street in Leith and it is assumed that this is where early craft would have beached in the foreshore.

Within the context of coastal change a general trend that should be considered with early harbours in this period is that (if archaeological remains survive) the original sites may be inland of the current coast, and possibly buried under thicknesses of later sediments, and latter urban/coastal development. For example, Aberlady and Auldham are important early medieval sites, but what is their relationship to their contemporary (now inland) shorelines? Is there evidence for buried ports and harbours in the region?

Roads and routeways through the landscape are a perennial aspect of the human past but widespread archaeological evidence for them is partial, and difficult to date. For example, Roman routes are inferred through linear distributions of forts and temporary camps and examples of "roads" appear specifically in the medieval baseline data. (For pilgrimage routes, **see also below, Early monasteries**). However, it is not clear to what extent there were discrete roads in use in the early medieval period. The earliest maps (all post-medieval) such as Gerardus Mercator's map of Southern Scotland highlights the physical and political geography clearly, but with no roads. This may be partly stylistic, as to not obscure the details of the map, or may reflect that roads and routeways are implied aspects of the cartography, and presumed to exist, and not shown at the national scale.

By the mid-18th century, Roy's 1752-55 Lowland Map quite precisely depicts the complexity of road networks, settlements, farms, areas under cultivation, uplands and upland margins and records patterns of routeways that we would assume to have developed, in some cases, from earlier centuries if not before. The complexity of how people moved around and through the landscape is a key part of understanding the SESARF region, but poorly-defined archaeologically.

There is however some evidence that Roman roads remained visible and to a certain extent continued to be used into the early medieval period. Most prominent is **Dere Street**, the main trunk road connecting York to **Inveresk** (**cross ref to Roman chapter?**) The name of this road is Old English, first attested in the twelfth-century work of Simeon of Durham as *Deorestrete*, the road of Deira. A western extension connecting it to the eastern terminus of the Antonine Wall has also been identified (eg Engl and Dunbar 2016), possibly connecting several of the medieval settlements identified above such as **Gogar, Ratho and Newbridge**.

Coinage and bullion

The evidence of coin-use in the SESARF region is small but significant, showing participation in the wider Northumbrian economy. Beginning with a few stray finds of the seventh and eighth centuries, coins began to circulate in the region in the ninth century (Bateson in Graham-Campbell 1995; Bateson and Holmes 1997; Pirie in Perry 2000; Holmes 2013; Holmes in Crone and Hindmarch 2016; Blackwell 2018). Two seventh-century coins, among the earliest coins found anywhere in Scotland, come from the SESARF area. A gold Merovingian tremissis was found near Coldstream, and an early silver sceat from Denmark came from excavations at Dunbar (Blackburn in Perry 2000; Blackwell 2018, 292). They attest to links with the vibrant trade zone spanning the North Sea, connecting market sites from Denmark to the eastern seaboard of Britain as far north as Portmahomack, Easter Ross (Blackburn in Carver et al 2016).

In the eighth century, coins began to be minted by Northumbrian kings based in York. Early sceattas from this phase are rare in Scotland, but include one from Aberlady (Bateson and Holmes 1997, 556). It is only with the development of the distinctive styca coinage unique to Northumbria that coins begin to appear more widely. The series of coins from Whithorn, Dumfries and Galloway, in the western extent of Northumbria, shows that coins circulated through the entire region (Pirie in Hill 1997). Ninth-century Northumbrian stycas have been found in small numbers at Dunbar, Coldingham and Jedburgh, while at least 12 are known from metal detecting in Aberlady. Along with numerous early medieval finds from this productive site, Aberlady is a leading candidate for a pre-burghal market. A lost hoard containing coins of the “early Saxon kings of Northumbria” was found near Coldingham, while another lost styca hoard from Jedburgh suggests that major church sites in the area were the main recipients of coins.

The royal mint stopped production with the fall of York to Scandinavian warlords in 867 and did not restart minting coins until the 880s. None of these ‘Anglo-Scandinavian’ issues have yet been found in the SESARF region, indicating fraught relations with the Northumbrian dynasty based at Bamburgh which maintained control of the area in the tenth century. Coins did not stop arriving into the area altogether, but until the establishment of a royal mint under David I, they come from a variety of English sources (Bateson in Graham-Campbell 1995). The few tenth-century coins in the SESARF area include stray finds of Aethelstan from Jedburgh, Eadgar from Bonjedward, and a lost hoard containing 'a considerable number of coins of Aethelstan' from near St Helen's Church, Cockburnspath. Coins of Aethelred II (1009-1017) have been found in a lost hoard from Jedburgh Bongate, and another from excavations at Jedburgh Abbey (Lewis and Ewart 1995). Although coins of Cnut have been found in neighbouring regions to north and west, none have yet been reported to the SESARF region. The only coins of William the Conqueror yet found in Scotland are however both from this area: two from excavations at the monastery of Auldham, and one worn example from the Isle of May nearby (Holmes 2013). A small but significant series of coin finds from the May monastery shows that coastal sites were the likeliest entrepôts for Northumbrian and foreign coinage in the ninth to eleventh centuries. Again, an association with ecclesiastical sites thus far is notable.

If the coin supply seemed to diminish for a period of time after late ninth century, there is only scant evidence that it was replaced with a Viking-age bullion or hacksilver economy. In a bullion economy, payments could be made according to metal weight rather than the face value of coins; in Britain and Ireland, the evidence for this comes in the form of hacked silver objects, the production and hacking of bars or ingots of metal, and the use of balance scales and lead weights for weighing of bullion (Graham-Campbell 1995; Horne 2020). In contrast to Scandinavian-controlled parts of northern Britain, there are no balance scales and very few scale weights in the SESARF area, including simple, undecorated lead weights from Maxton, Scottish Borders (Graham-Campbell 2008, 199), and a recent metal-detected find from Coldingham topped with insular metalwork (TTDB2022/0016). The only Scandinavian-style hacksilver hoard in the region is from 'Cadger's Cairn' in Gordon, Berwickshire (Graham-Campbell 1995). There are only rare finds of silver ingots, including one from Maxton and another from Whitmuirhaugh near Sprouston (NMS X.2016.30), but they are difficult to date closely (Graham-Campbell 2008, 199; Shiels and Campbell 2011). Like the above lead weights, they seem to cluster in the area that would later become Roxburghshire.

Craft Production

There is only limited evidence for specialised craft production in the early medieval SESARF region. There are as yet no well-excavated non-ferrous metal workshops such as those found in hillforts elsewhere in Scotland at this time, though traces of metalworking have been found at a number of sites. The excavations at Dunbar provide the widest range of craftworking activities, including the processing of textiles, antler, shale, and metals including lead and gold (Perry 2000).

The clearest evidence for craftworking in the region comes in the areas of textile production. Then as now, a large part of the economy in this area would have been devoted to wool production and weaving. The main evidence for this comes from the distribution of loomweights, spindle whorls and weaving sheds, and in some cases, from faunal assemblages. For instance, in Northumbrian phases at Dunbar, the age profile of sheep/goat bones shows a majority lived to advanced ages, suggestive of retention for wool rather than meat or dairy (Perry 2000, 219, 235). This matches well with the artefactual evidence from early Northumbrian-era Dunbar in which artefacts relating to textile production made up as much as 42% of the assemblage (ibid, 184-5). Blackwell (2018, 267-74) found that diagnostically Anglo-Saxon types of loomweights and weaving equipment from Scotland all come from five sites in the SESARF region. At both Dunbar and Ratho, clay loomweights were associated with sunken-featured buildings, and at the latter they were found in a row, representing an upright loom buried in situ in a weaving shed. A similar feature has recently been excavated just outside the project area in the Coquet valley of Northumberland (Current Archaeology 395, February 2023, need pages and author).

The use of clay for these loomweights hints at local production of ceramic, but only very few fragments of coarse wares have been found from early medieval settlements, including at Gogar Mains and Ratho.

The excavations at the monastery at **Auldham** have turned up tantalising evidence of manuscript production, including a rare glass inkwell and the harvesting of dogwhelk, a mollusc used for the production of purple dye (Crone and Hindmarch 2016, 138).

Distinctive Northumbrian and Viking-age decorated bone combs have been found at a number of sites in the region, but not evidence for bone-working as yet.

Pre-burghal markets and townships?

The latter part of the study period includes the development of pre-burgh townships, with archaeological evidence from the SESARF region providing critical data toward the chronology of settlement nucleation and urbanisation in Scotland. Historical sources from the time use the term *urbs* to describe a range of sites, from power centres like Dunbar to monasteries such as Coldingham, but these were not urban centres as we would understand them today, with dense settlement and roads. It is only from the early twelfth century that kings of Scots began to formally create burghs, or urban centres formally chartered with certain privileges to support market activity (Oram 2011). But excavations in urban centres like Dunbar, Edinburgh Old Town, North Berwick, Jedburgh and Dalmeny show early medieval trade activity which may help push the origins of urbanisation and permanent markets before this.

Lost hacksilver and coin hoards of the tenth and eleventh centuries from Gordon, Cockburnspath and Jedburgh (see above, **Coinage and bullion**) were mainly sourced from neighbouring Hiberno-Norse and Anglo-Danish economic zones, but together they show participation in the wider trend toward monetization in this period (Graham-Campbell 1995). Coin finds are now being supplemented with new finds of silver ingots in around the area that would become the burgh of Roxburgh, from metal detecting (Holmes 2004; Shiels and Campbell 2011).

Metal detecting in the Glebe Field area of Aberlady has turned up the largest assemblage of this period from Scotland, including several Northumbrian stycas, dress pins, and even a fragment of a crosier (Lowe 1999, 55; Blackwell 2018, 107). This is the closest to a middle Saxon 'productive site' encountered in Scotland so far, supported by recent excavations, providing structural context suggesting it was more than just a seasonal coastal market. The site and the wider assemblage remains unpublished.

There is a lot of potential to investigate the early medieval precursors of burghs and town formation in places such as North Berwick, Haddington, Jedburgh and Melrose but there have only been limited excavations in these towns to date. The keyhole excavations in North Berwick have revealed significant depths of stratigraphy and good preservation due to a build-up of wind-blown sands. Responsible metal detecting has already revealed important concentrations of 9-12th century weights, imported artefacts and early Scottish coinage in places such as Ayton and Maxton, while the concentration of early medieval burial evidence around Dunbar suggests increasing population density in the early medieval period.

Religion and ritual

Paganism and conversion to Christianity

The spread of Christianity within the region during the early medieval period has been associated with the long cist burial tradition (Henshall 1956; see below, **Burial traditions**), but recent research has shown that the link between inhumation burial and conversion is not straightforward (Maldonado 2013). It is also difficult to pinpoint 'pagan' places and practices, which makes attempts to define 'conversion' from them fraught.

One way to assess changes in belief may be to try and track the end of Iron Age burial practices, including cremation practice, crouched burial and communal burial in massive cists (Armit et al 2013). However, we should be careful not to ascribe a single cause, such as religious change, to breaks in the archaeological record (see below, **Burial traditions**).

The earliest evidence for Christianity in the SESARF region, and indeed in Scotland, is in the form of late Roman silver bearing Christian iconography from the Traprain Law silver hoard (Hunter et al 2022). These include spoons marked with the Chi-Rho monogram, and a flagon bearing one of the earliest depictions of the Adoration of the Magi outside of Rome itself (<https://blog.nms.ac.uk/2019/05/30/disentangling-early-christianity-on-the-traprain-treasure/>). However, this material was likely brought and retained as hacksilver, and does not necessarily reflect the beliefs of any of the occupants of the hillfort in the early fifth century.

Certainly by the middle of the fifth century, there were Latinate Christians among the Britons of the SESARF area, as shown by the early Latin-inscribed stones which began to appear at that time (**see below, Early inscribed stones**). The small number of these means we cannot be sure that literacy and Christianity were widespread, much less universal, but their appearance from Galloway to Midlothian around this time suggests a wider adoption of Romano-British cultural forms during the late Roman period that persisted after the fall of imperial control.

The arrival of Northumbrian cultural forms into the study area around this time makes it possible to detect new forms of Anglo-Saxon paganism as well. For instance, a seventh-century copper-alloy buckle plate from Ayton, Scottish Borders with parallels from Kent and Scandinavia, may bear iconography relating to the cult of Odin (Blackwell 2018, 147).

The conversion of Northumbria is traditionally dated to the mission of Bishop Paulinus to the court of Edwin in AD 627, according to Bede's account a century later. Edwin's successors renounced Christianity until Oswald gained the throne in 634 and the Iona-trained Aidan was installed as Bishop of Lindisfarne in 635. Regardless of whether these events had any bearing on the faith of Northumbrians outside royal circles, they are a useful reminder of the diversity of beliefs and practices extant in the study area in the first few centuries of the early medieval period.

Just beyond the study area, the royal centre of Yeavinger has the most convincing evidence for the performance of pre-Christian practices on a large scale as late as the sixth and seventh centuries. The Great Enclosure reuses prehistoric earthworks, and seems to have formed the focus for a large complex of ritual structures including timber halls and furnished burials. A burial at the entrance to the Great Hall contained an object interpreted as a staff or survey device as well as a goat skull, perhaps in reference to the place name Ad Gefrin, the Hill of the Goats (Hope-Taylor 1977, 69). Another structure associated with a deposit of cattle skulls was also interpreted as a 'temple', while a square enclosure with a central post has also been identified as a type of early Anglo-Saxon 'shrine' (Blair 1995). However, in 627, the gatherings that took place at this royal cult site were appropriated by Bishop Paulinus, who according to Bede preached and baptised people there for 36 days. A timber hall may have been made into a minster around this time, although the structures and the associated burials at Yeavinger remain difficult to date closely.

The similarities of layout between Yeavinger and the cropmark sites at Philiphaugh and Sprouston, where hall-like structures are joined with large enclosed burial grounds, suggest a similar sequence may have taken place in the SESARF area, but these sites remain unexcavated. A necessary caution here is that the presumed cult hall and burial complex at Doon Hill, East Lothian, also long compared to Yeavinger, has recently been proven to be prehistoric in date (see above, **Centres of power**).

Even after the Christianisation of the region, hints of pagan practice may still be found. A furnished burial from Auldham, in which a male adult was buried with weapons, spurs and a Hiberno-Norse belt set, may also be indicative of Norse pagan belief introduced in the Viking Age (Crone and Hindmarch 2016).

Early inscribed stones

An important series of standing stones inscribed in Latin dated from the fifth to seventh centuries marks the first archaeological evidence of Christian Britons in the study area. Katherine Forsyth (2005) has identified twelve of these inscribed stones from Scotland, all found south of the Forth-Clyde isthmus, and half of which are in the SESARF region. The earliest are the Cat Stane, now on the site of Edinburgh Airport, and the Latinus Stone from Whithorn, both dating from the mid-fifth century. While the Latinus stone directly invokes the Christian God, the Cat Stane is a Bronze-Age megalith reused as a simple memorial to Vetta son/daughter of Victricius (Cowie 1978). Both were found in close association to cemeteries of long cists, suggesting at least some of the occupants of these early inhumation graves were Latin speakers, with Latin names, literate and possibly adherents of the Christian faith.

The remaining examples in the study area are all from the Scottish Borders region. The sixth-century stones from Brox, Yarrow and Manor Water form a coherent group in that they are all laid out vertically, a feature of many of the Latin-inscribed stones of Wales, and perhaps a sign of influence from Irish ogham inscriptions. The commemorands on these three stones have a mix of Celtic and Latin names. While the Latinus named on the Whithorn stone was descended from the Celtic-named Barroadus, the opposite is seen on the Yarrow stone naming the 'princes' Nudus and

Dumnogenus sons of Liberalis. Unlike the contemporary Latin-inscribed monuments from Kirkmadrine and Low Curghie in the Rhins of Galloway, which bear crosses and reference clerics and bishops, the Borders inscriptions instead seem to be marking territorial boundaries. At Yarrow the stone was found near a long cist cemetery, one grave of which has recently been radiocarbon-dated to the sixth century (Knight et al, DES 2022). These three stones are joined by an enigmatic carving at Over Kirkhope of a nude figure who may be in an *orans* pose seen in early Christian art, but is otherwise difficult to date (Thomas 1971?).

At Cross Kirk Peebles, a lost inscription was said to commemorate a Bishop Nicholas, and the form of the Latin suggests it was a genuine member of this group. From later in the seventh century, a kite-shaped cross-slab from Peebles commemorates a bishop or priest named Neitan. Unlike the rest of this group which continued the use of late Roman capitals for their texts, this is inscribed in half-uncial, a book-script used in the earliest surviving Christian manuscripts. Along with its carved cross and commemoration of a member of the clergy, this stone seems to mark the transition to an era in which monumentality was dominated by monasteries, of which Peebles may be one of the earliest.

Burial traditions and belief

The most abundant evidence for early medieval settlement in the SESARF region is in the form of graves and cemeteries. Maldonado's (2011) database lists at least 80 sites with certain or possible early medieval burial in the region, representing about 15% of the known early medieval burial places in Scotland. It is the densest concentration of burial evidence in the country, and with some of the largest population sizes. Examples confirmed by excavation include 116 at Parkburn, Lasswade, and 111 at Thornybank. Population sizes grow potentially into the multiple hundreds at ecclesiastical cemeteries such as the unexcavated cropmark sites of Sprouston and Philiphaugh.

Of these 80 sites, 72 are listed as possible or confirmed long cist sites. Long cists are graves in which the cadaver is lined with unmortared stone, generally consisting of upright slabs. This was the most common burial rite in early medieval Scotland (Maldonado 2013). Long cists were used from prehistoric times through the medieval period, but they are most characteristic of the fifth to the seventh centuries. It is in this window of time that the best excavated examples can be found, including Thornybank, Lasswade and the Cat Stane.

One prominent example stands as a type-site. At the Cat Stane, City of Edinburgh, 51 cists were orientated W-E (that is, with head to west, facing east). The Cat Stane itself is an early inscribed stone which acted as a focus for the cemetery (see below, **Early inscribed stones**). Originally excavated in 1864 by Hutchinson, although it has been noted that the plans produced at the time are not reliable in terms of scale and measurements (Rutherford & Ritchie 1975). The uncovered cists were paved with flat stones, except for one 'short cist' which was built of ordinary stones and featured evidence of burning. The paved cists contained poorly preserved human bone but no artefacts were recovered. Further excavations were carried out in 1977 and uncovered four rows of long cists, some that had been previously investigated

and others that showed no signs of the earlier excavations. A badly denuded kerb was detected around the base of the Cat Stane, which some cist burials arranged around what appears to be a ploughed-out mound at its base. If the inscribed stone and the cemetery were consciously reusing a Bronze Age kerbed cairn and standing stone, it means the memorial to Vetta may not in fact mark their specific burial place, as much as the cemetery itself. The cists were constructed of either shale or sandstone, both available locally, and Maldonado (2011) suggested that these corresponded to different clusters, perhaps family groupings, when combined with radiocarbon dating. This could perhaps now be tested with stable isotope analysis or paleogenetics.

While in general the region benefits from fairly recent open-area excavations published with large suites of radiocarbon dated individuals such as Thornybank and Auldhame, the majority of identified sites remain unexcavated and/or dated. This is a problem mainly due to the visual and morphological similarity of cist burial over long periods of time. Iron Age cist burials in the region come in a variety of forms (eg Dalland 1991; Armit et al 2013), some of which may have been mistaken for early medieval cists before modern excavation reporting. Radiocarbon dating at Castle Park, Dunbar radiocarbon reveals that long cists were occasionally used in the later medieval period as well (Perry 2000). This may explain reports of cist burials around later medieval monasteries (eg Turner 1866).

Long cists were not the only form of burial used in the early medieval period. The large cemetery of Thornybank, Midlothian was roughly half long cists, alongside as many as 45 graves with an organic lining argued to have been log coffins, made from a hollowed tree trunk (Rees 2002). Two of the burials were further enhanced with square-ditched enclosures which may represent either low barrows similar to Pictish burials north of the Forth, or fenced mortuary houses as seen amongst contemporary British burials in SW England and Wales (Longley 2009). A grave with a four-post arrangement is also indicative of an above-ground timber structure. A similar mix of cists and log coffins can also be seen in at early medieval Whithorn in Galloway, where above-ground markers and fenced enclosures were also suggested, and it seems clear that both were part of the Britons' funerary ritual repertoire (Maldonado 2019).

There are also rare instances of furnished burial, that is, burial dressed and/or arrayed with grave goods. It may be that these are signs of pagan practice, but the link between unfurnished burial and Christianity remains unproven (Maldonado 2011), especially given that the majority of pre-Christian Iron Age burials in the region were also typically unfurnished.

One burial in particular forms the clearest example of an Anglo-Saxon-style furnished inhumation in the SESARF area, but also shows the difficulties of ascribing religious belief to burial practices. The burial of an adult individual at Hound Point, Dalmeny was discovered wearing a beaded necklace at the neck (only teeth survived at the west end of the grave). The most diagnostic beads have parallels among early Anglo-Saxon graves elsewhere in Britain, some as late as the seventh century. At the centre of the necklace was a fragment of Roman glass, a folded rim of clear blue vessel, dateable to the second century AD. There are numerous

instances of Roman glass and other objects being repurposed as amulets in Anglo-Saxon graves. Along with the date of the latest beads, a seventh-century date for the burial is most likely, making among the most northerly of the furnished burial rite. However, it does not follow from this that the individual was buried as a pagan. Grave goods were becoming less frequent in the seventh century, as discussed above (**Paganism and conversion**), there were both pagans and Christians in Northumbria in the seventh century. An inhumation facing east was typical of the Lothian area for centuries by this point. There are occasional small finds from long cists in the region, like an Iron knife and a fragment of shale bangle from Lasswade, which are hardly diagnostic of cultural affiliation, and instead suggest that personal objects could sometimes be included in the funerary rites of this region (Maldonado 2011, 114-16).

There are potentially earlier Anglo-Saxon-style furnished inhumations in the region, discussed most recently by Blackwell (2018). Late Roman and Anglo-Saxon weapons and other finds around the Roman fort site of Newstead suggest occupation into the fourth and fifth centuries here, and match well with similar finds from the hillfort of Traprain Law (ibid., 296-7). A burial in a long cist with a part of an iron spearhead from Easter Ferrygate Gardens, North Berwick (canmore 56641) was recently radiocarbon-dated to AD 555-644 (Knight et al 2021, 209). More recently, a fragment of a Style I-decorated Great Square Headed brooch was discovered through metal detecting near Chirnside, Scottish Borders (TT18/19, now NMS X.2021.31), extending the possibility that early Anglo-Saxon-style grave goods were used in the SESARF area.

A number of stray finds of elite Anglo-Saxon gold objects have been found in the Lothians, which could relate to burials displaced by the plough (Blackwell 2018). They include a domed gold and garnet cloisonné sword mount from East Linton (NMS X.1992.5), a pyramidal gold and garnet cloisonné sword mount from Dalmeny (NMS X.FE 50), a gold and garnet cloisonné fragment from a pendant cross from Dunbar (NMS X.1997.529), a gold and glass cloisonné mount from Auldham (NMS, unregistered), and a disc-shaped gold decorative fitting from Dalmahoy (NMS X.FE 86). It is only a small group but remarkable collectively. They have parallels with 'Final phase' Anglo-Saxon grave goods from Kent, and in some cases represent the only examples of their kind north of the Humber. They can all be broadly dated to the seventh century. Their clustering in the Lothians suggests that this region may have been wealthier and more well-connected to the world of princely burials such as Sutton Hoo than previously suspected, a "a hitherto unrecognised royal/political heartland" (Blackwell 2018, 304). Metal detecting has turned up one more find from this group in the Scottish Borders, a gold pendant with purple glass cabochon inset from Old Cambus, Cockburnspath (TT 80/18, now NMS X.2022.25).

Burial in the landscape

The majority of excavated burial sites in the study area are 'field cemeteries', that is, groups of graves which are largely unenclosed and far from contemporary settlement. Our current understanding of burial location in the landscape is that these field cemeteries and small groups of isolated burials are most characteristic of the 5-7th centuries; prominent published examples include Thornybank, Lasswade, The Cat Stane and Kingston Common. Where good sequences of radiocarbon

dating are available, it is clear that these cemeteries commonly went out of use after the seventh century. The exceptions are when the cemetery became associated with a church or monastic settlement. As excavations at the monastery of Auldham, East Lothian showed (estimated at 300+), cemeteries which are associated with churches were more likely to continue in use beyond the end of the study period, which may account for larger population sizes, and so radiocarbon dating is crucial. Excavated examples of ecclesiastical cemeteries such as Castle Park Dunbar and The Hirsell are also characterised by a high amount of intercutting graves, unlike earlier field cemeteries which were used for shorter periods of time.

The long cist cemeteries of the region were formerly seen as evidence for either missionary work or continuing Roman influence, but they are best understood as a continuation and expansion of continuing Iron Age burial forms attested in the area, particularly in East Lothian (Maldonado 2011). These newly-founded cemeteries generally date from the very end of the Roman Iron Age through the seventh century, at which point burial appears to shift into churchyards and monastic sites. As such, they join the rare but critical evidence for British settlement and belief, and could provide a window on the transformation of this region from potential clients of Rome under the Votadini to a Latin-speaking Christian elite as attested in the Latin-inscribed stones from Kirkliston (Cat Stane), Brox, Manor, Yarrow, Peebles and an ogham inscription from Selkirk (Forsyth 2005). Like the massive silver chains, the majority of which were found in East Lothian and the Borders (**see below, Material Culture**), these stones represent the complicated way in which the Britons were shaped by the frontier politics of the Roman Empire (Blackwell, Goldberg and Hunter 2017).

Early monasteries and monumentality

Despite the important early evidence for Christianity in the SESARF region detailed above, the archaeological evidence for early church and monastic settlements remains poor.

Among the best-documented sites is the early monastery of Coldingham. The first recorded mention of a religious house at Coldingham comes from Bede, who records a house of female religious there in the seventh century, but it is still unclear whether this was the site of the medieval priory or at the promontory fort of St Abb's Head on the coast. Bede names an abbess named Aebbe as one of its first leaders. Amongst other early medieval Northumbrian sculpture surviving from this site, there is a stone with a fragmentary inscription in Insular display capitals reading - [A]BBADISSA +, "- the Abbess", followed by the sign of the cross, tentatively dated to the eighth or ninth centuries (Okasha 1988, 1992). It is named in a list of churches within the diocese of St Cuthbert (Lindisfarne) in 854, but typically for the period, we do not hear much more about this site until a new charter was granted by King Edgar in 1098, re-confirming it to the Benedictine monks of Durham. A church dedicated to St Mary was dedicated here around 1100, and a Benedictine priory was founded in 1147 (Canmore 60143).

[overview of recent excavations here – Stronach et al; Digventures].

Another notable early documented establishment is at Abercorn, named by Bede as the location of a short-lived diocese headed by Bishop Trumwine. The diocese was created in 681 to cover the Northumbrian-controlled territories on both sides of the Forth, but a Northumbrian defeat at the battle of Nechtansmere in 685 led to the evacuation of that see. However, the site was seemingly never abandoned, and houses a remarkable collection of early medieval sculpture. A particularly ambitious eighth-century high cross decorated in relief once stood ___m tall, and sculptural production seems to have continued here throughout the early medieval period, including hogbacks and related tegulated coped recumbent stones which date from the 10-12th centuries.

Early sculpture turned up by the plough led to geophysical survey and excavations at The Hirsell 1978-1984 by Dame Prof Rosemary Cramp. A single-celled drystone proprietary chapel was built here in the 10-12th century and expanded to become a substantial mortared stone estate church with burial rights in the later medieval period. Some of the radiocarbon dated burials could be as early as the eleventh century, but most cluster in the 12-4th-century range. The simplicity of some of the early cross-marked grave markers precludes close dating, but an openwork ringed cross head with wedge-shaped arms belongs to the 11/12th century.

The only early medieval monastery to receive a modern open-area excavation was Auldham, though for reasons of preservation, the excavation was stopped before reaching the earliest layers. The dated burials and material culture here go back to at least the seventh century. The site was shown to re-occupy a prehistoric promontory fort. The earliest dateable church building was dated to ___ but appears to be on the site of an earlier timber structure that was left unexcavated. An exemplary multidisciplinary study has fleshed out its position in the early medieval period as a subsidiary or daughter church of the minster or 'mother' church at Tynninghame. Despite its subsidiary status, however, finds like a gold cabochon mount and a rare glass inkwell show that it likely enjoyed royal patronage in the seventh and eighth centuries.

The best index of the scale and influence of the "golden age" of the Northumbrian Church in the SESARF region is the distribution of relief-carved stone sculpture. This includes highly accomplished high crosses at Aberlady, Abercorn and Morham, and an intriguing collection of fragments of Anglian sculpture including possible shrine panels at Jedburgh and Ancrum (described at [Canmore ID 91515](#)). Unfortunately, as the Corpus of Anglo-Saxon Sculpture has not extended across the border, there has been limited cataloguing and analysis of this material (but see now Smith 2017, and entries on Canmore as part of the Early Medieval Carved Stones Project, Ritchie 2016). Mapping their original findspots would help flesh out the spread of monastic estates, territorial boundaries and routeways through the landscape.

With regards to Early Medieval pilgrimage routes, the Borders and East Lothian included pilgrimage routes from Lindisfarne to Old Melrose, St Andrews and Iona. This is attested by place-name and art historical evidence linking the main routes of travel with the cults of St Cuthbert and St Columba (Taylor).

Cross-slabs and sculpture overview badly needed. Ancrum, Jedburgh, Abercorn, Aberlady, Coldingham, Morham, the list goes on. Not just Anglian sites either. See weird crosses and cross slabs including Dalmahoy (<https://canmore.org.uk/site/50320/dalmahoy-st-marys-church>), and borderline Govan-school stuff at Netherurd, 'pictish' carvings, hard to date stuff like the orange stone, weird ones like Innerleithen, more.

Chapels on forts – St Margaret's, Edinburgh, Nennius's list of chapels at forst including one at Traprain Law?

Case Study Suggestions:

- Tynningham, St Abbs and Coldingham
- Holy wells in Edinburgh
- Places of pilgrimage e.g. holy wells
- Auldhame and Aberlady
- North Berwick pilgrim routes
- Corpus of sculpture – for summary, see Future Thinking section 2.3 Early Medieval <https://scarf.scot/thematic/future-thinking-on-carved-stones-in-scotland-2/2-current-state-of-knowledge/2-3-early-medieval/> and build on recommendations in Future Thinking section 3 <https://scarf.scot/thematic/future-thinking-on-carved-stones-in-scotland-2/3-creating-knowledge-and-understanding/>

Early medieval settlement around monasteries is becoming better understood with the excavations at The Hirsell (Cramp 2014), Jedburgh (), and Auldhame (Crone and Hindmarch 2016); however, the overall settlement hierarchy and interplay between monastic, royal and urban centres, such as they are during this period, and the relationship between these and their hinterland remains poorly understood (Petts 2017, 2018). The foundation of monasteries seems to be intimately tied to the expansion of Northumbrian hegemony in this area, and both should be considered on a wider landscape basis. Recent work collecting the evidence for Anglo-Saxon small finds in this region, greatly expanded through responsible metal detecting activity, is helping flesh out cross border entanglements with regard to settlement, craft production, dress styles and consumption patterns (Blackwell 2018).

Major monasteries twinned with hillforts? Coldingham+St Abb's Head; Jedburgh+The Dunion; Ancrum+hillfort; Melrose+Eildon; see also Perry for discussion of relationship between Dunbar (royal centre) and Tynningham (monastic centre)

Compare now to O'Brien and Adams 2016, 2018 for the diocese of Cuthbert landholdings.

Later sculpture and architecture

There is also an important set of coped stones or 'hogbacks' across the region which suggests continued patronage of these monastic sites into the Viking age, including at the island monastery of Inchcolm, only some of which will be related to the main pilgrimage routes. Hogbacks have been stereotyped as evidence for Norse

settlement, but recent research suggests they are better understood as a form of elite mortuary commemoration particularly associated with new foundations and the emergent merchant class (Barnes 2019). The ornament on some of these, such as the chequerboard pattern on the Tynninghame stone, is shared with Romanesque sculpture in the nearby church which means they may be as late as the 12th century (Maldonado 2021).

No early churches except perhaps a timber structure at Auldhame; few hillforts; few houses. Otherwise mainly undiagnostic stuff like querns, ceramic and spindle whorls, for which see above, Food Production and Craft Production.

Romanesque architecture, hogbacks, The Hirsell and the formation of parish churches.

Corpus of Romanesque Sculpture in Britain and Ireland database for crucial new fieldwork, including poorly understood 10-12th century carved stones.

See now Cusack 2015 for the introduction of Romanesque architecture at Dalmeny.

A big gap is our understanding of the post-viking, pre-Norman phases of monasteries. We know from excavations at Auldhame and Isle of May and recent work outside the study area at Lindisfarne (Digventures/Petts) that these burial grounds remained in use, albeit at a slower tempo. And late sculpture continued to be produced at Abercorn and Lindisfarne. A 10th century coin hoard from near St Helen's, Cockburnspath joined with two late 'hogbacks' speaks to an interesting phase of this church, while 9-10th century coins and late sculpture from Jedburgh remains decontextualised, likely through disturbance from the later reformed Abbey.

Material culture of identity

Dress

Late Roman types of penannular brooch: Collins 2010

Crock Cleugh annular brooch

Silver chains: Hoardweel, Greenlaw (lost) and Whitlaw are the furthest south. Traprain Law has silverworking and hoarding context. Blackwell et al 2017, 103–4, 141–2) for revised 4/5th C origins.

Beads: see Hound Point. Blackwell beads study focuses on Anglo-Saxon and Continental types but is the best recent overview for the region at 219-252.

8/9th century sees numerous finds of Northumbrian style dress pins and strap ends. Notable clusters of pins from the Aberlady assemblage and elsewhere discussed in Blackwell 2018. Strap-ends and other finds from Coldingham suggest lots of activity here in this period.

There is also a small number of antiquarian stray finds of Scandinavian and Hiberno-Norse material known from the area, including a Baltic form of penannular brooch from Gogar now on display in the National Museum of Scotland (X.FC 153; Graham-Campbell and Batey 1998, 101). Maldonado Crucible of Nations 2021 rediscovered a rare faceted carnelian bead from excavations at Coldingham Priory. A decorated lead weight recently reported to TT from Coldingham. Could this site have been targeted for raids by the Viking Great Army in the late ninth century? See new finds of lead weights from the Coquet valley by Sue Harrison and Jane Kershaw.

For furnished burial in general, see Burial Traditions above, and for weapons, see below under Conflict.

Everyday life

See above for discussions of querns, spindle whorls, coarse wares, bone combs. Iron tools from Dunbar.

Possible animal bells in NMS from Dunbar and Minchmoor: see Maldonado 2021, Crucible of nations.

Christianity

Aberlady crosier fragment

Kelso bell (Hume Castle)

Dunbar pectoral cross fragment

Auldhame inkwell

Conflict

Weapons

Dalmeny sword mount; spear burials mentioned above.

Blackwell 2018, 280-83 for possible early medieval spearheads at Traprain Law and Newstead

Driscoll and Yeoman 156 for possible Anglo-Saxon spearhead at Edinburgh Castle.

Battlefields

Gododdin

The battle of Degsastan in 603 between Dal Riada and the Bernicians occurred, possibly, in Liddesdale in the Scottish Borders (McLaughlan 2015).

638 seige of Edinburgh

Cinaed mac Ailpin (843x858) said to have burned Dunbar

Viking raid on Coldingham in 870, or is this simply later myth?

934 Aethelstan

Olaf Guthfrithsson 941 raids on monasteries as far as Tynninghame and Auldham

Edinburgh abandoned to the Scots in the reign of Indulf (954-62)

A battle between Malcom II and Constantine the Usurper occurred at Newbridge in 995AD, with some stray finds attributed to the battle being found during the 19th century ([Canmore 50735](#)).

The Battlefields Trust is currently working with the Carham 1018 society in the hopes of establishing the original site of the Battle of Carham, which is an often-overlooked event which played a deciding factor in where the Scottish/English border is situated today. (Carham 1018 Society). Although it lies slightly beyond the Study Area within Northumberland there is the potential for research to uncover the routeways taken by the Scottish army for the battle. see now McGuigan and Woolf edited book.

Osteological evidence for interpersonal violence

Osteological evidence: Maldonado said violence was rare in burials but this is now overturned by new work by Anglea Boyle. See now Boyle A (2021) *Cowboys and Indians? A biocultural study of violence and conflict in south-east Scotland c AD 400 to c AD 800*, PhD Thesis. University of Edinburgh.

Cramond mass grave also underlines a particularly weird example. A mass grave of 9 adults (five females, four males) and five infants was uncovered during excavations of the Cramond Roman bathhouse latrine in 1976. As they appeared to be mixed with later medieval midden backfilling the stone structure, they were interpreted as late medieval, perhaps a plague pit. Radiocarbon dating of 8 of the adults later determined that all had died in the 6/7th centuries (Orshi article).

Czere et al 2022, 66-68: "Evidence of interpersonal violence was seen on the crania of at least four individuals. Cranium 1, an adult male aged 26–35 years, had a healed sharp-force injury on the right parietal and a possible depressed linear fracture on the posterior portion of the same bone. Peri-mortem sharp-force trauma was identified on the right parietal of cranium 9, also an adult male aged 26–35 years. Cranium 5, a young adult female aged 18–25 years, had suffered a severe peri-mortem blunt-force injury to the right side of her head. Cranium 6, an older adult female aged upwards of 46 years, had an ossified haematoma on the right parietal, possibly the results of a blow to the head and a possible healed fracture of the body of the right mandible."

Discussion

Gaps in evidence

Material culture mainly; settlement evidence; dating of hillforts; pre-burghal settlement. Where's our Dunadd? Where's our Portmahomack? Where are the Scots?

Opportunities

Largest coverage of early medieval burials anywhere; territorial organisation; origin of burghs, shires and parishes; corpus of early medieval sculpture; origins of Bernicia; rise of Alba; Gododdin; the Late Antique period

Revising chronological barriers – how early can we start the early medieval? Should we include more late roman material? (Traprain, Newstead, silver chains all have a hazy 4/5th century period which is misunderstood because they are neither roman nor Pictish. Hunter 2006 Groam House lecture for late roman coin hoard distribution.

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