

Resource Assessment: Early medieval

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History of research

The literary output of Bede and the production of works of art, such as the Lindisfarne Gospel and the Codex Amiatinus, have ensured that the Golden Age of Northumbria has a high public and research profile. However, there is much more to the early medieval archaeology and history of the region than this short-lived flowering of ecclesiastical high culture. The surviving resource includes nationally important sites, such as Bamburgh, Lindisfarne, Yeavering, Monkwearmouth and Jarrow, in addition to a fine corpus of stone sculpture and a number of surviving Anglo-Saxon churches of 8th to 11th century date.

The best studied of these archaeological materials remains the widely distributed and highly visible fragments of carved stone sculpture, associated almost exclusively with ecclesiastical sites. Many of these were discovered during 19th-century church restoration, built into later medieval fabric. In addition, the latter half of the 19th century saw the beginning of more synthetic discussions of Northumbrian sculptural traditions. The earliest were the works of G. Baldwin Brown, who was followed in the early 20th century by W. G. Collingwood. From the 1960s this field of study has been dominated by the work of Rosemary Cramp, who was responsible for the first volume of the Corpus of Anglo-Saxon stone sculpture, a project which comprehensively covered all the early medieval sculpture from the north-east region

(Cramp, 1984) and has since been rolled out nationally, with many of the county catalogues available online¹. .

The rate of archaeological excavation on early medieval sites and research on the period has increased since the 1980s. This has partly been due to some research excavations, such as the University of Leicester's work on Green Shiel at Lindisfarne (O'Sullivan and Young, 1991), Anthony Harding's excavations at Milfield Henge (which produced several unexpected Anglo-Saxon burials) (Tinniswood and Harding, 1991), and Colm O'Brien and Tim Gates' excavations at New Bewick (Gates and O'Brien, 1988). More recently Sarah Semple has led a group of archaeologists from Durham University alongside the Gefrin Trust to re-examine the early medieval royal vill at Yeavering and its hinterland. David Petts and Digventures and a separate, concurrent project led by the Archaeological Practice and the Peregrini Landscape Partnership have investigated early medieval Lindisfarne. Work at many Roman fortifications have explored post-Roman occupation and use along the frontier, with Durham University excavations at Binchester demonstrating late Roman and early medieval use of the site (Petts personal communication 2017). Archaeologists from Newcastle University and Durham University have explored early medieval activity at Etal, and research in the Frosterly AONB has begun to reveal early medieval impacts to the landscape (O'Brien and Adams, personal communication, 2017). Ongoing excavations by the Bamburgh Research Project have explored the early medieval origins of the castle as well as a large, associated cemetery. Further afield, and just outside of the NERRF study region, significant archaeological sites from the period have been found that have contextualised early medieval settlement and burial practices, including the excavations at Loftus, Street House which has revealed a unique early medieval cemetery with richly furnished burials (Sherlock 2014). *People and Place: The making of the kingdom of Northumbria 300-800 CE* is a major research project, led by Sarah Semple, that is charting the entirety of burial evidence for the kingdom of Northumbria and testing these burials with using isotopic and palaeopathological analyses. These results are combined with GIS spatial analysis to

¹ www.ascorpus.ac.uk

investigate formation processes and patterns in the burial record from a landscape perspective.

From the 1990s there has also been an increase in the discovery of sites due to excavation carried out in a planning (PPG16) context: a further cemetery has been discovered in Norton recently, while excavations in the centre of Darlington have revealed Late Anglo-Saxon burials. Developer-funded projects have identified significant early medieval sites since the publication of the last NERFF, with many found due to the opening of extensive surface mines. Two early medieval small 'farmstead' settlements were found close to the previously identified settlements of Thirlings, Yeavinger, and Milfield in the Milfield Basin. These two small settlements at Lanton and Cheviot Quarries have been dated to the 6th century through radiocarbon dating (Johnson et al., 2008; Stafford and Johnson, 2007). A large settlement was excavated near the village of Shotton prior to open scale mining, that revealed a complex settlement of structures and overlapping enclosures that, according to radiocarbon dating, had a long life from the 5th to 10th centuries (Muncaster et al., 2014). Shotton is located in an area with relatively few early medieval sites, filling in a 'gap' of early medieval evidence between the monastic sites and reoccupied Roman fortifications in modern-day Tyneside and the cluster of sites in the Milfield basin.

Existing research frameworks

A number of research agendas and recommendations have, at one time or another, been created for the early medieval period, including, of course, the first northeast regional research framework (Petts and Gerrard, 2006). The earliest, however, was Martin Carver's list for pre-conquest Durham, which included an early demand for what amounted to deposit modelling, as well as the full publication of the late-18th-century excavations on the Chapter House (Carver, 1980). Local issues were also addressed in the papers published in *Past, present and future: the archaeology of northern Britain* (Brooks et al., 2002) which included an overview of the period of Roman to Anglo-Saxon transition by Chris Loveluck (Loveluck, 2002). Research priorities highlighted there included the investigation of upland land-use through

pollen cores, increased sampling of faunal remains, publication of Brian Hope-Taylor's excavations, and a wider awareness of the role of burial for the understanding of early medieval religion and social identity. The later part of the Anglo-Saxon period (c. 700-1100) was addressed by Rachel Newman (Newman, 2002). Limiting herself to evidence for Christianity, she pointed to the need for more work on minsters, the economic power of the church, and the role of the church in early urbanism, emphasising the need to and integrate evidence from the north-west and northeast of England as well as southern Scotland.

While the evidence for early medieval urbanism in the region is slight, it is important to be aware of a series of overviews of urban archaeology (e.g. (Addyman, 2003). The framework for urban/rural interaction based on the Urban Hinterland Project (Perring et al., 2002) made a series of methodological recommendations which should be implemented when exploring the early medieval origins of north-eastern towns, such as Newcastle, Berwick, Durham, and Hartlepool. The notion of 'recovery levels' and better dissemination of existing archives seem especially relevant.

A series of agendas and recommendations have tackled the issue of rural settlement and landscape change. The policy on the research, survey and excavation of medieval rural settlements compiled by the Medieval Settlement Research Group (MSRG 1996) highlighted the need to understand regional distinctiveness and the process of settlement nucleation. It also recommended further interdisciplinary research which combines environmental, documentary and archaeological skills. A number of managerial issues were also put forward, including the need for research to feed into planning decisions, both as advice to development control archaeologists and as a strategic influence in District Local Plans, etc. Steve Rippon also echoed this need for academic input into development control in his personal comments on the future of medieval settlement (Rippon, 2002). He made it clear that future landscape work should ignore traditional chronological divisions, and highlighted the need for more long-term, large-scale excavation and survey work.

Following the publication of the previous NERRF, additional research frameworks focused, at least partially, on the early medieval period have been collated and published that cover portions of the NERRF study region. The Durham World Heritage Site Research Framework was developed as part of the World Heritage Management plan for the site (Petts, 2015)². Likewise, the Hadrian's Wall Research Framework was developed to summarise the knowledge on the World Heritage site, and put forward recommendations for future activities at the wall (Symonds and Mason, 2009)³. The community-led Altogether Archaeology project, focused on the archaeological heritage of the North Pennines, recently produced a research strategy and agenda for the group's previous and future work (Altogether Archaeology and Frodsham, 2017a, 2017b)⁴. Adjacent to the northeast, research frameworks have been compiled for the northwest (Brennand et al., 2006)⁵, for Scotland (the Scottish Archaeological Research Framework)⁶ and the Maritime and Marine Historic Environment Research Framework (Ransley et al., 2013)⁷.

Northumbria has always attracted scholarly attention, from the earliest written histories of the region by Bede. Since the last NERRF key publications have been released on the early medieval northeast. David Rollason's *Northumbria 500-1100: creation and destruction of a kingdom* focused on the historical narratives and archaeological evidence for how the kingdom developed from core regions along river valleys and ultimately how the kingdom ended (Rollason, 2003). David Petts and Sam Turner's (Petts and Turner, 2011) edited volume *Early medieval Northumbria: kingdoms and communities AD 450-1100* is a collection of interdisciplinary papers that covers a wide-range of topics that moved beyond the well-documented 'Golden Age' of the kingdom to examine peripheral zones of the kingdom, the earliest origins of Northumbria, and new ideas on transportation, social space, and place-name evidence. Papers in Rob Collins and Lindsey Allason-Jones' (Collins and Allason-Jones, 2010) edited volume *Finds from the Frontier:*

² <https://www.dur.ac.uk/resources/imems/WHS/WHSResearchFrameworkFinal.pdf>

³ <https://www.dur.ac.uk/research/directory/view/?mode=project&id=485>

⁴ <https://www.altogetherarchaeology.org/reports.php>

⁵ <http://www.liverpoolmuseums.org.uk/mol/archaeology/artf/>

⁶ <http://www.scottishheritagehub.com>

⁷ <https://eprints.soton.ac.uk/347338/>

material culture in the 4th and 5th centuries were drawn from a 2008 conference on Late Roman/early medieval material culture and is an excellent overview of scholarship on how artefacts in this period reflect everyday life in the region. Rob Collins' research into the afterlife of the Roman military in the north is very important for understanding the transitional 5th century (Collins, 2012), and Colm O'Brien and Max Adams' have both published extensively on the archaeology and history of Northumbria, and formed the Bernician Studies Group in 2009 to explore early medieval Northumbria in association with the University of Sunderland's Lifelong Learning programme. In addition, key publications on Monkwearmouth and Jarrow have been published since the last NERRF including the full excavation monograph by Rosemary Cramp (Cramp, 2005; Cramp et al., 2006) and the landscape analysis of the monasteries by Sam Turner, Sarah Semple, and Alex Turner (Turner et al., 2013).

Landscape and environment

Patterns of long-term landscape change, particularly the impact of the transition from the Roman to the early medieval period, are best addressed through palynological evidence. At Hallowell Moss (Co. Durham) clearance appears to continue throughout the Roman period until the later 6th century, and Fellend Moss (Northumberland) showed stability in its landscape until the 7th century AD (Davies and Turner, 1979, p. 796). Further north, pollen from Broad Moss (Northumberland), close to Yeavinger, indicated landscape continuity and arable farming (Davies and Turner 1979, 796). Stability in open heathland, rather than arable landscapes, is indicated at Drowning Flow and Bloody Moss (Northumberland) (Moores, 1998, p. 244). At Fozy Moss, however, there is clear evidence for the regeneration of woodland following the Roman withdrawal (Dumayne and Barber, 1994). A similar pattern of regeneration (but commencing c. AD 500) was also found at Sells Burn and Steng Moss, where agriculture apparently only commenced in the later 9th century AD (Davies and Turner 1979, 794; Moores 1998, 245). The evidence from samples taken close to the mid-8th century settlement at Simy Folds in Upper Teesdale shows the presence of cereal pollen at even this relatively remote site (Coggins, 2004; Coggins et al., 1983). Pollen studies on the Heugh at Lindisfarne

meanwhile have suggested that it may have been significantly altered or even created in the 7th century AD (Brown et al., 1998; O'Sullivan and Young, 1991a).

Insufficient excavation on early medieval sites means that there is meagre environmental evidence from archaeological contexts, although recent excavations have begun to change this picture. The quantity of surviving invertebrate remains is correspondingly small, with nothing to match the 10th/11th century and 11th/12th century deposits from 61-63 Saddler Street, Durham (Kenward, 1979). This was one of the first urban deposits from the north to be explored for insect remains. There are also limited quantities of plant macrofossils, mostly from the ecclesiastical sites at Hartlepool (Daniels and Anderson, 2007), together with a small quantity of pollen evidence recovered at Monkwearmouth (Huntley, 1990, 1987; Huntley and Stallibrass, 1995). Although plant macrofossils were recovered during the excavations of Cheviot Quarry, these comprised only four barley seeds recovered from a single posthole of one of the early medieval structures at the site (Johnson et al., 2008, p. 179). The charred food remains found at Lanton Quarry suggest that barley was the most common cereal grain at this small settlement in the Milfield Basin, but wheat and oats were also utilised at this c. 5th and 6th century site (Stafford and Johnson, 2007). The excavations at Bamburgh have demonstrated food processing of a variety of domesticated and harvested species and the remains are suggestive of a wide hinterland supplying Bamburgh (Kirton and Young, 2017, p. 201). Macrofossil evidence from Shotton confirmed the use of oat and hulled barley cereals in the late seventh to eight centuries at the site, with few other types of plants suggestive of use of heathland plants as well as seaweed from the coast (Muncaster et al., 2014, pp. 134–35). Tipping's (2010) work across the Anglo-Scottish border in the Bowmont Valley reinforced continuity and innovation in agricultural and pastoral practices in the shaping of the early medieval landscape. Pollen coring analysis demonstrated that the utilisation of the upland Cheviots in the early medieval period continued while at the same time witnessing a growth of peat and deteriorating agricultural land due to climatic change (Tipping, 2010, pp. 190–96).

A number of bone assemblages also survive. Despite the potentially poor burial environment, some animal bone was recovered from the palace site at Yeavinger (Higgs and Jarman, 1977; Hope-Taylor, 1977, pp. 325–27); an assemblage dominated by head bones from young adult cattle. Some bone, all calcined, was also recovered from the henge monument there (Tinniswood and Harding, 1991). Excavations of the inner ward of Bamburgh Castle yielded a somewhat limited faunal assemblage dated to the early medieval period. However, within this sample, cattle represented a high proportion of the faunal remains (Kirton and Young, 2017, 201). Other faunal assemblages from ecclesiastical sites include those from Jarrow, Monkwearmouth and Hartlepool (Cramp, 2005; Daniels and Anderson, 2007; Noddle, 1992, 1987; Rackham, 1988) and fish bones were also recovered from excavations in Holy Island village, presumably related to the early medieval monastic community (Allison et al., 1985; O’Sullivan, 1985).

There are relatively few major urban assemblages from Newcastle, apart from the Blackgate excavation, though there is an important collection from 61-63 Saddler Street, Durham, which contains bird (including capercaillie) and fish bones (Rackham, 1979). Recent investigations have uncovered faunal assemblages at the Binchester Barracks (5th/6th century AD) (Petts personal communication, 2017) as well as at Lindisfarne during trial trenching for improvements to the winery, village hall, and public toilets (Northern Archaeological Associates, 2001) and by Durham University’s project to investigate the origins of the early medieval monastery (personal communication, Petts, 2017).

Apart from the environmental evidence, information on Anglo-Saxon agriculture is limited. Although there are many relict field systems in most of the upland areas of the region, these are difficult to date, and where they have been, they mainly show either a prehistoric or medieval origin. An important question is when the medieval shieling system developed, and it is unclear whether upland sites, such as Simy Folds, were shepherd's bothys or permanent farmsteads (Coggins et al., 1983). There is some evidence for crop processing, the most important being the horizontal watermill excavated at Corbridge (Snape, 2003). There is also information about crop

processing on a household level; a fragment of a quern being found at Simy Folds (Coggins et al 1983).

Settlement

The evidence for early medieval settlement in the north-east is extremely variable, although recent discoveries since the last NERFF have begun to change this picture. Some areas, particularly the Milfield Basin (Northumberland), have important surviving sites, but elsewhere, particularly in County Durham, very little has been found.

Better known for its important prehistoric landscapes, the Milfield Basin has evidence for early medieval occupation in a number of locations. The most significant site is the nationally important royal centre at Yeavinger, which has been the subject of extensive excavation (Hope-Taylor 1977). Although some of the excavator's conclusions have been questioned (Scull, 1991), this remains an important and unusual site. Conventionally associated with Bede's Ad Gefrin (Ecclesiastical History II.15), it includes a complex of halls and an unusual palisaded enclosure and amphitheatre-like structure (known as the cuneus). Excavation on a neighbouring prehistoric henge monument -south of the excavations by Hope-Taylor also revealed evidence for early medieval metalworking (Tinniswood and Harding 1991). The site has more recently undergone a major campaign of geophysical survey by a team of archaeologists from Durham University and The Gefrin Trust led by Sarah Semple, which has identified not only structures identified by Hope-Taylor, but also has identified anomalies that are indicative of additional structural features at the site (Semple et al., 2017). Analysis of the recently released Environment Agency LiDAR data has identified additional traces of features potentially related to Yeavinger nearby, and has further contextualised the role of Yeavinger in its landscape (Semple et al., 2017). Finally, a systematic drone survey, undertaken by Darren Oliver, has provided clearer evidence of two circular features along the western boundary of the site using multi-spectral imagery (Semple et al., 2017). The work at Yeavinger and its hinterland has offered a new framework for understanding

the emergence of elite Northumbria by focusing on Yeavinger and its relationship to the region through routes of access and seasonal movement (Semple et al., 2017).

Nearby, at Milfield, is another probable palace site, associated with Bede's Maelmin as the successor settlement to Yeavinger (Ecclesiastical History II.15). Aerial photography and geophysical surveys have shown a complex of great halls, a series of large enclosures, and grübenhauser; a small amount of excavation has taken place on a timber post-hole structure (Gates and O'Brien, 1988, p. 3). Crop marks have shown similar sites at Sprouston (Scotland), close to the Tweed (Smith, 1991) and at Philiphaugh, near Selkirk, which shows evidence of an Anglian settlement and associated cemetery, possibly dated to the 7th century (Alexander and Neighbour, 1995; Hale, 2016).

To the south-east of Maelmin and to the west of the River Till is a group of early medieval settlements whose nature and scale of settlement vary. Excavations at Cheviot Quarry and Lanton Quarry prior to surface mining of gravels, found the remains of small, rectangular post-hole structures and in the case of Lanton Quarry, the truncated remains of grübenhauser. Radiocarbon dating from these small settlements indicates these two sites dated to 5th and 6th century (Passmore and Waddington, 2012, pp. 295–6; Stafford and Johnson, 2007). Positioned roughly half-way between the two quarry sites, the settlement at Thirlings contained larger halls, albeit not as big as the great hall at Yeavinger. The largest hall at Thirlings was enclosed by a wooden fence or barricade, and the site is probably a 6th century settlement, with a larger scale and investment noted in the size and shape of the excavated halls (O'Brien and Milet, 1991). The structural evidence at Thirlings displayed a range of construction techniques and, like the other excavated sites in the area, an insignificant quantity of material culture. Around 15km to the south-east of Thirlings a further site, New Bewick, was identified from cropmarks and a small-scale excavation confirmed it as a small early medieval farmstead with a grubenhaus (Gates and O'Brien 1988).

It is important to question how far this cluster of sites in northern Northumberland is a real phenomenon reflecting intense early medieval activity in the region or is simply due to the intense amount of aerial photography, development-led archaeology, and academic research in the Milfield Basin by scholars of all periods. The area is also particularly conducive to the formation of cropmarks, in stark contrast to other parts of the region, such as Teesside, where even Roman villas are invisible from the air. As Gates notes in the Till-Tweed Studies Volume 2, aerial photography 'has played a leading role in the recognition of early medieval settlement sites' in northern England and southern Scotland with the gravel terraces of the Milfield Basin, in particular, yielding a relatively high number of early medieval cropmarks (Passmore et al., 2012, 90). Approximately 100 grubenhaüser have been recognised in the Milfield Basin and along the River Tweed through aerial photography (Passmore and Waddington 2009; Passmore and Waddington 2012), suggesting a high density of early medieval settlement in this region.

A second cluster of early medieval sites in northern Northumberland comprises Bamburgh and Lindisfarne (Northumberland). Excavations by Brian Hope-Taylor and current excavations by the Bamburgh Research Project have shown that Bamburgh is of exceptional importance. Hope-Taylor excavated at both Bamburgh and Lindisfarne in the 1960s and 70s, but never published the results of these excavations. Recent work by the Bamburgh Research Project (BRP) has identified and re-excavated Hope-Taylor's trenches and married these results to Hope-Taylor's plans and notes housed in his archive at the Royal Commission on the Ancient and Historic Monuments of Scotland and in records found at Bamburgh Castle (Young, 2003). On nearby Lindisfarne excavation has taken place at Green Shiel, possibly a farmstead dependent on the monastery there. A series of stone structures were uncovered there, together with coins, bone comb fragments and iron knives (O'Sullivan and Young 1991; and is currently being re-evaluated and written by Deirdre O'Sullivan and Richard Thomas). Excavations, also on the island, at the Winery site on Lewin's Lane found a ditch containing a 9th-century bone comb and two possible cess pits (Williams, 2000). The Hope-Taylor Archives have also been explored recently to explore Hope-Taylor's work on Lindisfarne prior to new

investigations on the island (Petts, 2017, personal communication). Excavations by Durham University and DigVentures as well as the Peregrini Landscape Partnership on Lindisfarne have further explored the early medieval landscape of the island, uncovering early medieval namestones, inhumations, and possible early medieval structures on The Heugh (Petts, 2017, personal communication; Northumberland County Council website 2017).

The Breamish Valley Archaeology Project was a joint investigation between Durham University, the Northumberland National Park Authority, and the Northumberland Archaeological Group that ran from 1994-2003 that examined the archaeological landscape of the Breamish and Ingram valleys. The project was a multi-year investigation of targeted survey and excavation exploring the use of the landscape from the Neolithic through modern periods (Frodsham and Waddington, 2004). Although little evidence of the early medieval period was found, evidence for the continuation of agricultural activities into the post-Roman period was observed due to the maintenance of agricultural terraces and is suggestive of early medieval exploitation of the landscape in this region (Frodsham and Waddington, 2004, 181).

An unusual site is Huckhoe in the Wansbeck Valley. Though it began life as a Romano-British farmstead, excavations by Jobey suggested that the rectangular buildings which replaced the circular houses continued in use into the 5th or even 6th century AD (Jobey, 1959, pp. 247–50). The site also produced pottery identified as late-4th century and a possible post-Roman rim sherd (Collins, 2012; Thomas, 1959). Alan Vince re-examined the pottery from the site that was initially identified as early medieval and indicated that the vessel fragment dates suggested the site either was abandoned in the late 4th-early 5th or the site was continuously throughout the 5th century, albeit with very little pottery production in this time (Vince, 2007). Although early reports suggested there might have been some Anglo-Saxon occupation at West Whelpington, subsequent excavation failed to produce structural or artefactual evidence to confirm this. It was clearly a village, however, before the end of the 12th century.

The large, multi-phase settlement at Shotton, roughly halfway between the Wansbeck Valley and Newcastle, was excavated between 2009 and 2010 prior to surface mining. Two main phases of early medieval settlement were identified, with the site being occupied from the mid-6th through the late 9th/early 10th centuries (Muncaster et al., 2014, p. 77). The earlier phase contained three, large post-hole halls while the later phase contained seven enclosures and associated structures including halls (albeit at a smaller scale) and grubenhäuser. Shotton is one of the few mid-to late-Saxon period settlements in the north-east, and its settlement plan shows the complexities of social organisation and settlement hierarchies in the region during this period (Muncaster et al., 2014, 137-38).

The Romano-British villa site of Quarry Farm at Ingleby Barwick, Stockton-on-Tees is one of the most northern Roman villa sites in Britain, and an early medieval settlement and burials were identified during the excavation of the site prior to development (Archaeological Services Durham University, 2008, p. 1). The villa complex, established in the late 2nd to early 3rd centuries, underwent significant changes in the late Roman and sub-Roman period, with the construction of a large enclosure ditch and timber buildings, alterations to the villa structures, and the construction of two possible grubenhäuser and multiple firepits (Archaeological Services Durham University, 2008, 33-34).

Another important feature noted in the archaeology of the early medieval northeast is the frequent re-use of Roman military sites in the post-Roman period (Collins, 2012; Wilmott and Wilson, 2000). There is on-going debate about the afterlife of forts along the Wall, and how these affected and/or reflected the early medieval territorial structure in the post-Roman period (Casey, 1993; Collins, 2012, 2007; Collins and Allason-Jones, 2010; Dark and Dark, 1996; Dark, 1992; Wilmott, 2000). Rob Collins notes that many of the forts, in the late 4th century, underwent significant changes to the structural makeup and artefact assemblages associated with the forts, suggesting these were adapted and potentially continuously occupied by the Roman forces that remained in the region (Collins, 2012, 75-80). A main question on this period is if military occupation by the Roman military continued into

the 5th century, if the forts were abandoned and later re-occupied, or if it was a combination of the two options (Collins, 2012, 108-9).

Just outside the region, Birdoswald shows significant levels of early medieval activity, with late Roman granaries being converted into post-Roman hall houses (Wilmott, 1997, pp. 203–222). A number of sites in the region also show some level of post-Roman use, such as South Shields, which had a ditch cut across the outside of its south-west gate sometime in the early 5th century. This ditch was later filled in and the gate returned to use (Bidwell and Speak, 1994). At Binchester the evidence from excavations on the commandant's house suggests continued activity into the 5th century. Midden deposits here were overlain by a flagstone floor associated with fragments of sawn antler (Ferris and Jones, 2000). Further probable 5th-century refortifications include the addition of earthen banks to support pre-existing walls at Housesteads and Chesterholm (Bidwell, 1985; Crow, 1989, p. 46). There are also both Anglo-Saxon and sub-Roman burials associated with forts.

Of possible interest in this context is The Castles, Bedburn (Co. Durham), which is, unusually, quadrangular in form with stone ramparts. Although the subject of several investigations, the date of this site has never been ascertained. It was though it may be an early medieval attempt to imitate a Roman fort (Birley, 1954; Collins, 2002), but a more recent evaluation of the site by Time Team suggest it is most likely of Late Iron Age origin that may have been reused at a later, post-Roman date (Wessex Archaeology, 2008).

Related to the Roman military fortifications was the infrastructure of the roads constructed to support the military zone along the Roman frontier. It has long been recognised that the Roman road network played an important role in the development of the early medieval landscape (Bonney, 1976; Draper, 2006; Hoskins, 1955), and new technologies are allowing a better understanding of the breadth of Roman roads across Britain. The recent release of freely available LiDAR survey data from the Environment Agency, in particular, has led to discoveries of previously unknown Roman routeways by both the amateur and academic communities. The

expanded network of roads has added to this understanding in the northeast, especially due to the growing number of early medieval sites that have been identified over the last decade. The importance of roads such as Dere Street and the Devil's Causeway and their relationship to early medieval settlement and burial practices has been better contextualised thanks to this research, although questions remain on how these roads were used and maintained during the early medieval period.

Very little evidence for occupation comes from the lowlands south of the Tyne. The partial remains of a single structure at Ferryhill Police Station were dated to the 10th century by an associated bone mount (Batey, 1990). Traces of a possible late Anglo-Saxon structure were also recorded during a watching brief at Seaton Holme, Easington (Daniels et al nd). Relatively little has changed in our understanding of lowland settlement south of the Tyne since the publication of the last NERRF, although a few possible cropmark sites have been recognised on the gravels of lowland Durham, that suggests more research is needed to contextualise if this is a gap in knowledge or a gap in settlement during the early medieval period (Hewitt et al., 2011).

There is more evidence for occupation in the uplands south of the Tyne. A radiocarbon date from charcoal found during excavations on a group of rectangular buildings at Simy Folds in Upper Teesdale placed them in the mid 8th century AD (Coggins et al 1983). The buildings, paired at right angles and positioned around a small yard, were sited within an extensive field system of possible early medieval date. The small finds assemblage comprised a spindle whorl, an iron ring and a fragment of rotary quern. This site shows parallels with other upland farms elsewhere in the Pennines, such as Gauber High Pasture (King, 1978), Willly Brig Sike, White Earth, Stonehouses, and Holwick Castles (Coggins, 2004, p. 329). However, Simy Folds is difficult to date based on the structural morphology; rectangular buildings from the region have also been found to have a later medieval chronology. That said, Denis Coggins now argues that new methodological advances and ideas on

early medieval settlement suggest that future work at the site is needed to more fully investigate early medieval upland settlement in the region (Coggins, 2004, 332).

There are also hints at some kind of activity or re-use of hillforts in the Cheviots of northern Northumberland. Radiocarbon dates from Wether Hill suggest some kind of activity here in the 6th century AD, though its nature is unclear (Frodsham, 2004, p. 65). Another hint of early medieval hillfort occupation comes from Brough Law, where an early medieval iron knife was found in the 19th century (Tate, 1861). It has also been suggested that there may have been some form of early medieval activity at the Iron Age enclosure at Ingram (Frodsham, 2004, 73; Hogg, 1956, 1942; Jobey, 1971).

The origins of urbanism in the North-East are poorly understood, although Hartlepool, Newcastle, Durham, and Darlington appear to have pre-conquest origins (Graves and Heslop, 2013). Notably, all are associated with ecclesiastical sites. At Durham, the earliest occupation is probably beneath the castle and cathedral, though the excavations at Saddler Street revealed much about the later Saxo-Norman city (Carver, 1979). The ceramic sequences from these excavations were recently re-dated by Alan Vince, Quita Mould, and Ian Riddler, pushing the context of the ceramics, and by extension the early occupation of the city, as of the later 11th or early 12th century date. Excavations further south, in the Market Place at Darlington, revealed a probable Late Anglo-Saxon cemetery, presumably associated with a minster church (Archaeological Services, 1994), and it is possible that the large ditch known to have lain near North Lodge Park may have been an Anglo-Saxon defensive structure, though elsewhere the evidence is more speculative. Excavations by Archaeological Services Durham University did not identify this ditch, although they noted that a break in the slop had 11/12th century stake holes within it (Carne personal communication, 2017). It has also been suggested that the large bank and ditch on Spade's Mire at Berwick-upon-Tweed may be of an early medieval date (White, 1962; Williams, 2001). Excavations in Hartlepool have centred around the Headland and the remains of the early medieval monastery, while in Newcastle the early town of 'Monkchester' probably grew up around the castle. Excavations

conducted between 1973 and 1992 at the Black Gate of the medieval castle revealed a large, multi-phase cemetery from the 7th century through the 12th century that may be related to 'Monkchester', although the authors note there is still insufficient evidence at this time to state if it relates to an unrecorded 7th century monastic settlement at the site or a lay settlement (Nolan et al., 2010) as it is not clear where the population lived. A few fragments of Anglo-Saxon pottery have also been found on the opposite bank of the Tyne at Bottle Bank, Gateshead (OAN, 2003).

Trade, transport and communications

Coinage does not appear to have been as widespread in the northeast as elsewhere in the country. The Early Medieval Corpus of Coin Finds and the Sylloge of Coins of the British Isles in 2017 lists 293 individual coin finds from the region; most are Northumbrian stycas and pennies. The vast majority come from Bamburgh (72), but also from Jarrow, Lindisfarne and Monkwearmouth. The Portable Antiquities Scheme (PAS) has recorded an additional 14 coins from the early medieval period. Finally, recent excavations at Bamburgh and Lindisfarne have turned up more coins from the period (Young and Petts, personal communication, 2017). The most important scholarship on the coinage of the region remains that of the late Elizabeth Pirie (Pirie, 2000). Of the four known hoards, those from Gainford and Satley date to c. 875, but the Hexham group is earlier, dating to the 840s-50s (Pagan, 1974; Sugden and Warhurst, 1979). The Bamburgh hoard was found in the village, rather than in the castle area, and consists of about 400 stycas, a fragment of a coin balance and some nondescript iron work (Pirie, 2004).

Although the presence of Tating Ware at Jarrow, Stamford Ware at Durham, and walrus ivory from Bamburgh are all indicative of widespread trading, evidence for substantial long-distance trading links in the region is rare. There is nothing to compare with the range of imported ceramics found at York, and the northernmost distribution of Ipswich Ware is North Yorkshire (Blinkhorn et al., 2012). No settlements appear to be equivalent to the emporia of Mercia, Wessex, and York and it is unknown if this is due to a genuine lack of emporia or if these take a different form along the Northumbrian coast and are thus still undiscovered. The large

amount of coinage and the presence of the walrus ivory at Bamburgh do suggest, however, some kind of regional importance as a trading entrepôt, and here further analysis of Hope-Taylor's and the Bamburgh Research Project's pottery assemblages will doubtless prove important. Perhaps at Bamburgh a landing place lay just to the north of the palace amongst the present day sand dunes; this would be accessible to the main site via 'Oswald's Gate'. The presence of important monastic sites at major river mouths (e.g. Monkwearmouth, Jarrow, Hartlepool) must surely be indicative of the significance of maritime trade elsewhere (Stocker, 2000), though coastal erosion may have destroyed potential beach markets. Christopher Ferguson has re-evaluated access to coastal communities in Northumbria by vessels, and demonstrated that travel within the North Sea zone was quicker and easier than previously assumed, which repositions monastic and coastal sites in Northumbria as having strong links to communities across Britain and the continent (Ferguson, 2011a, pp. 297–99, 2011b).

Religion and burial

Anglo-Saxon burial

To the south of the region, in Teesside and south County Durham, several 6th-century cemeteries are known, including Andrew's Hill, Easington (Hamerow et al., 1995), Norton (Sherlock and Welch, 1992a), Green Bank, Darlington (Miket et al., 1976) and Saltburn (Gallagher, 1987). These date to the 6th century, though the artefactual assemblage from Green Bank suggests that this site started and finished slightly later than the other two. Other probable cemeteries can be identified at Ferryhill and Denton (Co. Durham), where recent metal detector finds suggest cemeteries of 6th-century date (Philippa Walton personal communication). It is also probable that there was a cemetery at or near the Roman villa site at Ingleby Barwick, where excavation has revealed a fragment of a square-headed brooch, several inhumations, and fragments of cremation urns (ASUD 2000; 2006).

Examples of isolated burials can also be found. A single cist grave containing the remains of a child and a single bead was recovered in the early 20th century at Blackhall Rocks (Co. Durham) (Archaeological Services and Carne, 1998). A number of finds, including a pair of unusual bow brooches possibly of north-west German origin (found at Maltby) are likely to have come from a female inhumation, though excavation at the site found no sign of any other burials (Sherlock and Welch, 1992b). Three stone-lined cist graves were identified during excavations prior to the development of Faverdale East Business Park, and although the excavators noted were possibly late Iron Age or Roman, these may represent early medieval graves as they have not been conclusively dated (Proctor, 2012, pp. 1–2). A spearhead found in Thornby may also come originally from a burial (Sherlock, 1988, p. 251). Perhaps the earliest Anglo-Saxon burial from this area comes from Castle Eden (Co. Durham), where in the late 18th century an inhumation accompanied by a unique late- 5th-century Frankish green-blue claw beaker was discovered (Bruce-Mitford, 1950).

Most burials in these cemeteries were inhumations, though from the south of the region a few cremations are known. Other than that from Ingleby Barwick mentioned above, over 20 cremations were recorded at Saltburn and three from Norton (Gallagher, 1987; Sherlock and Welch, 1992a). A number of early Anglian burials has also been recorded from Roman forts. At Binchester a crouched burial was found in Phase 10, accompanied by a reverse S-shaped brooch, glass and amber beads, ceramic vessels and two antler objects. This burial probably dates to the mid 6th century. Two other Anglian objects are known from residual contexts in the fort: a small-long brooch and an iron francisca, though the latter may be a late Roman axe (Ferris and Jones, 1996; Ferris, 2011, 2010).

The evidence for burial from other sites is limited to chance finds of Anglo-Saxon metalwork. Two brooches of the late 5th century at Corbridge were accompanied by a string of beads and two fragments of a small urn (Knowles and Forster, 1909, pp. 342, 406–8). Two small, long brooches of uncertain provenance may also have been found nearby, though they may have come from Yorkshire (Miket, 1985). A small long brooch was also found in Hylton (Tyne and Wear) (Miket, 1982).

A 7th-century annular brooch was found at Chesters and another, of 6th-century date, is known from Chesterholm (Miket, 1978). A square-headed brooch, a cruciform brooch and a glass vessel (not fully recovered) were found to the east of the fort at Benwell (Jobey and Maxwell, 1957). Whereas the Chesters and Chesterholm brooches could be simple losses, the assemblages from Corbridge and Benwell suggest an origin in a burial context. Square-headed brooches have also been recovered from the Tees at Piercebridge and the banks of the Tyne at Whitehill (Cramp and Miket, 1982, p. 10).

A notable group of apparent sub-Roman burials has been found at South Shields; burials from a courtyard house within the fort and some from its approach have provided 5th-century radiocarbon dates (Bidwell and Speak, 1994, pp. 45–6, 265). Excavations at the fort suggest post-Roman occupation and activities at Arbeia through the 7th century (Bidwell and Speak 1994), which is intriguing as historical tradition indicates this was the site of

North of Hadrian's Wall the evidence for early Anglo-Saxon burial is less extensive, and noticeably lacking between the Coquet and the Tyne, apart from the individual barrow burial at Barrasford, which included a shield-boss with six silver studs, a sword and a knife (Meaney, 1964, p. 198). Even to the north of the Coquet there are no extensive cemeteries to compare with Norton or Easington. Instead burial sites tend to contain only a few graves and are distinguished by their relative lack of material culture. Known burial sites include the poorly recorded site at Gayle, near Thirlings (O'Brien and Miket, 1991), which has a broad 6th-7th century date, as does a group of fifteen burials from Howick Heugh (Cramp and Miket 1982, 5-6). The cluster of graves associated with a prehistoric henge at Milfield North probably belongs to the later 6th or early 7th century (Tinniswood and Harding 1991).

As well as burials which are clearly culturally Anglo-Saxon, there are others which show different affinities, and contain few, if any, grave-goods. The largest group of these are from Yeavinger, where two cemeteries were discovered (Hope-Taylor

1977, 67-78, 244-267). In total several hundred graves were excavated, though the final report gives them only limited space, and the phasing of these graves is generalised rather than specific. Only four burials contained grave-goods: two from the western cemetery had knives, whereas in the eastern cemetery Grave AX contained a knife and an iron object identified as a groma, and Grave BZ56 iron belt fittings, a purse mount and a knife. Although an Anglo-Saxon rather than a British context for the settlement at Yeavinger has been asserted (Scull 1991), it is probable that these burials have closer affinities with the traditions of the early medieval British. Another cemetery with similar attributes is that recently rediscovered and excavated at Bowl Hole, Bamburgh. Over one hundred crouched and supine inhumations were identified at the Bowl Hole, with limited grave goods suggesting a 'final phase' cemetery in the 7th-8th centuries (Groves et al., 2013). The skeletal evidence has undergone a variety of scientific testing, exploring the diet and movements of the inhabitants and indicating a large proportion of the inhabitants of the Bowl Hole cemetery were not local (Groves, 2011, 2010; Groves et al., 2013).

There are also a number of barrow burials, though these have no firm dating evidence. Secondary inhumations with iron spears are known from Sweethope Farm, Bavington and Turf Knowe, Ingram (Northumberland) (Hodgson, 1887). Secondary inhumation burials without any datable grave-goods are known from Hollinghill and Copt Hill. It is possible that these are 7th century or later, when the use of grave-goods became less common; alternatively, they could belong to the 5th or 6th century and represent a form of the native British find-less burial rite.

From the 7th century onwards the process of conversion to Christianity by Anglo-Saxon kingdoms began, with influences coming from both the Roman church via Augustine and Canterbury, and the Scottish church via Aidan and Lindisfarne. Many of the changes in Anglo-Saxon burial rites in this period seem to be related to shifts in religious belief. So-called 'final-phase' burials are believed to represent the last accompanied burials before the shift toward churchyard burial. They are characterised by a decline in the number of artefacts placed with the dead. A small cemetery near the village Hepple along the western margins of Coquetdale, had finds including

beads, pedants, rings and a comb; a typical 7th-century 'final phase' assemblage (Cramp and Miket, 1982, pp. 4–5; Miket, 1974). Nearby, four limestone cists were found near Great Tosson, on the eastern side of the Coquetdale, and contained metal spearheads and a brass buckle that point to it being of a similar age as Hepple (Cramp and Miket, 1982, p. 269; Loveluck, 2002, p. 141; Lucy, 1999, pp. 34–5; Meaney, 1964, p. 199; Miket, 1980, p. 294). The more substantial Milfield South cemetery may have contained up to 100 graves, although only 41 were excavated. Just two graves here contained finds, which included iron knives, an iron buckle, a tag or strap end, and an unidentified perforated iron object (Scull and Harding, 1990). Excavations at the Roman fort of Binchester revealed a large early medieval cemetery radiocarbon dated from the late 6th centuries including an isolated furnished female burial and an inhumation cemetery of at least 1.5 hectares that possibly contained hundreds of burials (Ferris, 2011, 2010, pp. 124–130, Rainbird, 1972, 1971).

There are also some isolated burials from the 7th and 8th centuries. A barrow burial, probably inserted as a secondary burial into an earlier cairn, from Capheaton (Northumberland) was accompanied by a hanging bowl, a ring, and a few copper fragments; a bronze buckle with garnets was found in a rock-cut grave at East Boldon (Cramp and Miket, 1982, pp. 9–10).

The development of churchyard burial is poorly understood in the region. In some cases, a 'final-phase' site may have developed into a church; a small gold and garnet pendant was found in the churchyard in Stainton and there are reports of Anglo-Saxon metalwork being found near the churchyard at Seaham. Subsequent excavation at Seaham has revealed an extensive cemetery in Flower Field near Seaham Hall, which was dated by radiocarbon dating and coffin fittings to the 7th and 8th centuries AD (Macdonald, 2000; NAA, 1999). Additional work at the site by the Seaham Community Excavation project and NAA in 2017 identified a further eight skeletons laid out in rows and estimated there could be in excess of several hundred bodies at the site.

By the 9th century churchyard burial was probably widespread. There may have been an early church at Binchester, where burials radiocarbon-dated to the late 8th to 10th century were found at Binchester Hall within the Roman fort (Archaeological Services, 2005; Connell and Roberts, 1996). Likewise, burials found during excavations at the Market Place in Darlington are probably related to the foundation of St Cuthbert's church (ASUD 1994), which still retains some Anglo-Saxon stone sculpture. The cemetery at the Blackgate of the castle at Newcastle also probably began in the 8th century AD and was presumably related to an ecclesiastical establishment.

The early medieval period is notable for a number of well-preserved skeletal assemblages. The early Anglo-Saxon cemetery at Norton (Teesside), dating to c. AD 520- 620, produced bone from 126 individuals (Birkett, 1992; Marlow, 1992). Recent excavation nearby at Bishopsmill School has produced a second, later, Anglo-Saxon cemetery (7th to 9th century?), again with substantial amounts of well-preserved bone skeletal material (Higgins, 2004). Large quantities of skeletal material of early medieval and later date have also been recovered from Monkwearmouth and Jarrow (Tyne and Wear) (Cramp 2005). Early Anglo-Saxon burials with bone are also known from Binchester (Co. Durham), Blackgate (Newcastle) and the Bowl Hole, Bamburgh (Northumberland) (Groves, 2011, 2010; Groves et al., 2013; Nolan et al., 2010; Norton and Boylston, 1997). The Black Gate Cemetery was established within the remains of a Roman fort, and is one of the largest skeletal assemblages identified from later Anglo-Saxon England with 663 articulated skeletons recovered (Mahoney Swales, 2013). This skeletal material has been used in a number of doctoral theses, such as Sarah Groves' examination of activity-related stress and social status (which also examines material from Norton and the Bowl Hole), Tina Jakob's consideration of the prevalence and patterns of disease in early medieval Britain (using material from Norton) and Pam Macpherson's work on Anglo-Saxon childhood diet (using material from Blackgate, Newcastle) (Jakob, 2004). The assemblage from the Bowl Hole has been explored through isotope analysis (Budd et al., 2004; Groves, 2011, 2010; Groves et al., 2013). This combination of good skeletal assemblages and wide ranging analyses means that skeletal material from this period is amongst the best

studied and understood in the region. Additional burials have recently been found at Lindisfarne and work is ongoing both at the site and in post-excavation analysis (Petts, 2017, personal communication).

Pagan religious activity

As for the rest of the country, evidence for pagan religious practice is sparse. Certain buildings at Thirlings (Building C) and Yeavinger (Building D2) may have had a pre-Christian sacred function (O'Brien 2000), something which has also been suggested for Hurworth in Upper Teesdale (Coggins and Fairless 1997). This poorly understood site, which also produced Mesolithic occupation and a Late Iron Age burial, was surrounded by an enclosure with a radiocarbon date of mid-5th to mid-8th century AD which the excavators suggested may have had a ritual function. The evidence is tenuous.

British Christianity

There is also historical and archaeological evidence for Christianity amongst the native British elements of society. Possible churches of late Roman or sub-Roman date have been identified at Chesterholm, South Shields and Housesteads (Bidwell and Speak, 1994, pp. 102–3; Birley et al., 1998, pp. 20–21; Crow, 1995, pp. 95–6). It is uncertain, however, how long these structures were in use. They may merely have been regimental chapels for a final phase of Roman military use or they could have had continued importance throughout the early medieval period.

Chesterholm also produced an unusual portable stone altar of probable early medieval date, a rare find with few parallels, to which must be added a 5th- or 6th-century inscribed memorial stone to an individual named Brigomaglos. Haverfield's attempts to link this with St Briog are unconvincing (Haverfield, 1914; Jackson, 1982), though the stone is clearly part of an early medieval epigraphic tradition which is more common in Wales and southwestern England, but also stretches into Northumberland and Lowland Scotland (Thomas, 1992). Other stones in this tradition were clearly carved within a Christian cultural milieu and it is likely that the Brigomaglos stone is an indicator of Christianity.

Churches and ecclesiastical sites

The North-East is home to a series of major Anglo-Saxon monasteries, several of which have been investigated. The best known are undoubtedly those at Monkwearmouth and Jarrow, which have been the focus of extensive excavation by Rosemary Cramp (Cramp, 2005, 1994, 1970, 1969; Cramp et al., 2006; Mills and Webster, 1991). The *One Monastery in Two Places* project investigated Jarrow and Monkwearmouth using a landscape approach to examine the development of the monasteries and their long-term effect on the region by investigating the historic landscape, the monastic sites, and the fabric of the churches (Turner et al., 2013). Founded in the 7th century by Benedict Biscop, the twin monasteries were for nearly a century an internationally important centre for learning in the early medieval world. Home to Bede (AD 673-735), whose writings on history, time, science and scripture were key texts; it was also a major production centre for books and produced the Codex Amiatinus, the oldest surviving single-volume bible in the world. Sarah Semple and Maria Utrero Agudo are investigating Jarrow and Monkwearmouth in a comparative project, *Church Building as Industry in Early Medieval Western Europe*, which is examining the quarries and hinterlands associated with early stone-built structures in the UK, Spain, and Portugal through an in-depth analysis of the stone fabric of the churches.

Lindisfarne, until recently, has been relatively little explored, with excavations only within the precinct of the medieval priory, on selected sites in the village, and a possible proto-grange excavated elsewhere on the island at Green Shiel (O'Sullivan and Young, 1991b; Petts, 2013). Two new projects are addressing the early medieval use of the island. The *Peregrini Lindisfarne Landscape Partnership* is a community-led project investigating the archaeological, cultural, and natural landscape heritage of Lindisfarne⁸. As part of this project, a series of archaeological investigations have focused on the rocky promontory of the Heugh along the southern edge of the island and intervisible with Bamburgh across Budle Bay. These investigations have revealed

⁸ <http://www.peregrinilindisfarne.org.uk>

the stone foundations of a possible early medieval church, with the small rectangular building having a chancel-type configuration on the east end. Durham University and Dig Venture's *Lindisfarne: Search for the heart of Anglo-Saxon Northumbria* project is investigating the early monastic origins of the island, with a campaign of geophysical survey and excavations identifying evidence of the early medieval activities on the island including skeletal remains, Anglo-Saxon carvings including a namestone, and rubble suggesting building remains (Petts personal communication 2017). Both projects are ongoing and continuing to explore the landscape of Holy Island.

In Hexham excavation has concentrated on the abbey itself and little is known about the wider monastic enclosure of what was undoubtedly an important monastic site (Cambridge and Williams, 1995; Harbottle, 1978). There is also a lack of work on early medieval Tynemouth. Excavations by George Jobey revealed Iron Age or Roman round houses and a post-Conquest cemetery here, but no traces of the early medieval monastery were identified, although the site has produced Anglo-Saxon carved stone and an Urness-style mount (Cramp and Miket, 1982; Jobey, 1967, p. 10, catalogue no. 14). The same is true of Chester-le-Street, where the foundations of modern housing over the site of the monastery may have destroyed any surviving Anglo-Saxon stratigraphy, though the deeper layers relating to the Roman fort still survive. In Durham the Romanesque cathedral and its precinct probably lies over the site of the Anglo-Saxon monastery of which little has been recorded beyond some Late Anglo-Saxon burials on the site of the Chapter House (Carver, 1980). These burials were of both males, females, and children and surface gravemarkers and sandstone crosses were also found nearby (Brown, 2014, pp. 159–60). Hartlepool, the site of a monastic community founded by Hild, has been the focus of extensive excavations, including the remains of structures and evidence for metalworking and other craft and industry (Daniels, 1988; Daniels et al., 1998, 1987; Daniels and Anderson, 2007). Excavations by Altogether Archaeology and Archaeological Services in Frosterly have identified the early medieval remains of St Boltlph's Chapel. The stone foundation of the church is similar in size and scale to nearby 7th century church at Escomb. A single male burial was found associated with the chapel foundations and has been carbon dated to 779-1013 cal AD (ASUD 2015) along with

the remains of a possible 8th century cross-head. The evidence points to the site being pre-conquest, and potentially dating to the 8th century (ASUD 2015).

In addition to its below-ground archaeology, the region possesses a range of standing Anglo-Saxon ecclesiastical architecture. The major overview of Anglo-Saxon church architecture in Britain is Taylor and Taylor's magisterial *Anglo-Saxon Architecture* (Taylor and Taylor, 1978). They recognised pre-conquest fabric at several churches in the region: Aycliffe, Billingham, Bywell, Corbridge, Escomb, Hart, Hexham, Ingram, Jarrow, Monkwearmouth, Norton, Ovingham, Sockburn, Staindrop, Warden, Whittingham, and Woodhorn. Work by Peter Ryder on the churches of Durham has amended this list, suggesting that the early fabric at Staindrop is more likely to be Norman, as is that at Hart, Pitlington and St Mary, Seaham and possibly Norton. On the other hand, the evidence from Chester-le-Street is more convincing than previously thought and Anglo-Saxon fabric has also been recognised at St Brandon in Brancepeth, St Nicholas in West Boldon, Hamsterley, Gainford and possibly Church Kelloe (Ryder, 2004, 1996, 1988). An argument has also been made for Anglo-Saxon fabric at St Michael in Heighington (Clark, 1986), while Eric Cambridge has suggested that the Anglo-Saxon tower at Billingham is, in fact, 12th century, though this remains contentious (Cambridge, 1994). The best-preserved crypt in the region is at Hexham; Anglo-Saxon crypts may be preserved at Bamburgh and Jarrow, but this has yet to be confirmed by fieldwork. Paul Bidwell led a structural survey of Hexham crypt, focusing on the reuse of Roman stonework in its construction and how the wider landscape of Roman ruins influenced the construction of St Andrew's at Hexham (Bidwell, 2010).

Carved stone

The major overview of the Anglo-Saxon stone sculpture remains Rosemary Cramp's Durham and Northumberland volumes of the *Corpus of Anglo-Saxon Stone Sculpture in England* published in 1984. Those areas to the south of the region (i.e. Durham south of the Tees) not covered by this volume are treated in James Lang's volume in the same series, dedicated to North Yorkshire (Lang, 2001). Cramp's volume has records for nearly 400 individual stones, fragments or groups of architectural

stonework (e.g. balusters). A modest number of additional fragments have since come to light, including namestone fragments from Lindisfarne and Hart as well as other new stone carving material from Gainford (Richardson, 1994)⁹, although this has not significantly changed the overall distribution of early medieval sculpture in the region.

Anglian material consists mainly of objects from Hartlepool, Hexham, Jarrow, Lindisfarne and Monkwearmouth, though finds are also known from Escomb, Norham and Rothbury. Crosses dominate the assemblage at Hexham and Norham, whereas grave markers are more common at Monkwearmouth and Hartlepool. Both Lindisfarne and Jarrow have significant groups of both types. This distribution appears to reflect that of the major Northumbrian monastic establishments, though sculpture was also found at important minster sites. By the late 8th century there is an increased Mercian influence on the region's sculpture, which can be seen on fragments from Rothbury, Auckland St Andrew and Norham (Cramp 1984, 3).

The initial Viking raids of the late 8th and early 9th century appear to have had little impact on the output of the stonecarving workshops of Northumbria. The establishment of the Viking kingdom of York in the mid-9th century, however, was more significant. In the early 10th century, the great estates of the monasteries were being alienated by the Viking kings and redistributed to both Anglo-Saxon and Anglo-Scandinavian lords. The concentration of hogbacks along the Tees valley, on land formerly held by the community of St Cuthbert, probably reflects the establishment of new churches by these new lords, although recent scholarship is challenging these notions linking the artefacts to a single cultural group but rather focusing on investigating the spatial locations and life histories of the hogbacks as reflecting both cultural interaction and local traditions (e.g. Williams, 2015, 2016a, 2016b; Whitworth, forthcoming). The style of these monuments shows an increasing Scandinavian sense of identity. It is noticeable that hogbacks are almost entirely

⁹ <http://www.ascorpus.ac.uk>

absent from Northumberland, where a rump kingdom of Northumbria survived into the early 10th century.

Evidence for the use of runic epigraphy in the North-East is very rare. A runic inscription in Old English is carved on a house-shaped memorial at Hawkhope, Falstone (Northumberland), and, intriguingly also carries the same Old English inscription in insular majuscule. Inscriptions using runes and Anglo-Saxon capitals are also known from Chester-le-Street and Alnmouth (Cramp 1984, 54, 161). Three runes have also been found carved onto living rock adjacent to prehistoric cup-and-ring marks at Lemmington Wood, Northumberland (Beckensall, 1983, pp. 51, 186).

Of the Late Anglo-Saxon sundials from the region, the best known is that built into the south wall of the nave at Escomb, which, if it is contemporary with the construction of the church, dates to the 8th century. Other pre-conquest sundials are known at Pittington, Staindrop, Middleton St George, Dalton-le-Dale, Darlington and Hart. Unlike examples elsewhere in England, none carry inscriptions.

Material culture

Ceramics

The best source for early Anglo-Saxon ceramic assemblages is the small group of cemeteries from the south of the region. Twelve pots were recovered from inhumations at Greenbank, Darlington, which have broad parallels with vessels from Sancton (East Yorkshire) (Miket et al., 1976). Three urned cremations were also recovered from Norton (Teesside) (Sherlock and Welch 1992), while an isolated urn came from the south bank of the Tees near Yarm (Myres, 1977, figs. 322, 150). Several urns were also revealed during work on the mixed-rite cemetery at Hob Hill, Saltburn (Gallagher, 1987; Hornsby, 1912; Myres, 1977). Tiny fragments of pot have come from other burial sites, such as Andrew's Hill, Easington (Durham) and Low Lane, Ingleby Barwick (ASUD 2005; Hamerow and Pickin 1995, 44).

Pottery from non-burial contexts is rather less common, particularly towards the beginning of the early medieval period. Settlement sites have produced little; only five fragments of Anglo-British pottery were recovered from Thirlings (O'Brien and Miket 1991, 87) despite extensive excavations, and New Bewick produced even fewer (Gates and O'Brien 1988). More substantial quantities have come from Bamburgh, but these have yet to be assessed (Paul Gething personal communication). Surprisingly little has been found at Monkwearmouth and Jarrow, though it does include some rare northern examples of Tating Ware. There is little pottery from urban sites, such as Newcastle and Hartlepool (Wrathmell, 1990); the only substantial collection are the very late Saxo-Norman assemblages from Saddler Street, Durham (Carver 1979), which include a Stamford Ware lamp (Clark, 1980)(Clack 1980).

Alan Vince was working on a survey of Anglo-Saxon pottery from the Northumbrian kingdom, in order to generate a database and a series of ICPS (Inductively Coupled Plasma Spectrometry) prior to his untimely death in 2009. The archives from this and other projects were deposited with the Archaeology Data Service in 2010, and more work is needed to synthesis these projects.

Rough ceramic loom weights and spindlewhorls are also known, including chance finds from Wooler and excavated examples from Thirlings, Lanton Quarry, and Shotton (Miket 1980, 295; O'Brien and Miket 1991, 87).

Glass

Glass vessels are rare in the North-East. Perhaps the best preserved is the Frankish claw beaker (late 5th century) from the barrow burial at Castle Eden. Some fragments of claw beaker were also recovered at Thirlings (O'Brien and Miket 1991, 87).

Window glass has been found in ecclesiastical contexts at Monkwearmouth, Jarrow and Escomb (Cramp, 1976; Pocock and Wheeler, 1971), but also, unusually, in a secular context at Bamburgh (Paul Gething personal communication).

Glass beads are known from a range of sites, including from burials at Norton (Teesside), Hepple and Howick Heugh (Northumberland), and Blackhall Rocks (Co. Durham) (Sherlock and Welch 1992a, 45; Cramp and Miket 1982, 4-5), from settlements such as Lanton Quarry (Stafford et al. 2007), and as chance finds, such as those from Ilderton and Dilston (Northumberland) (Anon, 1951; Smith, 1966, p. 19).

Metal objects

Little is known about metalwork from sub-Roman contexts. Margaret Snape has identified a possible early-5th-century sub-variant of a Type D penannular brooch (Snape, 1992), though a brooch of this type has been found in a secure late Roman context at Piercebridge (Fitzpatrick and Scott, 1999, pp. 114–15). The increasing evidence for sub-Roman continuity on Roman sites means there is a need for the late finds assemblages from such sites to be re-assessed.

The main source for early Anglo-Saxon metal objects in this region is burials. However, although there are a number of important Anglo-Saxon cemeteries in the south of the region, the wider Bernician burial rite is relatively low in material culture (Cramp, 1988). The metalwork from the southern cemeteries is typical of the assemblages found further south in Deiran contexts. For example, Norton, Easington and Greenbanks, Darlington, have all produced a range of personal items including cruciform brooches, small-long brooches, annular brooches, buckles and wrist clasps (Miket and Pocock 1976; Sherlock and Welch 1992a; Hamerow and Pickin 1995).

Industrial features of Anglo-Saxon date were associated with a Neolithic henge at Yeavinger, and included a number of crucible fragments, which produced evidence for copper and tin, implying bronze working at the site (Tinniswood and Harding 1991). Clay metalworking moulds have also been found at Hartlepool, including moulds for high-status objects such as a plaque showing a calf with a trumpet (presumably a symbol of an evangelist), and a small cross, either a mount or a pendant (Cramp and Daniels, 1987; Daniels, 1988, pp. 187–190). The same site

produced crucibles and slags which demonstrated copper alloy and silver working (Daniels 1988, 184-187). The presence of several pins made from the same mould at Bamburgh is also suggestive of metal production on the site (Paul Gething personal communication), and the numerous coins and other metal objects suggest it may have been a possible mint and/or productive site (Young personal communication, 2017). Iron smelting and smithing also took place at Simy Folds (Coggins et al 1983) and while there is no evidence for primary extraction, on the north side of Bollihope Burn, Stanhope (Co. Durham), charcoal from earthworks has produced a radiocarbon date of AD 880-1050 (90% probability). Analysis of associated slag shows it to have a high lead content, suggesting it was either at an intermediate stage in processing or it was being refined for silver (Manchester, 2001; Paynter, 2001). Excavations at the same site have also revealed a probable early medieval iron-working furnace (Rob Young personal communication).

In general, the quality of middle and later Anglo-Saxon metalwork is low compared with other parts of Anglo-Saxon Britain. The end of the tradition of depositing gravegoods and the lack of excavated settlement sites means that most metalwork of this date are chance finds. Hanging-bowls are known from a burial at Capheaton (Northumberland) and a possible votive deposit at Newham Bog (Northumberland) (Collingwood Bruce, 1880; Cramp and Milet, 1982, p. 10, no. 12), while a gilded 8th-century disc-headed pin was found on the monastic site at Hartlepool (Daniels et al 1998). The Portable Antiquities Scheme has recorded a gilded mount from the Bishop Auckland area (Philippa Walton personal communication), and a gold mount has been recovered at Bamburgh (Wood, 2004). Among finds of rings are a late-8th-century silver ring with runic decorations from Whitley Hill and a pair of Saxo-Norman gold rings from Corbridge (Craster, 1914). Important pendants include the small gold example from Daisy Hill, Sacriston, dating to the 7th century AD, and a recently discovered gold and garnet pendant from the churchyard at Stainton, Middlesbrough. Strap-ends are known from Wooperton and Frosterley (Bailey, 1993), and from the Green Shiel settlement on Holy Island (O'Sullivan and Young 1991). David Wilson suggests that an unusual strap-distributor in the British Museum, which has parallels with examples from Meols and the Viking burials at

Cronk Moar and Ballateare on the Isle of Man, may have come from Goswick (Bersu and Wilson, 1966). Ecclesiastical metalwork includes the pectoral cross from the shrine of St Cuthbert in Durham, and an Anglo-Saxon chalice from Hexham. A final important discovery is the hoard of Viking silver objects from Old Spital, Bowes, which included nineteen silver bars, a broken bracelet and a rough waste object (Edwards, 1985).

Weapons occur as excavated and chance finds. Spears and shields were found at the cemetery at Greenbank, Darlington (Miket and Pocock 1976, 72), a spear fragment from a grave at Easington (Hamerow and Pickin 1995, 40), and twelve spears and spear fragments, shield bosses and a seax from Norton (Sherlock and Welch 1992a, 32-34). Hope-Taylor's excavations at Bamburgh recovered two swords and several spears (Paul Gething personal communication), and a folded, pattern-welded sword found at Eslington suggests the burial of a high-status individual (Collins and Turner forthcoming). Chance finds include a probable seax from Lowick (Northumberland), and a decorated spear of probable 9th-century date from Burradon (Spain, 1923). Two swords and an axe, part of the Viking 'Hurbuck' hoard discovered at Lanchester, are now in the British Museum (Shetelig, 1954, p. 74) A cist burial containing three bodies, a bone comb, and an enamelled disc-brooch were found in Cambois, Bedlington, Northumberland in 1859 (Alexander, 1987). The artefactual evidence from the burial suggests a 9th century date and the individuals had a wide trading network as the brooch and combs may have been imported (Alexander, 1987, 105).

Fragmentary iron objects are known from cemeteries, including knives from Easington and a key from Greenbanks, Darlington. Iron objects were also found at Yeavinger, among them a curious 'standard' (Hope-Taylor 1977, 200-203). Iron tools, including four scythes and a pickaxe, were part of the 'Hurbuck' hoard (Shetelig 1940). Knives have also been found at Jarrow and Monkwearmouth.

Bone objects

The acid soils of the north mean that bone objects are under-represented. Combs are known in grave contexts from a burial at Hepple (7th century) (Cramp and Miket

1982, 4-5) and the Viking burial from Bedlington (Alexander, 1987; Shetelig 1954, 77) as well as from occupation sites at Jarrow and Monkwearmouth, Green Shiel and The Winery in Holy Island, Saddler Street in Durham and Church Street in Hartlepool (O'Sullivan and Young 1991; Carver 1979; Daniels 1988, 195). A 10th-century decorative bone strip, probably some form of mount, was found during an excavation at Ferryhill (Batey, 1990). Intriguingly, recent work at Bamburgh has also produced a fragment of walrus ivory with saw marks, suggesting both trade with northern Scandinavia and probably craft working on the site (Paul Gething personal communication). The wider social context of the manufacturing and use of bone combs in the north of Britain has been explored in depth by Steven Ashby at the Department of Archaeology, University of York

Other objects

Worked stone objects are relatively rare, though three stone bowls of early medieval date have been identified from sites in Sunderland, Dalden and Durham, one with an Anglo-Saxon inscription. Their function is uncertain, though it is possible they may have had a liturgical purpose (Hart and Okasha, 2003). A range of limestone containers were also recovered from the monastic site at Hartlepool (Daniels 1988, 190), as well as a possible stone cresset lamp from Lindisfarne (Petts, personal communication, 2017).

Durham Cathedral has an important selection of well-preserved organic objects from the shrine of St Cuthbert. These include the unique carved wooden coffin, a portable altar (wooden encased in metal) and embroidered silk stoles. The shrine also contained his gold, cloisonné pectoral cross (Emery, 2004).

Museums

Teeside Archaeology maintains the HER and holds the finds from the cemeteries at Saltburn and Norton; the main early medieval collection held by Tees Archaeology being the 120 skeletons from the recent excavations on the cemetery at Norton. In County Durham, Bowes Museum holds the archives and finds from Denis Coggins' excavations at Simy Folds, and the cemeteries at Seaham, Binchester and Andrew's

Hill, Easington. The Museum of Archaeology in the City of Durham holds little Anglo-Saxon material beyond some fragments of late sculpture. More significant collections of Anglo-Saxon sculpture are held at Durham Cathedral in the Open Treasure exhibit within the Monk's Dormitory. This exhibit also holds the material from St Cuthbert's shrine. There is also a small collection of sculpture held in the Anker's House Museum in Chester-le-Street.

On Tyne and Wear the Museum of Antiquities held a good collection of sculpture (32 objects or fragments), but fewer items of pottery or metal. These were combined with other collections into the revamped Great North Museum: Hancock in 2009. Major items include the Capheaton hanging bowl, cross fragments from Rothbury and Nunnykirk, and a coin collection. A full catalogue of early medieval items (from both within and outside the region) was published in 1982 (Cramp and Milet 1982), and the museum catalogue is searchable online. The material excavated by Rosemary Cramp at St Paul's, Jarrow, can be found in Jarrow Hall: Anglo-Saxon Farm, Village, and Bede Museum; here are also the objects relating to the Anglo-Saxon cemeteries at Milfield North (on loan from the Museum of Antiquities), Andrew's Hill, Easington, and Norton on Tees (on loan from the Bowes Museum). In Northumberland, a small collection of material is held in the Alnwick Castle Museum, including an annular brooch from Coquet Island and the objects from the barrow at Barrasford (Collingwood Bruce 1880). Outside the region, the British Museum holds a small number of early medieval objects from the North-East, of which the Viking Hurbuck hoard is the most significant.

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