4. PREHISTORIC ARCHAEOLOGY

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4.1 A BRIEF OUTLINE OF SOME PREVIOUS WORK ON THE PREHISTORIC ARCHAEOLOGY OF NORTHUMBERLAND

Historical Background

It was not until the nineteenth century, with the founding of the Society of Antiquaries of Newcastle that methodical research into the prehistoric archaeology of Northumberland really began. From the earliest days of the Society the emphasis was on Roman archaeology but it was also during this period that the services of the surveyor Henry Maclauchlan were sought by the fourth Duke of Northumberland. The latter was a keen antiquarian, a Fellow of the London Society of Antiquaries, a patron of the Newcastle Society of Antiquaries and also a Trustee of the British Museum. Initially interested in Roman antiquities, he shifted the focus of general interest beyond Hadrian's Wall, and he commissioned Maclauchlan to carry out surveys of Roman roads throughout the county. In carrying out this work Maclauchlan recorded many examples of prehistoric settlement sites and related features.

Henry Maclauchlan was a seminal figure in the development of archaeology in Northumberland. He was born in 1792 and his early career was as a surveyor with the Ordnance Survey, mainly in the south of England. From its early years the Ordnance Survey had encouraged its field officers to recognise that, 'The remains of ancient fortifications, Druidical monuments, vitrified forts and all Tumuli and Barrows shall be noticed in the plans whenever they occur.' (quoted in Charlton and Day, 1984). Maclauchlan developed a keen interest in the human impact on the environment, but it was not until after his retirement in 1844 that his interest in archaeology developed into a full-time occupation. In 1860 when Maclauchlan was 68 years old he was once again enlisted into the service of the Duke of Northumberland to carry out, 'extensive researches among the old Celtic camps in the fastness of the Cheviot Hills.' (quoted in Charlton and Day, 1984).

This work was to provide a valuable resource for later prehistorians working in North Northumberland generally, and the area that was to become the Northumberland National Park in particular. Maclauchlan was involved in surveying almost 2,000 square miles of upland terrain, which, because of its inaccessibility, was largely covered on horseback. In 1867 he published *Notes, Not Included In The Memoirs Already Published On Roman Roads In Northumberland.* Related to this work are 142 site plans, including surveys of Yeavering Bell, and many of the College Valley prehistoric sites, the prehistoric sites of the Breamish Valley and Threestone Burn and sites in the North Tyne Valley from Kielder to Bellingham. He refers to over 144 'native' sites in the text and from his discussion it seems that he was present at several excavations during this period in particular, those carried out at the Roman site of High Rochester and the prehistoric sites of Greaves Ash and Yeavering Bell hillfort. Maclauchlan also met Canon Greenwell, and he was able to sketch some of Greenwell's excavations of Bronze Age barrows.

The other antiquarians working in Northumberland in the nineteenth century were as we have seen above principally excavators who, unlike Maclauchlin, were more focused on individual sites. The two principal figures were Canon William Greenwell and George Tate. Greenwell was primarily interested in funerary monuments and was responsible for the opening up of several Bronze Age barrows in the county in the tradition of the great nineteenth century barrow diggers (Greenwell, 1877). Tate's work was more varied and he excavated sites on behalf of the Berwickshire Natural History Society and the Duke of Northumberland. He was responsible for the excavation of the hillfort and adjacent monuments on Yeavering Bell, and his excavation report, (along with other reports of his work in Northumberland) was published in the *Proceedings of the Berwickshire Natural History Society*. He also excavated at Brough Law, Prendwick Chesters and Greaves Ash in the Breamish Valley. His notebooks are now deposited in the archive of Berwickshire Museum (see Tate, 1856 – 62a; 1856 – 62b).

At the end of the nineteenth century R.C. Hedley carried out survey work at Lordenshaws and Tosson Burgh hillforts, but the only serious publication relating directly to the prehistoric archaeology of the current Park area to come out between 1890 and 1920 was David Dippie Dixon's *Upper Coquetdale* (1903). This book dealt with the whole range of antiquities in Coquetdale and still remains an important antiquarian source book.

Many other excavations were carried on during this period, largely under the auspices of the Society of Antiquaries of Newcastle-upon-Tyne, but the main focus of their interest remained Hadrian's Wall. Also during this period the County History of Northumberland was commenced. It was structured on a parish basis and contains details of excavations, site descriptions, stray finds, and useful inventories of the antiquities found in each parish.

A renewed phase of archaeological enquiry began in Northumberland after the First World War. In 1924 the North of England Excavation Committee was formed, but it was more or less solely concerned with sites within the vicinity of the Roman Wall. By 1935 only six later prehistoric hillfort sites in the whole county had been tested by excavation. Four of these, Greaves Ash, Yeavering Bell, Brough Law and Prendwick Chesters lie within the area now bounded by the Park (*see* Tate, 1856 – 62a; 1856 – 62b).

Throughout the twentieth century archaeology developed rapidly as an academic discipline and public interest in, and awareness of, the past also grew. Within the north of England, a new, more disciplined archaeological interest, became centered on the Universities of Durham and Newcastle. Two figures in particular influenced the development of prehistoric studies in Northumberland, - George Jobey and Colin Burgess. These two, both professional archaeologists, were largely responsible for defining a framework of enquiry into northern prehistoric sites, particularly in the uplands of north Northumberland.

Jobey and Burgess undertook the systematic classification of the numerous, and previously largely ignored, 'native' sites in the area, testing out hypotheses against excavation work and developing a chronology for the prehistoric period. It soon became apparent, through their work, that the uplands of Northumberland, contained unique, complex and well-preserved prehistoric and historic landscapes, and that rather than being an area of sparse population for millennia they were in fact, densely occupied (Jobey, 1964, 1965, 1972, 1982, 1983a, 1983b; Burgess, 1980, 1984).

In addition to the activities of Jobey and Burgess we must also note the work of Beryl Charlton and John Day who from the 1970s carried out extensive, multi-period, field research projects within the area of the National Park, particularly in the area of the Otterburn Military Ranges (Charlton, 1996; Charlton and Day, 1997, 1978). Stan Beckensall has recently made great strides in recording rock art both within and without the Park area (Beckensall, 1983, 1991, 1995; Beckensall and Frodsham, 1998; Frodsham, 1995, 1996) and Peter Topping and the Northumberland Archaeology Group have tackled a range of issues from the Neolithic of the Cheviots through to fieldwork projects such as the recent excavations on Wether Hill (Topping, 1981, 1987, 1989a, 1989b, 1990, 1991, 1993, 1995, 1999a, 1999b, 2004).

The NNPA has instigated a range of field projects in recent years that have contributed substantially to our knowledge of prehistory within the Park boundary e.g. *The Simonside Project* (LUAU, 2000), *The Breamish Valley Archaeology Project* (Frodsham and Waddington, 2004, 171 – 189) and *The Discovering Our Hillfort Heritage Project* (Hedley, forthcoming).

There have been many general reviews of Northumberland's prehistoric archaeology. Three are worthy of mention here. In 1984 Burgess published a speculative review of Northumberland prehistory in a *Festschrift* produced for the late George Jobey entitled '*Between and Beyond the Walls*'. In 1986 Nick Higham produced an ambitious, if somewhat flawed, review of '*The Northern Counties to AD 1000*' and in 2003 Stan Beckensall published his '*Prehistoric Northumberland*'. Of particular relevance to the National Park is Frodsham's recently edited volume on '*Archaeology in Northumberland National Park*' (Frodsham, 2004) and Waddington and passmore's Ancient Northumberland (2004).

PERIOD REVIEW

Mesolithic

Amateur archaeologists have undoubtedly played a vitally important role in keeping up interest in the region's prehistory, and nowhere is this more obvious than in the study of the northern Mesolithic. This is made manifest if one looks at a generalized distribution map for Mesolithic sites in Durham and Northumberland (Young, 2000a) which clearly reflects where local, and in the main, amateur, workers have been active since the early part of the twentieth century.

If one looked, however, for published articles which mention Palaeolithic and Mesolithic archaeology in the North's three leading archaeological journals, then the situation of research stagnation would seem to be confirmed. In the Transactions of the Architectural and Archaeological Society of Durham and Northumberland/Durham Archaeological Journal for 1973-99, some 125 archaeological articles and substantial notes were published. Of these only four dealt with aspects of the period under study here. In Archaeologia Aeliana from 1976-2000, of the 266 archaeological articles and Museum Notes, only seven dealt with, or mentioned, earlier prehistory. Similarly, over the same period, 242 archaeologyrelated articles appeared in the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, but only twelve discussed aspects of Palaeolithic and Mesolithic archaeology.

As early as 1912, however, C.T. Trechmann produced a paper entitled 'Neolithic Chipping Sites in Durham and Northumberland' (Trechmann, 1912). This included a discussion of lithic material from the uplands of County Durham as well as the coast of Durham and Northumberland, and it was the first attempt by local archaeologists to discuss the relationship between Mesolithic and later material from upland and lowland/coastal locations.

This paper was important for a number of reasons. For example, it included the first published mention of the site at Crimdon Dene, north of Hartlepool which was to become an important archaeological location as the early years of the twentieth century progressed. Trechmann also speculated about sources of raw materials, suggesting that the upland flint came from the Yorkshire Wolds, while the 'coastal' flint artefacts were mainly pebbles from the local boulder clay. He also put forward a relative dating scheme for sites in both upland and lowland areas and concluded that whilst the material may or may not be contemporary 'there was no intercourse or exchange of materials between the two areas' (1912, 81).

His discussion of the Northumberland coast was slight, however, and he noted that lithic material was 'practically absent from that part stretching from the mouth of the Tyne northwards to Whitley Bay. The only definite 'chipping site' that he recorded was at a location 'a mile north of Newbiggin' which produced some 400 pieces of flint (1912, 82).

In 1922 Francis Buckley produced a small note in the *Antiquary's Journal* on a 'Pygmy Industry on the Northumberland Coast', and another in the *Proceedings of the Society of Antiquaries of Newcastle -upon-Tyne* on 'Early Tardenois remains at Bamburgh'. These contributions discussed finds from Bamburgh and Craster, and clearly and for the first time identified Mesolithic material in the area. Buckley linked the finds with the Belgian Tardenoisian industries (1922a; 1922b) and he followed this work up in 1925 with a more detailed discussion of the material. This paper on 'The Microlithic Industries of Northumberland' employed typological analysis to separate the coastal material into an 'early Tardenoisian', characterised by small scrapers and pointed blades and a 'developed Tardenoisian' which included semi-geometric microliths (Buckley, 1925, 42-47).

In the same year, Raistrick also produced a detailed discussion of the distribution of Mesolithic sites in the north of England (Raistrick, 1933, 141-156). In a study clearly influenced by Buckley's work, Raistrick speculated that the coastal sites were earlier than those in the northern uplands and that they had more affinities with material from Belgium. He believed that the microlithic sites of the Pennines were the product of a later, inland, movement of people from the coast (1933, 150 -152). Raistrick's ideas about relations with the continent were further developed in a 1934 paper with G. Bennett-Gibbs, entitled *'Prehistoric Invasions of Northumberland and Durham'*.

1934 also saw the publication of one of the most detailed discussions of '*Mesolithic* Sites of the North East Coast of England' by Raistrick himself. In this contribution he discussed material from the area between Newbiggin and Lyne Hill on the Northumberland coast and recorded flint scatters from three main locations; near Newbiggin itself; near Element Head and Sandle Holes on Newbiggin Moor; and north of the river Lyne at Lyne Hill All the lithic material recovered from these sites came from the boulder clay cliff surface beneath layers of blown sand, a phenomenon that was noted at Nessend on Lindisfarne and to which we will return below. A possible 'limpet hammer' or bevelled pebble was recovered in association with the Newbiggin material (Weyman, 1984, 42), while at Sandle Holes, Raistrick recorded two discrete layers of material separated by 'three inches of soil' (Raistrick, 1934, 188). Just above the boulder clay at this site he noted microliths, chips and small blades, and in the upper layer he observed 'larger cores and bulky chips and flakes of Neolithic type' (1934, 188). Unfortunately all of these locations have now been eroded away either by the action of the sea or by quarrying.

At Lyne Hill Raistrick recorded two scatters of flint material 'about 15 yards diameter and 100 yards apart' (1934, 188). These were areas of high lithic concentration with some 3000 pieces being recovered in 'two days' work' (1934, 188). We can only guess at the total number of finds made at these two locations, but Raistrick hints at the size of the assemblages in his comment that '..in a collection of over 5000 fragments from one site without any selection, over 12% show careful workmanship' (1934, 192). He also says that the 'principle area of the site was completely cleared, chips, implements, and every piece of flint present being collected, in order to get a census of the various types present in the culture as a whole' (1934, 194). Raistrick noted that 'the same proportions are maintained on other sites, except for the relative scarcity of microliths. These are still present everywhere, but reduced in numbers' (1934, 194).

The remainder of Raistrick's paper gives a detailed account of other coastal and inland locations where flint scatters were recorded. The author drew attention to the potential relationship between 'coastal' and upland Pennine sites, but never developed the point and he was convinced that sites like Lyne Hill 'had a fairly wide distribution along the coast, from Hartlepool to Bamborough, everywhere resting on boulder clay and being covered by blown sand' (1934, 197). On the basis of pollen analysis of peats at the mouth of the Lyne river and their relationship with the stratum in which the Lyne Hill lithic material was found, Raistrick suggested that the coastal sites may have been of late Boreal/early Atlantic date and that they were occupied into the

'middle Atlantic or true Neolithic period' (Raistrick, 1934, 197). He further suggested that the upland sites, especially those in the Pennines, were slightly later in date. Finally, Raistrick found no stratigraphical support for Buckley's earlier suggestion of two phases of 'Tardenoisian' activity on the coast (1934, 195).

The authors then present a fuller discussion of each major artefact type (1936, 208-212), and they make much of the fact that the Mesolithic and later artefacts were recovered from the same few inches of grey sand, under the recognisably different blown sand (1936, 212).

This paper is also important because, for the first time we have some discussion about potential functional variation between sites on the coast. The authors distinguish between 'factory' sites like Crimdon Dene, on the Durham coast, occupied for long periods of time and smaller locations where the lithic component is not large but dominated by microliths and blades. These latter sites were seen as 'of much more occasional character, advantageous fishing points particularly, being marked by a number of tools (mostly broken) on an old soil level, but not having the quantity of chips, often running into thousands, and the high proportion of cores' (Raistrick et al., 1936, 214).

There was also much discussion of the typological affinities of the material from Crimdon Dene, and in the spirit of the times it was linked closely to the late Tardenoisian industries of continental Europe, particularly Belgium and Germany. The authors contrasted this situation with that prevailing in West Yorkshire and the Peak District (1936, 215) where the typological links were said to be more with the early Tardenoisian, however in another first, the paper does point out that the material from Weardale and Teesdale in the North Pennines had typological links with the Durham coast and not the Central Pennines.

Since the 1930s and 1940s, work on coastal aspects of the Mesolithic archaeology of Northumberland, and indeed the Mesolithic in general in the region, has been sporadic. O'Sullivan and Young's research on Lindisfarne represents one of the biggest projects relating to the area (O'Sullivan and Young, 1995; Beavitt, O'Sullivan and Young, 1985, 1988, 1990; O'Sullivan and Young, 1991a; 1991b). Bonsall's

excavations at Low Hauxley, on the Northumberland coast in 1983, (*unpub.*) coupled with subsequent research on this site (*see below*), have also made a useful contribution to our understanding of the 'coastal' prehistory of the region. Mention must also be made of the Northumberland County Archaeology Section's 'Coastal Survey'.

No work of synthesis has been produced in recent years, however, and this was one of the aims of the Lindisfarne Project. Most recently, the exceptional site at Howick looks set to galvanise research into the coastal archaeology of Northumberland (Waddington, forthcoming and *see below*).

In their 1976 discussion of '*Archaeology in the North*' Clack and Gosling, suggested that Mesolithic activity was concentrated mainly on the region's east coast. They considered the area between the Tyne and the Tees to be especially important, because over half the known Mesolithic finds in the region had been made there. They also highlighted the scarcity of material north of the Tyne, the major finds in this area coming from Spindlestone and Ross Links on the Northumberland coast (Buckley, 1925; Brewis and Buckley, 1928).

In 1983 Davies produced a gazetteer of Northumbrian Mesolithic sites in *Northern Archaeology* (1983) and Weyman examined aspects of the north-eastern Mesolithic, particularly raw material type and source location (1984). Nine years later, in 1993, O'Sullivan and Young published a detailed interim report on work at Nessend on Lindisfarne in Northumberland, and they discussed this in the context of the so-called 'coastal' Mesolithic of north-east England.

In 2000 Young developed his interest in coastal Mesolithic research in a paper that examined the relationship of so called 'coastal' sites with inland and upland locations of Mesolithic activity (Young, 2000a).

In terms of other, recent, Northumbrian work, mention must also be made here of the as yet unpublished excavations and related work at Low Hauxley (C. Howard-Davis, *pers comm*). This site was examined initially by Clive Bonsall, subsequently by Stephen Speak, and most recently by Lancaster University Archaeological Unit,

funded by English Heritage. A series of Bronze Age cairns and cists has been found eroding from the sand dunes at Low Hauxley since 1982. Beneath this was an old land surface and midden deposit, on and in which was an assemblage of lithic material of probably later, but possibly earlier, Mesolithic date.

Bonsall's 1983 excavation, along with Tipping's associated pollen work, showed the importance of the site in terms of its palaeoenvironmental potential. Some 250m to the north of the archaeological exposure there are inter-tidal peat deposits, which have been examined by Innes and Frank (Frank, 1982, 24-32), and which have yielded evidence for a well-dated series of environmental changes. Low Hauxley has the potential to tell us much about the later Mesolithic environment and subsequent marine inundations of the Northumberland coast. Further detailed work is required here before the site is totally lost to the sea.

In 1996 Christopher Tolan – Smith produced 'Landscape Archaeology in Tynedale'. This was the first report from Newcastle University's multi-disciplinary Tyne-Solway Ancient Landscapes Project, designed to examine the human use of the Tyne-Solway corridor from the earliest prehistoric periods to Medieval times. In this project some 34% of the 400 hectares that were fieldwalked produced stone artefacts. Tolan-Smith has studied these from a landscape archaeology perspective, rather than simply concentrating on typology, and he has suggested that certain parts of the corridor were more or less important for certain activities at certain times.

Indeed, he has argued that contrasting, almost mutually exclusive patterns of land-use were emerging in the area for the Mesolithic and Neolithic periods, with an increase in the amount of the land used by Neolithic farmers. From the distribution of Neolithic axes and other material, he has suggested that this increase was the result of farmers moving up the Tyne Valley, and that evidence for Neolithic activity falls off with distance up the valley from the east coast (Tolan-Smith, 1996).

On-going research by Clive Waddington in the Milfield Basin in Northumberland has further highlighted the important contribution of a 'landscape' based approach to earlier prehistory (Waddington, 1999; 2000a). In his 1999 BAR volume, based on his doctoral research, Waddington dealt with the Mesolithic and Neolithic of the Milfield area, concentrating on the evolution of the landscape, settlement data, ideology and the changing nature of people's relationship with the 'natural' world. He employed a wide range of methodologies, working closely with geomorphologists among others, and he has developed new fieldwork practices which will benefit all fieldworkers in the region, as well as producing an impressive analysis of the collected lithic data and on overall archaeological synthesis for the area.

Most recently Nicky Milner and Clive Waddington of Newcastle University have examined a site at Howick near Alnwick and Craster discovered in the 1980s by John Davies. This is another important 'coastal' site as it has revealed archaeological evidence for a Mesolithic hut with related timber features in association with large quantities of knapped flint, marine shells, ochre, charcoal and charred hazelnut shells (Milner and Waddington, 2001, 6; Waddington et al., 2002). A series of radio-carbon dates concentrating around 7800 Cal. BC has recently been obtained from the hazelnut shells (Waddington et al., 2002.), making the site comparable with, and potentially earlier than, that at Filpoke Beacon on the Durham coast (Jacobi, 1976). In 2002 John Davies recorded the first Mesolithic material from Simonside (Davies pers. comm.). In 2003 Waddington *et al.* produced a detailed discussion of their work at Howick. This is the most comprehensively dated Mesolithic site in the British Isles and it has produced a unique and detailed history of occupation.

Most recently there has been a large, English Heritage funded, expansion of Waddington's work in the Milfield Basin. This has seen an extension of the existing fieldwalking programme so that around 1000ha has now been covered at either 10m or 5m intervals. In addition Waddington and Passmore have commenced the Till-Tweed Project which at the time of writing has covered some 390 ha of land in the upper reaches of the Till and the lower Tweed, at 5m and 2m intervals

Neolithic

Neolithic archaeological remains are still few and far between in Northumberland as a whole. As early as 1877, Greenwell reported the discovery of Neolithic pottery from the barrow at Broomhill near Ford (1877, 410, CLXXXVIII; Longworth, 1969). These would now be classified as early Neolithic sherds of Grimston Ware. Other

fragments of decorated vessels found near Ford and given to Greenwell would be classified as of Burgess's Meldon Bridge style (Burgess, 1984) some Grooved Ware forms are also present (Longworth, 1969, Fig. 1.5).

In 1968 Tait produced a review of the then known finds of Neolithic pottery in Northumberland. Peterborough pottery is known from Heatherwick and Old Town Farm, Allendale, while material from Kyloe Crags may have more Scottish influence.

In 1976 T.G.E. Newman recorded a potential causewayed enclosure at Hasting Hill in Tyne and Wear (Newman, 1976). In the course of his discussion of this site he refers to apparently similar enclosures at Lookout Farm, Seaton Sluice and at Old Yeavering on the edge of the Milfield Plain.

In the same year Miket published an important contribution entitled '*The Evidence for Neolithic Activity in the Milfield Basin*' (1976, 133 – 142). This summarized the existing knowledge of the Neolithic in the area and reported on Meldon Bridge style pottery and Grooved Ware finds from the Millfield Plain at Thirlings (1976, Figs. 7.10, 57.4; 7.12, 59). Also present was Fengate Ware and much plain, thick, bucket shaped pottery that was very difficult to classify (Miket, 1976, Figs. 7.10, 57.6; 7.11, 57.9). Hope Taylor also recorded Grooved Ware and Meldon Bridge pottery from Yeavering (1977, Figs 121 – 2).

The ceremonial monuments of the Late Neolithic, henges, cursus and some of the stone circles, are highly visible. These monuments probably had several functions, as the demarcation between social, economic and spiritual spheres that marks our society was probably not apparent in these early social groups. Evidence from the Millfield Plain henges (Harding, 1981), particularly the Yeavering example indicates that the sites were used for burials, but that they were also associated with domestic activities. Pits, possibly for grain storage, in association with Neolithic pottery would seem to indicate Neolithic arable activity.

In 1981, Burgess, Ovens and Uribe de Kellet published a preliminary statement on the implications of the distribution of polished and ground flint and stone axes in the north-east of England. They pointed out some notable concentrations and absences of

finds, and drew the conclusion that this was a proxy indicator of the levels of population in certain areas of the region. The boulder clay, they suggested, was only slightly occupied in the Neolithic and they concluded that this was the result of the difficulty that the Neolithic farmers would have experienced in tilling the heavy clay related soils in these areas.

1982 saw Gates publish his discovery of a long cairn at Dod Hill, Ilderton, Northumberland and one year later, in 1983, Stan Beckensall produced the first of many detailed surveys of the rock art of Northumberland with his book *'Northumberland's Prehistoric Rock Carvings'*. As we will see in the rest of this chronological review of published work, Beckensall was soon to establish himself as the doyen of Northumbrian rock art studies.

In 1984, Burgess mapped the distribution of polished stone axes in Northumberland. This work was based on the earlier contribution by Burgess, Ovens and Uribe de Kellet (1981) and from his mapping he reiterated some of the earlier conclusions about the implications of the overall distribution. He suggested that Neolithic activity must have been fairly widespread within the county. Axes were made on rocks from a variety of sources, with the Lake District area being prominent. The local quartz dolerite of the Whin Sill was also exploited (1984, 133 - 136).

Burgess also highlighted the lack of known Neolithic settlement sites in Northumberland, pointing up the sites at Thirlings, and Yeavering (1984, 140). When Burgess wrote his account, Thirlings had produced the widest range of evidence in the form of large quantities of both early and late Neolithic pottery. Hundreds of pieces of Grimston Ware came from pits and post holes and some of these conjoined. One post hole produced material which gave an uncalibrated radio-carbon date of 3280bc (Burgess, 1984, 141). In 1983, Gibson had analysed the diatoms in the clay of the Thirlings pottery, proving that its source was most likely to be the banks of the adjacent river Till.

In 1984, in the same volume as Burgess's discussion of the region's prehistory, Lionel Masters reviewed the evidence for Neolithic long cairns in Cumberland and Northumberland. He listed the Bellshiel Long Cairn (Craw, 1932, 358; Newbiggin,

1936a); The Devils Lapful which lies within Kielder Forest (Newbiggin, 1936b) and Dod Hill (*see* Gates, 1982) as definite examples of the type and the sites of Birks (Thorneyburn); Dour Hill (Craw, 1932, 182, 357 – 358; Jobey, 1977a, 204 – 207 and most recently see Wadington, 1996); Marven's Pike (Hodgson, 1943, 170); Med's Lapful of Stanes (Heyes, 1976, 248, 253) as potential examples.

Two years later, in 1986, Stan Beckensall again ventured into print with his book *Rock Carvings of Northern Britain*. This was a popular text produced in the 'Shire Books' series. He also published a detailed account of rock art motifs in two volumes that were produced privately in the period 1991/92. 1988 also saw Elizabeth Twohig's analysis of the Roughting Linn rock carvings (1988).

Ten years on from Beckensall's *Rock Carvings in Northern Britain*, Waddington attempted to 'put rock art to use' (Waddington, 1996). In this paper he demonstrated the potential value of an integrated landscape approach to the study of rock art, concentrating on the Milfield Basin and combining the excavations at the Coupland enclosure and 'avenue' with detailed studies of rock art and the identification of settlement zones through intensive fieldwalking. A large and early henge-type monument, at Coupland, in the Millfield Basin (with calibrated radiocarbon dates of c. 3,800 B.C.), was approached by a droveway which may be contemporary with the henge and which may have been used for driving stock from grazing areas. Simultaneously, the droveway may have functioned as a ceremonial approach to the site itself and it does seem clear that many of these late Neolithic monuments were situated in significant places in the landscape, approached along prescribed pathways (Waddington, 1996). These pathways might have been indicated by outstanding natural features in the landscape and the carving of rock art may have been an additional way of demarcating their routes.

The same year saw Tolan-Smith's publication of a discussion of the Mesolithic-Neolithic transition in the Tyne valley. This was based on the detailed survey work at the heart of the Tyne-Solway Project. In this discussion he argued for a landscape based approach to understanding relationships between Mesolithic and Neolithic groups and he put forward a model of differential land-use for the two chronological periods (Tolan-Smith, 1996a; 1996b). In 1997 the joint NNPA / Durham University Breamish Valley project produced a Neolithic radio carbon date of c. 4000bc from an excavation carried out over a series of cultivation terraces at Ingram, and in the same year Topping published his account of *'Different Realities: the Neolithic in the Northumberland Cheviots'* (Topping, 1997). In this he explored some general trends in the articulation of the landscape in the Northumberland Cheviots during the Neolithic period. He recorded Peterborough Ware from Wether Hill, and he detailed the remains of two stone circles at Hethpool and Threestoneburn (cf. Topping, 1981; Burl, 1976, 49-50). The pottery has recently been re-examined by Alex Gibson and now seems to belong to the category of food vessel (Waddington, pers. comm.).

Clive Waddington produced a critical review of late Neolithic pit alignments in the Milfield area in 1997. Pits in the Milfield Plain and at Ewart had produced Grooved Ware and cremated bone. Waddington was at pains to argue that pits in the pit alignments may have had varied functions. The double line of pits noted at the Milfield North site was associated with the henge monument and may have been a form of avenue.

1998 saw the publication by Waddington *et al.* of the results of survey work at Harehaugh Hillfort which suggested that an earlier Neolithic enclosure lay beneath the ramparts. In the same year, Waddington published a discussion of Northumbrian rock art (1998) and with John Davies, he also published the results of the excavations at the Neolithic settlement near Bolam Lake. This site had been discovered by Davies after several seasons of detailed fieldwalking and structural evidence was fairly well preserved. Two pits from the site produced Grimston Ware, and charred hazelnuts which gave a radio carbon date of c. 3700 cal. BC (2960+/-70bc Beta-117290; 2930+/-80bc, Beta-117291) (Waddington and Davies, 1998).

1998 also saw Waddington produce his PhD thesis entitled 'A Landscape Archaeological Study of the Mesolithic-Neolthic in the Milfield Basin' (Waddington, 1998). This was a highly innovative approach to fieldwalking and the interpretation of the results of this activity. He was keen to promote a total landscape approach to broaden our understanding of settlement land-use and social relations in the study area in the Neolithic. He put forward a model for Neolithic land use in which the fell sandstones were utilized as stock grazing areas during the summer months, exploited by herding communities with horticultural plots on the gravel terraces and certain parts of the low Cheviot slopes. He derived support for this model from the fact that

- a) very few Neolithic artifacts had come from the Sandstones, and that
- b) he had identified an Early Neolithic stock droveway at Coupland in the Milfield Plain which connected he thought to an early Nelithic enclosure in the core settlement area of the Plain with the Sandstone to the east of the river.
- c) The Early Neolithic settlement at Bolam Lake, on the Sandstone Fells only appeared to have been temporarily occupied.

On the basis of theses pointers, he suggested that there may have been no great social or economic upheavals involved in the transition from the Mesolithic to Neolithic in the region.

In 2000 Waddington provided a critical review of the whole notion of a specific Neolithic period in Northumberland (Waddington, 2000c). This built upon his PhD dissertation which examined the Mesolithic and Neolithic archaeology of the Milfield Basin (1998), and stressed the artefactual evidence for continuity from the Mesolithic to Neolithic periods. It also reiterated the land-use and settlement models that he had put forward in his doctoral dissertation.

Stan Beckensall published a further popular statement on Northumberland rock art in 2001. Among other things this dealt with art in the landscape, art in monuments and portable rock art, and in 2002 Waddington and Davies published a final account of their work at Bolam Lake. This discussion expanded on the earlier report noted above and paid more attention to a broader contextualization of the site and its material culture.

Most recently, Stan Beckensall has produced an excellent popular account of the prehistoric archaeology of the county (Beckensall, 2003). This provides a readable overview of some of the key developments in the subject in general but has good sections on the Neolithic and rock art in particular.

Bronze Age

The Bronze Age represents a period during which further fundamental changes in society occurred. While its major characteristic is usually thought to be the introduction of metalworking, which was an important development, the period is perhaps most significant for the gradual change from the ancestral, monument dominated landscape of the Neolithic to the settlement and agriculture dominated landscape of the Iron Age and later periods.

The earlier Bronze Age is a clear development from the native later Neolithic, and this is reflected in the fact that certain types of monument and artefacts are classified as 'late Neolithic/early Bronze Age'. It is only really within the last twenty years or so that the detailed study of Bronze Age settlement sites has come into its own, largely as the result of initial fieldwork by George Jobey and Colin Burgess. Most work on the Bronze Age in the region has tended to concentrate on material culture finds, mainly of pottery, flint tools and metalwork, and burial sites. The following review is intended to give an insight into the gradual shift in interests over time.

As early as 1934, Raistrick and Bennet-Gibbs had speculated on the nature of prehistoric invasions in Northumberland and Durham. For them, all changes had to be introduced into the region from outside and they argued that the north effectively lagged behind the rest of the country in terms of the way innovations were taken up and in the general pace of change from one chronological period to another (Raistrick and Bennet-Gibbs, 1934).

Discussions of material culture finds of the sort published in 1929 by Parker Brewis and J.D. Cowen became common place. In this paper they discussed a find of an Encrusted Urn from Ryton on Tyne (1929, 197 – 198). Similarly in 1933, Cowen discussed the Ewart Park Bronze Age sword finds. Again, the emphasis was on artifact morphology, typology and chronology and in the same volume of *Archaeologia Aeliana* he reported in similar fashion on some fragments of a late Bronze Age sword from near Corbridge which were deposited in the Black Gate Museum (1933a, 185 – 198; 1933b, 199 -205).

1936 saw the publication of Maryon's excavations of Barrows at Kirkhaugh near Alston. One of these produced the now famous gold 'earring' of Early Bronze Age date, supposedly associated with a 'food vessel' (Maryon, 1936, 207-217). Two years later Gilbert Askew reported on his excavation of two cists at Benthall on the Northumberland coast near Beadnell (1938, 149-155). The report also documents similar finds at North Sunderland.

In 1941 Nancy Newbiggin reported on a series of Neolithic/Bronze Age and later archaeological finds from the area around Hebburn Moor and Old Bewick. (1941, 104-116). These included:

five stone axes, or fragments of axes, thirty two beads from a jet necklace, a spindle whorl, a miniature jet cup, a fragment of a jet cup or armlet, seven barbed and tanged arrowheads, several leaf arrowheads, slug knives and over seventy worked flints of various sorts.....

(Newbiggin, 1941, 106)

Five years later Collingwood and Cowen published an account of the recovery of a beaker burial in a cist at West Lilburn. This burial was also accompanied by a small bronze blade, a fragment of flint and a jet button. This was an important contribution to research as it listed, for the first time, all known finds of bronze knives and v-perforated jet buttons from Northumberland (Collingwood and Cowen, 1946). This was followed in 1948 by their report on a prehistoric burial at Haugh Head near Wooler which produced a food vessel and a series of flint finds including a 'spearhead' and a single barbed arrowhead (Collingwood and Cowen, 1948). In the same volume of *Archaeologia Aeliana* Cowen also reported on a series of bronze finds from Northumberland (1948, 127-139).

It was not until 1960 that a further report on prehistoric burials in the county was published in *Archaeologia Aeliana*. In this year Jobey reported on a beaker burial from Shipley, near Alnwick (1960, 244-247) and he also recorded two food vessels from Callaly and Ashington (1960, 241-243). One year later Collingwood and Jobey reported on a burial from West Lilburn that had been associated with a complete food

vessel and several other pottery fragments (Collingwood and Jobey, 1961, 373 – 378). This was followed in 1965 by Jobey *et al's* report on the early Bronze Age burial from Reaverhill Farm, near Barrasford (1965, 65-76). The latter was a remarkable find, producing as it did a fine example of an early Bronze Age riveted dagger. The style, date and affinities of the piece were discussed in detail by Colin Burgess (1965, 68-75).

1965 also saw the publication of Tait's important catalogue of *Beakers in Northumberland*. This was the first time that a complete listing of finds of this pottery type had been compiled for the region. A similar catalogue of Bronze Age metal finds was published by Colin Burgess in 1968. This was based on research that he had carried out whilst he was the Sir James Knott Research Fellow at Newcastle University (Burgess, 1968).

Further work on Bronze Age burials was published by Jobey in his seminal discussion of the cairnfield at Alnham (1966). In this paper he highlighted the potential morphological variability of Bronze Age burial sites and he produced a listing of all known finds of cordoned and collared bell beakers, with burials, in Britain. Jobey followed this up two years later with a report on his excavations at the Chatton Sandyford cairnfield site (1968, 5-50) and in the same year he reported on food vessel finds in north Northumberland (1968a).

Aubrey Burl discussed the four post stone circles of the Goatstones and the Three Kings in 1971. Again this was an important paper that attempted to place these two anomalous sites into their Scottish Bronze Age context. The paper facilitated a more general discussion of stone circles in Northumberland and included a list of all known four posters in Britain (Burl, 1971). The following year Burl and Jones published an account of their excavations at the Three Kings Circle. These showed that the monument had a small cairn at its centre and that clearly as originally constituted it had been made up of a rectangular setting of four upright posts (Burl and Jones, 1972).

In the same volume of *Archaeologia Aeliana*, Colin Burgess published his report on his excavations at the Goatscrag rock shelter near Wooler. Among other finds this

work produced a series of early Bronze Age burials, some associated with ceramic vessels of food vessel urn type. The paper also set out a general discussion of other rock shelter sites in Northumberland (Burgess, 1972, 15-69).

1973 saw the publication of a dagger grave find from Allerwash near Newbrough in the south Tyne Valley (Newman and Miket, 1973, 87-95). This was a remarkable find as an early Bronze Age three rivet dagger was associated with the body of a young woman within a cist. Miket's 1974 account of his work at the destroyed Christian chapel site of West Hepple is also of interest here. As well as features associated with the active life of the chapel, the work also revealed two prehistoric burials, probably of early Bronze Age date. Both were in pits; one being associated with an inverted collared urn (Miket, 1974, 153-188).

In the same year Burgess and Miket, published the find of a bronze flanged axe from Elsdon and discussed the wider problems of interpretation associated with this kind of axe (1974, 27-32). They followed this two years later with a note on three socketed axes in north-east England, two of which came from Ulgham Park Farm in Northumberland (Burgess and Miket,1976, 1-9) and in the same volume of *Archaeologia Aeliana*, Stan Beckensall discussed his excavations at the rock shelter site of Corby's Crags (1976, 11-16). As at Goatscrag, the rock shelter at Corby's Crag had been used for burial in the Bronze Age and the site produced a cremation in an urn. T.G. Newman also discussed a jet bead necklace from Kyloe in the same volume (1976, 177-182).

Jobey recorded a Beaker burial from Hazelrigg in 1975 (1975, 217-219) and in the same volume of *Archaeologia Aeliana* he also published a paper with T.G. Newman on a collared urn burial at Howick on the Northumberland coast (1975, 1-16). Newman ventured into print again in 1977 to discuss prehistoric burials when he recorded the finding of two early Bronze Age cist burials at Short Moor Farm, Wark and Broomhill, High Mickley, Prudhoe. The High Mickley burial also produced a food vessel (Newman, 1977, 39-45). In the same volume of *Archaeologia Aeliana*, Jobey published a note on a food vessel burial at Dour Hill, Byrness (1977, 204-206). One year later Jobey also recorded a Beaker burial from Altonside, near Haydon Bridge (1978, 173-174).

1978 saw three publications dealing with Bronze Age ceramics that were of direct relevance to the Bronze Age in the region. Trevor Cowie published a catalogue of food vessel urns in North Britain, while Alex Gibson produced a general discussion of Bronze Age pottery finds within the region. Colin Burgess and Gillian Varndell also discussed the origin and development of collared urns (Cowie, 1978; Gibson, 1978; Burgess and Varndell, 1978). In 1979 Richard Coleman-Smith recorded the finding of a Bronze Age spearhead from Holy Island.

In the 1980s there was a significant shift in emphasis in terms of archaeological activity and publication within Northumberland. In 1978 George Jobey published an important contribution on unenclosed platforms and settlements of the later second millennium BC in northern Britain (Jobey, 1978a). This had serious repercussions as for the first time it was suggested that Bronze Age settlement sites might be clearly identified within the landscape. In 1980 Jobey published a discussion on settlement potential in the second millennium in north Britain (1980, 371-376) and he also produced his first statement of results from his excavations at the unenclosed settlement of Standrop Rigg. The latter suggested that the site had Bronze Age origins. In the same year Burgess produced two statements on a similar site at Houseledge, Black Law, near Wooler (1980a, 3; 1980b, 5-12).

1981 was a particularly important year for prehistoric archaeology in Northumberland. Anthony Harding produced his final report on excavations at the henge complex at Milfield (1981), Jobey produced a discussion of small cairn groups in the county, coupled with the results of his excavations at the Millstone Hill cairnfield site (1981), Burgess published a further interim statement on his work at Houseledge (1981) and Miket discussed pit alignments and the excavations of these features at Ewart (1981). In addition Burgess and Gerloff produced some seminal work on *The Dirks and Rapiers of Great Britain* that recorded material from Northumberland (1981) and Schmidt and Burgess published a corpus of bronze axes from Scotland and Northern England (1981). Alex Gibson also produced a paper on perforated implements from Northumberland and Durham, Peter Topping discussed the stone circle at Hethpool and Tim Gates reported on a food vessel burial from Wellhouse Farm, Newton (Gibson, 1981; Topping, 1981; Gates 1981). In 1982 Welfare published a note on a bronze knife from Cartington, near Rothbury and Burgess also discussed the find in the light of other double edged knives of later Bronze Age date (Welfare, 1982a, 19-31; Burgess, 1982, 32-46). Welfare also published a note on the finding of flanged and socketed axes from the Rothbury area (1982a, 53-58) and Charlton recorded a Bronze Age settlement site at Tod Law on the Otterburn Training Area (1982, 3-5). Burgess reported on further work at Houseledge (1982, 4-6) and Gates reported on his excavations at the unenclosed site of Hallshill (1982, 7-9).

Settlement archaeology was again to the fore in 1983 when Gates published a detailed discussion of unenclosed settlements in Northumberland (1983, 103-147). This was a vital contribution, drawing, as it did for the first time, on a detailed analysis of available air photographic data and modern field work. Jobey also broke new ground with the publication of the results of his excavations on the unenclosed settlement at Standrop Rigg. This work produced radio-carbon dates of 2070+/-80bc (HAR – 3983; 4020+/-80bp) and 350+/-70bc (HAR-3981; 2300+/-70 bp) and along with the ceramic finds this clearly demonstrated a Bronze Age date for this form of settlement. By the same token the paper saw the first serious discussion of the potential relationships of unenclosed and enclosed settlements in the uplands of Northumberland. Welfare also published a note on a flanged axe from the Rothbury area (1983, 3-7).

Of particular importance to our overall understanding of the general prehistory of Northumberland was Burgess's speculative discussion published in the *festschrift* to George Jobey entitled '*Between and Beyond the Walls*' (1984). This remains to this day a first port of call for anyone interested in prehistoric archaeology in the region. 1984 also saw Miket publish an account of the recovery of a Beaker from Twizell (1984, 245-248) and Jobey reported a radio-carbon date of 1840 +/-65bc (GU-1648; 3790+/-65bp) c. 2400 – 2200BC for the tree trunk coffin recovered from Cartington. This had been recorded with an associated beaker in the latter part of the nineteenth century (Jobey, 1984, 235-238).

In 1985 Stopford *et al.* recorded two cemeteries of second millennium date in Northumberland. These were at Cheviot Walk Wood, Eglingham and Pace Hill near

Crookham. The former produced a series of cists and food vessels, the latter produced cists and one associated beaker (Stopford *et al*, 1985, 117-132). Miket also published a report on his excavations at the ritual enclosure site of Whitton Hill, near Milfield (Miket, 1985, 137-148).

1989 saw Topping speculate on the potential Late Bronze Age dating of some cord rig patches in Northumberland (Topping, 1989a; 1989b). He followed this up a year later with the report on his work at the unenclosed settlement site of Linhope Burn (Topping, 1990-1991, 1-42). Gill Ferrell's 1990 review of the prehistoric pottery from Hope Taylor's excavations at Yeavering demonstrated the presence of Late Neolithic, Grooved Ware and beakers, along with cinerary urns and a range of later Bronze Age/Iron Age forms (1990, 29-49).

In 1991 Page and Turner-Walker revisted the Reaverhill dagger, first recorded in 1965 (*see above*). Their programme of conservation included micro-photographic analysis and X-radiography and it revealed much about the dagger's structure. It also revealed evidence for organic remains, associated with the hilt of the piece.

A further unenclosed settlement was examined by J.M. Monaghan at Lookout Plantation and the report on this work was published in 1994. This was another important contribution as it demonstrated that the unenclosed settlement form was not just a phenomenon of the Northumberland uplands. More sites must surely be identifiable from the available air photographic record (Monaghan, 1994, 29-42).

1996 saw the publication of Stan Beckensall's long term excavations at the site of Blawearie near Old Bewick. This was merely one cairn amidst a whole range of sites discovered in the course of the work. The excavation revealed a series of burials that had been missed in the course of Greenwell's earlier excavations. Associated material included food vessel and food vessel urn pottery, a necklace of jet and shale beads, a range of flint types and part of a copper ring. The burials within the main cairn had clearly all been added at different times and two satellite cairns were also excavated, one of which produced a cremation (Hewitt and Beckensall, 1996, 255-274).

A good general overview of some recent developments in Bronze Age archaeology in Northumberland can be gleaned from Beckensall's recent publication entitled *Prehistoric Northumberland* (2003).

Iron Age

Arguably the Iron Age should be one of the best understood of all of Northumberland's prehistoric periods. The emphasis in research terms, even from the nineteenth century and before, has been on settlement sites, many of which are only dated on the basis of their morphology in relation to a limited number of excavated sites.

From the late 1950s onwards, the late George Jobey was instrumental in developing ideas about the nature of Iron Age settlement within Northumberland generally. In 1959 he published the results of his excavations at Huckhoe, in the course of which he identified a stratigraphical sequence that was to be recorded at many other sites in Northumberland. The stone built settlement was preceded by a double palisaded enclosure that was dated by radio carbon assay to 510+/-40 uncal. BC (GaK-1388) (Jobey, 1968).

In his seminal 1965 paper on '*Hillforts and Settlements in Northumberland*' Jobey made a first attempt to classify the range of later prehistoric settlement forms in the area. He also initiated discussion on the nature of the so-called cross ridge dykes (assumed to be Iron Age) in the Cheviots and he produced a comprehensive list of hillforts and related settlements in the region. He followed this in 1966 with his report on excavations of the two palisades at High Knowes A and B near Alnham. The latter was a substantial double palisaded site containing at least 16 ring groove houses (Jobey and Tate, 1966).

In 1970 Ritchie discussed the context and affinities of palisades in northern Britain. Sites in Northumberland figured large in this and she proposed a classification system which distinguished between the 'homestead' with less than three huts and the 'settlement' with three or more (Ritchie, 1970). Also, in the late 1970s Colin Burgess began his, as yet unpublished, excavations of the hillfort site at Fenton Hill near Milfield.

This was an incredibly important piece of work as it demonstrated that a very complex sequence of palisades was in existence at Fenton Hill before the multi-vallate, final, hillfort phase. Some details of this excavation were given by Burgess in his 1984 contribution on Northumberland's prehistory. The site began as a stockaded farmstead with a perimeter that was part double and part single in terms of the fence line. This phase was dated to 880-760 uncal. BC (Burgess, 1984, 156). A box rampart was constructed over the early palisade around c. 450 uncal. BC and this in turn was replaced by a second box rampart c. 210 uncal. BC (Burgess, 1984, 157, Fig. 8.7).

In 1970 Jobey published his report on excavations at the enclosure site of Burradon. Here an early Iron Age settlement, consisting of a rectangular ditched enclosure surrounding a series of circular timber built huts was shown to predate a later homestead which may date to the second century AD. In the following year the results of Jobey's excavations at Brough Law and Ingram Hill in the Breamish Valley were also published. This work produced the first radio-carbon dates for both of these settlements. Brough Law was dated to 245 +/-90 uncal. BC (I-5315) and Ingram Hill produced a date of 220+/-90 uncal. BC (I-5316) (Jobey, 1971). The two sites were shown to be broadly contemporary and Jobey speculated on the social and political relationships of the people using these two locations. Ingram had been excavated previously (Hogg, 1942; 1956) and the work had demonstrated the presence of an early palisade that predated the ring bank enclosure.

In 1973 Jobey published his excavations at Hartburn to the east of the Park boundary and demonstrated how complex the seemingly simple settlements sites of the region might be. In the same year he published the first reports on a programme of excavations carried out in advance of the construction of the Kielder Reservoir, which now lies just outside of the Park boundary. The site of Tower Knowe was of Romano-British date (Jobey, 1973), but the Belling Law excavations (Jobey 1977) again emphasized the complex palimpsest of settlement activity that was present in the uplands of the county. Belling Law began life as a late Iron Age palisaded settlement and saw continued use into the Roman period. The site was re-occupied in the seventeenth and eighteenth centuries AD by a small farmstead. Work at Kennel Hall Knowe (Jobey, 1978) and Gowanburn (Jobey and Jobey, 1988) also re-enforced this picture of Iron Age – Roman continuity in the settlement record.

In 1979, in the course of other work in the area, Jobey recorded a palisaded settlement at Bishop Rigg quarry near Corbridge (Jobey, 1979). Eight years later, with his son Ian, Jobey published a report on excavations at Murton High Crag. Here unenclosed and palisaded settlements were met with as well as Romano-British settlement activity (Jobey and Jobey, 1987). In 1988 father and son again appeared in print together to report on their work at Gowanburn River Camp. Here, once more, a palisade was shown to predate a later ditched enclosure (Jobey and Jobey, 1988). 1989 saw the publication of the excavation report on two further palisaded sites, this time at West Whelpington (Jarrett and Evans, 1989).

Of particular relevance here are the recent excavations at Pegswood and Gosforth Park in Newcastle, both of which are at present unpublished. The *Discovering our Hillfort Heritage Project*, which is on-going in the National Park, has also contributed much to our understanding of Iron Age settlement development and land-use, as has the long-term landscape and excavation project in the Breamish valley. The former project has facilitated the detailed survey of several major hillfort sites (see below) and the latter project has seen the excavation of an Iron Age Hillfort at Wether Hill (Topping, 2004) and three settlements spanning the Iron Age /Romano-British periods at Little Haystacks, Fawdon Dene and Ingram South (Frodsham and Waddington, 2004).

4.2 PREHISTORIC ARCHAEOLOGY IN THE NORTHUMBERLAND NATIONAL PARK

Assessment of the current state of the prehistoric archaeological resource

Palaeolithic.

To date there is no recorded evidence for lower and middle Palaeolithic activity in Northumberland. This may be due to problems of identification of material in the field, but it is just as likely to reflect the fact that the Northumberland landscapes have been scoured by ice sheets over the millennia and that these have effectively removed any possible evidence for lower and middle Palaeolithic finds. There have been a few isolated finds of upper Palaeolithic implements in the northern region generally, the most northerly being a large, backed, flint blade found during the course of fieldwalking at Eltringham, Prudhoe (Cousins and Smith, 1995).

Mesolithic

Although Mesolithic flint tools (including knives, scrapers and microliths which were used for the manufacture of composite tools) have been recovered from several places in the Park, they are usually found during fieldwalking or through the investigation of later sites as there is rarely any surface evidence to suggest the location of Mesolithic settlements. For example, Mesolithic artefacts were recovered from the excavation of the Anglian 'palace' at Yeavering (Hope-Taylor, 1977), and from the site of a Romano-British settlement at Kennel Hall Knowe in North Tynedale (Jobey, 1978). In addition, many Mesolithic flints have been picked up from the furrows ploughed in advance of forestry plantations.

These latter finds suggest the presence in the hills of numerous Mesolithic hunting camps. We know from fieldwork elsewhere in Northumberland that some upland hunting camps made use of natural rock shelters (Weyman, 1984, 40), and although none has yet been excavated there are several examples in the Park which have the potential to tell us much about the local Mesolithic. Such places would have been occupied temporarily by bands of mobile people who moved around the landscape in a seasonal cycle, following herds of wild cattle over the hills, or salmon upriver, along long established routes. These hunter-gatherers would probably have been based on extended families, and would have returned to more permanent settlements, perhaps in the river valleys or even on the coast, for the winter where interaction with other bands, including ritual and ceremonial gatherings, exchange of marriage partners, and exchange of commodities could have occurred.

Young (2000a) has stressed the need to consider the wider landscape if we hope to gain a better understanding of upland Mesolithic sites. Communities may have had

'base camps' on the coast, with some or all of the community moving inland for part of the year. We can only hope to gain something of an understanding of such Mesolithic communities if all sites within a given region are considered together.

A major recent contribution, using just such a landscape approach, is Clive Waddington's very important programme of research in the Milfield Basin. This included the painstaking collection of lithic material from a thousand hectares of ploughed fields, in a transect extending from the Cheviot foothills, across the Milfield plain, to the fell sandstones in the east (Waddington, 1999). Some of the stone tools recovered were of locally occurring agate and chert, so flint may have been in short supply. Some flint was, however, apparently being imported from north-east Yorkshire, suggesting that inland exchange networks of some kind were already well established. Waddington (2000a, 174) believes that during the Mesolithic the Milfield Basin was exploited relatively intensively by 'semi-mobile extended family groups', from which small task groups would be formed to undertake specialised activities in certain parts of the landscape as required. Some such groups would presumably have travelled into the wild wood of the Cheviots on hunting expeditions.

Yeavering Bell, which towers over the southern edge of the Milfield Basin, may have acquired some special status as a ceremonial site during the Mesolithic. If so, then such early importance may ultimately have underlain the special status that was clearly afforded to Yeavering in later prehistoric and early historic times.

On the southern fringes of the Park, work by Chris Tolan-Smith (1996) has examined Mesolithic settlement in Tynedale. Although this work did not extend up North Tynedale and into the National Park area, there seems little reason to doubt that patterns of landscape exploitation here would have been essentially similar to those identified by Waddington at Milfield, with semi-permanent base camps in the lower Tyne valley or perhaps even on the coast. Similar patterns must have existed in Redesdale and Coquetdale.

Further evidence for the presence of Mesolithic people in the area of the Park comes in the form of palaeoenvironmental evidence for artificial clearings in the natural forest. Much of the landscape would have been clothed in mixed deciduous forest by the middle Mesolithic, with birch and pine on the higher ground and perhaps only the tops of the highest hills visible above the tree line. Artificially created clearings would have attracted deer and other grazing beasts, thus contributing to more effective hunting strategies. Over exploitation of some upland regions, however, may have resulted in the erosion of soils, leading to the creation of extensive areas of blanket peat and preventing the regeneration of any woodland. Young (2004) has discussed the nature of the relationship between Mesolithic people and the environment (*see* also the discussion of palaeoenvironmental research issues *below*).

It is important to stress that Mesolithic people were not 'simple folk'. They would have lived within a complex symbolic landscape. Over time, the routes they followed around the landscape would have become imbued with special meaning, linked by mythological associations with the ancestors. Systems of belief not dissimilar to those of Australian Aborigines, with landscapes dominated by song lines and sacred places, would probably have existed in Mesolithic Northumberland. Stories would have been told around camp fires which reinforced and enhanced cultural memory, reminding everyone of their place in the world and the importance of those who had been here before them. It is not difficult to identify elements of the ancient landscape that may have been regarded as special or sacred, and on a local scale there can be little doubt that Simonside would have fulfilled this role, conceivably from the moment that Mesolithic people first set foot in Northumberland.

From many miles away, to north and south, Simonside's dramatic profile forms a familiar landmark. People would have been drawn to its summit, where the curious rock formations and natural fissures would have helped to create an aura of mystery that we can still sense echoes of today. The recent recovery of Mesolithic flints from Simonside (J. Davies, pers. comm.) demonstrates beyond doubt that Mesolithic people were active here, and they must have given this place a name. That name, forever lost to us, would probably have been intimately bound up with the mythology and 'religious' beliefs of the time. Although we will never be able to prove it, there is every chance that this dramatic natural hill would have been seen as their principle 'sacred mountain' by the Mesolithic inhabitants of central Northumberland.

Neolithic (c.4000-2000BC)

Dozens of Neolithic polished stone axe heads have been recovered by chance over the years from in and around the National Park, with notable concentrations around Milfield and Rothbury (Burgess, 1984, 134). A few of these axes are of flint, but most are of hard volcanic rock. The majority can be sourced to Langdale in the Lake District, where axe production was practiced on an industrial scale during the Neolithic: Langdale axes are found throughout Britain, and long distance exchange networks of some kind were clearly in operation. The axes were essential tools, used for felling trees, woodworking and numerous other tasks including, probably, the breaking up new ground for ploughing. Some axes were buried with some ceremony in ritual monuments, suggesting that the axe was also of considerable symbolic importance to Neolithic people. This reminds us that the modern distinction between 'functional objects' and 'religious symbols' did not apply to the Neolithic world. The distribution of these axes, along with other Neolithic artefacts such as leaf shaped flint arrowheads provides proof that people were present in the Park's main valleys during the Neolithic.

A potential rock source for polished axes has been identified by Waddington and Schofield (1999) in the area around Langlee Crags in the Cheviots (Waddington and Schofield, 1999, 175-176).

Although no occupation sites have been excavated within the Park, we can assume that settlement, at least during the earlier Neolithic, retained a considerable degree of mobility related to the patterns of previous millennia. This should come as no surprise when it is realised that many communities still moved between lowland winter dwellings and upland summer pastures into the seventeenth century AD. We know from excavations on the Milfield Plain, and from palaeoenvironmental work elsewhere (eg. in Redesdale and Upper North Tynedale), that primitive varieties of wheat and barley were being cultivated by c.4000BC (Young, 2004; *see* also discussion of palaeoenvironmental issues *below*). As with domesticated beasts, these cereals must originally have been introduced from abroad. Wild resources were still harvested, but cereals and other domesticated crops provided an increasing proportion of the dietary requirements of Neolithic people as time progressed.

The new reliance on cultivated crops would have necessitated the production and maintenance of fields, and this may have influenced the development of more permanent settlements, allowing some people to tend the crops while others travelled the traditional seasonal routes at certain times of the year. The increasing reliance on domesticated resources was a profound development, and domestic stock and crops must have provided a rich source of metaphor for everyday life. Where wild resources were simply hunted or gathered when required, crops had to be sown, nurtured and harvested. The cycles of birth, death and rebirth must have been related in people's minds to the lives of individuals and of the wider community. To each succeeding generation, the domestic stocks and arable fields were the legacy of the ancestors, and had to be managed and passed on in a healthy state to those who would need them in future.

A more sedentary lifestyle would have enabled the development of pottery, which is clearly not suitable for essentially nomadic communities due to its fragility. Early Neolithic pottery, characterised as Grimston Ware series round based pottery, has been recovered from at least five sites just north of the Park boundary, including Thirlings and Yeavering. Later Neolithic pottery of the impressed ware tradition, and 'Grooved Ware', has also been found at Thirlings and Yeavering, although continuity of occupation throughout the Neolithic cannot be proven at either site. Detailed examination of some of this pottery has proved that it was manufactured locally, using clay from the nearby River Till. Organic remains from pits at the Thirlings settlement returned radiocarbon dates ranging from c.4000BC through until c.2500BC. While this might suggest that some sites could have been occupied continuously throughout the Neolithic, it is equally possible that breaks in occupation occurred during this immensely long period covering sixty or more generations. As with Mesolithic campsites, these early settlements leave no surface trace and are only discovered by chance or by careful fieldwalking. Many similar settlements almost certainly await discovery in and around the Park.

The extent to which an agricultural transformation occurred in the uplands during the Neolithic is still debated by archaeologists: it was probably not until the Bronze Age that large numbers of permanently occupied, self sufficient farmsteads appeared in the hills. On the Milfield Plain, Waddington (2000a) paints an image, throughout the Neolithic, of 'many small-scale settlements distributed over the raised terraces of the plain in close proximity to the rich resources of the river Till and the adjacent wetland fringes (eg wildfowl, fish, rushes, watering animals, edible green plants) over what is now the modern alluvial flood plain.' During the later Neolithic, although there must still have been much seasonal movement around the landscape, occupation of some of these settlements became more permanent, with cultivated crops and domestic stock providing an increasingly proportion of the diet.

Although no investigative work has taken place elsewhere around the Park, we can envisage similar populations to those in the Milfield Basin existing around Rothbury, and also further south in Tynedale, with the uplands being exploited on a seasonal basis. Palaeoenvironmental evidence (Young, 2004; see also palaeoenvironmental discussion below) suggests increasing amounts of woodland clearance in the uplands from about 2500BC, in the late Neolithic and extending into the early Bronze Age, but whether or not permanent villages were present in the uplands prior to 2000BC remains unresolved.

The earliest Neolithic monuments visible in the National Park landscape are the 'long cairns', linear burial monuments which excavations elsewhere in Britain have demonstrated were built to contain communal burials of many individuals (Masters, 1984). The massive Bellshiel Law long cairn which is some 110 metres in length, is located high above Redesdale, offering a wide view over the valley. In plan, the monument is trapezoidal, 18 metres in width at its east end tapering to 8 metres in the west. This suggests that the east end, where burial chambers may originally have been located, was the main focus of the monument. The cairn was partially excavated in the 1930s, but unfortunately little information relating to its origins or function was recovered. The Devil's Lapful is located in a not dissimilar position, high in North Tynedale at Kielder. This cairn is similar in form to that at Bellshiel, but is only about half the size. The long cairn at Dour Hill, located only about two kilometres west of Bellshiel Law, has recently been surveyed and reinterpreted as a 'chambered tomb', containing accessible corbelled chambers in which the dead could be laid to rest and from which relics could be taken for ceremonies at certain times of year (Waddington

et al, 1998). Most recently the Borders Archaeology Society has begun the excavation of a potential 'horned cairn' at Scald Hill (NT 93762 21485) (Aylett and Miket, 2004)

A handful of other possible long cairns exist in and around the Park, such as the recently recognised linear mound adjacent to the Harehaugh Camp hillfort (Frodsham, 2004). In addition, it is highly probable that some of the really massive hilltop round cairns, usually thought to be of Bronze Age date, may prove to have had Neolithic origins. Examples might include the massive cairns on Simonside, or that on Crigdon Hill (Upper Coquetdale), but the investigation of such monuments would represent an enormous logistical exercise and is unlikely to occur in the near future.

The cairns may well have stated the rights of certain kinship groups to territories in the uplands, perhaps for seasonal grazing land, and it would be a brave individual in the supernatural world of the Neolithic who would risk incurring the wrath of the ancestors by questioning the rights of such a group to its 'ancestral' lands. Regardless of their exact purpose, the effort that went into the construction of these monuments was substantial, demonstrating that they must have been very important to the people who built them.

No certain examples of early Neolithic enclosures have been recorded in the National Park, suggesting that they may not have been necessary here. Perhaps the 'natural' landscape here is so full of 'special' places that there was no need to construct special monuments: natural places, perhaps only slightly modified, could have performed a similar function to the causewayed enclosures of southern England. It is equally likely however, that such enclosures do exist but have not yet been recognised on account of the fact that archaeologists have looked for the form of causewayed enclosures common in southern England (Waddington, 2001).

Recent surveys of Iron Age hillforts in the Park have suggested that some may overlie earlier enclosures, and it is possible that future excavation will uncover evidence of early Neolithic ritual enclosures in such locations. At Harehaugh Camp, Coquetdale, the recovery of probable Neolithic flints, and a radiocarbon date of c.3000BC from a sealed context beneath the fort ramparts, coupled with the presence of the nearby Five Kings stone row and a probable long cairn, suggest very strongly that some form of early Neolithic enclosure may exist beneath this Iron Age hillfort (Waddington *et al.*, 1998). Indeed, a Neolithic complex of considerable regional importance may exist here at what is undeniably a strategic location, where the Coquet Valley meets the uplands and the Grasslees Burn provides a natural route through into Redesdale.

Later Neolithic monuments, from 3000BC onwards, include the great stone circles and henge monuments such as Stonehenge and Avebury in southern England. There are no stone circles of comparable grandeur in the National Park, although remnants of substantial examples can still be seen at Hethpool and at Threestoneburn in the Cheviots. The equivalent of medieval fairs may have been held at such places, with communities coming from some distance to exchange goods, to socialise, and even to seek marriage partners. The Threestoneburn circle consists of sixteen stones, of which only four remain standing, in a flattened circle up to 36 metres in diameter. A further four stones lying outside the circle may have been 'outliers', forming an integral part of the monument (Waddington and Williams, 2002).

George Tate excavated here in 1856, finding charred wood and a single flint knife which had 'two cutting edges and seems a portion of a small knife' (Tate, 1862, 452). He assumed the circle to have been a Druidic temple, but today we know that these circles were built some 2500 years before the earliest known reference to the Druids. An excavation using modern techniques could certainly tell us a great deal more about the people who built and used this particular circle.

The Hethpool circle, on a wide plateau above the College Burn near the mouth of the College Valley, is also a flattened circle, measures 41 by 36 metres, and consists of at least 23 stones. Both circles have apparent outliers to the north, and both have a relationship with the summit of Cheviot: Threestoneburn being due east of the summit, and Hethpool not far off due north. While we cannot currently explain them, such alignments are certainly not coincidental and the Neolithic architects who planned the circles would have been very much aware of them. Peter Topping (1997, 120) argues that one of the functions of the Hethpool circle may have been to 'ritualise' access along the College Valley towards The Cheviot, the vast bulk of which dominates the view southwards from the circle. Several smaller stone circles, some of which may be of early Bronze Age date, survive in the Hadrian's Wall
corridor. These include the beautiful little circle at Greenlee and a recently discovered site, which may contain burials, at Gibbs Hill.

Not all Neolithic monuments were circles. The stone row known as the Five Kings (of which only four survive, the fifth having been carted off to be fashioned into a gatepost in the nineteenth century), stands beneath Harehaugh Camp in Upper Coquetdale. In Hadrian's Wall country, 3km north of Sewingshields in a lonely moorland setting appropriately marked on the maps as 'Standingstones Rigg', is another stone row. This may originally have been an 'avenue' of standing stones associated with a burial cairn. It is most unusual in a Northumbrian context, and would be more at home on Dartmoor, where such monuments are relatively commonplace. Other standing stones exist singly or in pairs, such as the intriguingly named Mare and Foal near Cawfields. Some of these may once have formed part of larger monuments such as rows or circles, or may have been associated with now vanished stone cairns or earthworks. To try to interpret such sites without excavation is futile, and none has been excavated in modern times.

Several henge monuments (circular banks with internal ditches enclosing a central 'sacred' space) existed in the Milfield Basin, including one within the Park at Yeavering. These were all discovered by aerial photography: their banks and ditches have all been flattened by natural erosion and agricultural activity, but their ditches still show up as parch marks or cropmarks when seen from the air under certain conditions. They formed part of what we have already seen was a busy Neolithic landscape on the edge of the Cheviots.

Although they were a new development, these ceremonial monuments were intimately linked with the wider landscape. For example the stone circle at Threestoneburn is located due east of the summit of Cheviot, in a vast natural ampitheatre with a view out over the fell sandstones to the east, and the henge at Milfield North has its southern entrance aligned towards the peaks of the northern Cheviot hills, suggesting that these distinctive hills were of significance long before the massive hillfort of Yeavering Bell (*see below*) was constructed (Harding, 2000). A reconstruction of the Milfield North henge can be seen today at the Maelmin Trail in the village of Milfield.

The henge beneath the northern face of Yeavering Bell incorporates a clear alignment to the distinctive hill of Ross Castle several kilometres away to the east. The so-called 'Battle Stone' at Yeavering, which is probably contemporary with the henge, sits astride this alignment as if to further demonstrate its significance. The Milfield henges may have been linked by ceremonial processions which ended at Yeavering Bell. If so then this provides further evidence for the early importance of Yeavering as a ritual centre for the communities of the northern Cheviots and Milfield Basin.

Research elsewhere has demonstrated beyond doubt that many such monuments incorporated astronomical alignments, principally to the sun and the moon. The alignments on The Cheviot from the stone circles at Threestoneburn and Hethpool have already been noted, and similar relationships exist between many other Neolithic and Bronze Age monuments, natural features and possible astronomical events.

Such alignments must have taken on special significance at certain times of the year, for example at the solstices and equinoxes. However, no substantial research into such phenomena has yet been carried out at Northumberland stone circles or henges.

It has been suggested above that settlement may have retained a degree of mobility throughout the Neolithic, and the communal ceremonial monuments probably represented 'an expression of relative permanence in an otherwise transient lifestyle – a place for seasonal meetings to reaffirm beliefs and a shared identity' (Topping, 1997, 121).

Further ritual sites worthy of mention at this point, although their dating remains very much unresolved, are the panels of rock art, or cup and ring marks, which are found at many places on the Fell Sandstones of central and north Northumberland. These were first recognised in the mid nineteenth century and George Tate provides a fascinating overview of early work on them. In concluding his survey of Northumberland rock art he observes that:

Those who are not content unless every mystery is fully explained may feel dissatisfied, that after all the labour and research bestowed on the inscribed rocks, we cannot read them off as from a book. Before, however, more definite results can be arrived at, further investigations must be made in other parts of the world....Something, however, has been achieved – materials for aiding in the fuller solution of the problem have been placed on record – an advanced starting point made for future enquiries – and a description and representation preserved of marvellous sculpture which time and the elements will eventually obliterate

(Tate, 1865, 43)

Whether or not Tate would have been impressed with the progress we have made with rock art studies over the past century and a half must be open to doubt. The subject was largely ignored by archaeologists for most of the twentieth century, largely due to the fact it does not lend itself to study by conventional archaeological techniques. More recently, rock art sites have been subjected to a myriad of statistical analyses, and we certainly have more facts at our disposal relating to their age and context (Bradley, 1997). Despite all this work, however, it is questionable whether we are now, or perhaps ever will be, any closer to actually understanding the rock art motifs than were Tate and his contemporaries.

Waddington (1999, 175) believes that rock art on exposed panels of bedrock was originally produced during the early Neolithic, and builds a convincing model of early Neolithic landuse around the Milfield basin in which the rock art sites exist at upland grazing areas. It may well be that open air rock art was produced throughout the Neolithic, with some old sites being regularly embellished and occasional new ones created. It is possible that information relating to the chronology of rock art in Northumberland will arise from a careful programme of excavation around a sample of sites, something that is now long overdue.

Good local examples of cup and ring art can be seen at Lordenshaws, near Rothbury. Today, thanks largely to the efforts of Stan Beckensall, who has meticulously catalogued and recorded hundreds of such sites throughout northern England (Beckensall, 1982, 1986, 1995, 1999, 2001; Beckensall *et al.*, 1991), this rock art is increasingly recognised as an integral part of the prehistoric landscape which has the potential to tell us much about the ways in which Neolithic people used and understood their world.

We have already made reference to the 'sacred' nature of the landscape when considering the Mesolithic, and have suggested that Simonside, and possibly Yeavering Bell, may have taken on the status of 'sacred mountains'. Peter Topping, in a recent consideration of the Neolithic in the Cheviots, makes a similar claim for Cheviot. Having considered the relationship between Cheviot and the stone circles at Hethpool and Threestoneburn (discussed above) he observes that:

ethnography records the role prominent mountains can play across a range of differing levels of perception...Mountains can be utilised as territorial markers, refuges in times of stress, sources of raw materials for ceremonies, sites for ritual offerings, locations for shrines, and as landmarks featuring in mythologies (homes of the gods, origin myths) and stories (historical, land tenure etc). These oral traditions strengthen social ties and bond the human world to that of the immortals/ancestors.

(Topping, 1997, 120).

It seems that many places were probably regarded as sacred in Neolithic Northumberland, but Cheviot, as the highest place of all, may have been of extra special importance.

Bronze Age

Despite the introduction of bronze working, which some authorities herald as an 'industrial revolution', the boundary between the later Neolithic and the early Bronze Age is actually very blurred. This is reflected in the fact that certain types of monument and artefact are classified as 'late Neolithic/early Bronze Age'. Examples include round burial cairns (of which hundreds exist throughout the Park), characteristically shaped 'barbed and tanged' flint arrowheads, and types of pottery vessels such as 'beakers' and 'food vessels'. Indeed, radiocarbon dates obtained from recent excavations at Ingram (Frodsham and Waddington, 2004; Topping, 2004) have demonstrated that some conventionally 'Bronze Age' burial monuments (burials with beaker and food vessel pottery) actually appear to predate some of the 'Neolithic' henges on the Milfield Plain.

The archaeological record for the early Bronze Age is dominated by burial monuments. However, about a hundred settlements of one or more unenclosed roundhouses, of which many are probably of Bronze Age date, have now been recorded by aerial photography in Northumberland, the vast majority in the Cheviots (Gates, 1983). Many more such sites must lie concealed beneath later settlements, while others will have been destroyed by subsequent ploughing. These unenclosed roundhouses, often constructed on circular platforms scooped out of the hillside, are frequently clustered in groups of half a dozen or more. Some of the more isolated examples, such as those on Long Crags, at a height in excess of 400 metres above Langleeford, may only ever have been occupied seasonally, although a pollen diagram from nearby Broad Moss does suggest that barley may have been grown here at some point in the Bronze Age. Many other unenclosed settlements occur with associated remains including fields, paddocks, field clearance cairns and burial cairns, and these must have been permanently occupied settlements.

In places, such as in the north-east Cheviots around Humbleton Hill and Fredden Hill, extensive Bronze Age field systems, littered with occasional settlement and ritual/burial sites, survive. These are some of the most important Bronze Age landscapes in Britain. The visible remains are not spectacular, in the main consisting of low, turf covered stone walls or small cairns of stone resulting from clearance to improve the fields. When viewed from the air, however, or when freshly exposed following heather burning, their extent becomes clear. They represent the first large-scale agricultural exploitation of the uplands. In general, this activity is thought to date from the centuries after about 1800BC, although there is very little hard dating evidence from Northumberland and some of the unenclosed settlements may yet prove to be earlier. Exactly why fully sedentary, self sufficient settlements should have appeared in the uplands at this time remains unresolved, but may be related to pressure on lowland due to the rising population levels of the later Neolithic.

Two Cheviot Bronze Age settlements have been excavated in recent times, giving us an idea of what it would have been like to live in the Cheviot Hills in the middle of the second millennium BC. At Standrop Rigg, high up the Breamish Valley beyond the Linhope Spout waterfall, George Jobey excavated part of a settlement of half a dozen timber-built round houses arranged within a system of small, irregular fields surrounded by rubble walls. The settlement appears to have been occupied in about 1300BC, although the results of the excavation did not permit the longevity of occupation here to be determined (Jobey, 1983). The climate throughout much of the Bronze Age, up until at least 1200BC, was notably warmer than today, enabling crops to be grown at altitudes in excess of 300 metres. Although no evidence as to what was being grown in the fields surrounding the Standrop Rigg settlement was obtained from the excavations, the recovery of saddle querns suggests that grain of some kind was being cultivated.

A single round house of slightly later date was excavated by Tim Gates at Hallshill, Redesdale, and this produced evidence for the cultivation of wheat and barley, and possibly also oats and flax, in the early first millennium BC. Weeds indicative of waste or cultivated land, including fat hen, sheep's sorrel and hoary plantain provide further evidence for cultivation at Hallshill (Gates, 1983, 116).

Although located higher up in the hills, essentially similar agricultural regimes may have been in operation at the Cheviot unenclosed settlements. At one such settlement, Snear Hill, located at a height of 335 metres on the eastern flank of Cold Law above the Harthope Burn, faint cultivation marks have been recorded in association with field boundaries and unenclosed houses. This may be our earliest visible evidence for Bronze Age cultivation, but for now the site remains uninvestigated and undated (Gates, 1983, 115). Further palaeoenvironmental evidence for Bronze Age agricultural practice is provided in the palaeoenvironmental section of this research agenda document.

The second Bronze Age settlement excavated in the Cheviots is at Houseledge (Burgess, 1984, 145-152), overlooking a natural ravine in the hills about 3km west of Wooler. This settlement, like that at Strandropp Rigg, was of about half a dozen round houses, although here evidence was uncovered of more than one phase. One house had its timbers set within a rubble bank which had apparently been formed of field clearance stone piled up around an earlier timber house, which had in turn replaced a still earlier timber house. This sequence suggests that the village may have been occupied for quite a long time, perhaps several centuries.

Although absolute dating evidence for the development of the Houseledge site was not obtained, Burgess suggests that occupation here may have begun very early in the second millennium BC. The settlement at Houseledge was surrounded by a complex, and apparently multi-phase, agricultural landscape of clearance cairns, small fields or paddocks, lynchets, and strange lengths of stone wall of no apparent purpose which may have been nothing other than linear dumps of stone cleared from the fields, though some may have functioned as stock shelters. Burgess (1984, 151) noted that some of the fields associated with the Bronze Age settlement overlay a system of agricultural terraces, thus proving that these particular terraces were cultivated no later than the Bronze Age. The suggestion that such terraces could be in use during the earlier Bronze Age is supported by recent evidence from Ingram (Frodsham and Waddington, 2004) where sizeable excavation trenches have been cut through one system of substantial terraces, providing two radiocarbon dates suggesting cultivation here in the early Bronze Age (c.1750BC).

It is not known when or why settlements such as Standropp Rigg and Houseledge were abandoned, but their demise may well be linked to the onset of generally cooler and wetter climatic conditions from about 1200BC. Some archaeologists have attempted to link the abandonment of such settlements to the massive eruption of the Icelandic volcano, Hekla, which palaeoenvironmental evidence has demonstrated occurred in 1159BC. The quantity of ash and dust thrown up into the atmosphere by Hekla may well have resulted in a few successive cool, dull summers, causing perhaps insurmountable problems for upland farming communities. Just two successive bad years, during which seed corn had to be consumed or breeding animals eaten, may have been sufficient to force the abandonment of a small village.

However, there would presumably have been considerable reluctance amongst local populations to abandon their ancestral homelands, leaving the fields and villages which may have been meticulously maintained by their ancestors over many centuries. Hence, alternative agricultural strategies, such as an increasing reliance on pastoralism, must have been experimented with before any sites were actually abandoned. There is also an issue of where people could actually move to: by this time it may not have been easy to simply 'up sticks' and relocate, as the best agricultural land would already have been claimed by others (*see* Young and Simmons, 1995).

Although a link between the abandonment of these settlements and the eruption of Hekla remains unproven, it does seem that many of the upland Bronze Age villages appear to have been abandoned by the turn of the first millennium BC. The succeeding settlement pattern of defensible palisades and hillforts is considered in the Iron Age section of this account.

At the same time as the Houseledge settlement was excavated, a burial cairn on top of the adjacent hill known as Gains Law was investigated. This consisted of a ring-bank of rubble surrounding a central area, 16 metres in diameter, which contained one large cist (to which a secondary, smaller cist had been added) and fragments of cremated bone and food vessel pottery. It seems reasonable to infer that this cairn was an important ritual site for the occupants of the nearby village.

At Tod Law in Redesdale, adjacent to Otterburn Camp on the Otterburn Training Area, a fascinating complex of visible roundhouses, fields, clearance cairns, and a cupmarked stone, probably spanning much of the Bronze Age and extending into the Iron Age, can still be seen. Associated with this are some substantial burial cairns and a cremation cemetery which, by analogy with sites elsewhere, is probably of early Bronze Age date. Another good example of a cremation cemetery can be seen near Brough Law at Ingram, though neither this nor the Tod Law site, have been excavated.

The round burial cairn is certainly the most common surviving monument from the Bronze Age, and examples exist, sometimes in isolation but often in clearly defined groups termed 'cairn cemeteries', throughout the National Park. Such monuments take a variety of forms, but most are circular in plan – hence the all-encompassing term 'round cairn'. Some are truly massive, while others are relatively insignificant, and some burials can occur in flat graves without any sort of covering mound.

A recently recognised variation worthy of note is the so called 'tri-radial' cairn, consisting of three arms radiating from a central point (Ford *et al*, 2002). Several tri-

radial cairns have now been recorded in upland Northumberland, and although some archaeologists continue to regard them as sheep shelters of much later date, evidence is accumulating to suggest that they do represent a previously unrecognised form of Bronze Age ritual monument (Frodsham and Waddington, 2004).

Some round cairns, for example those on top of Thirlmoor in Upper Coquetdale, and the single example on Callerhues Crags above Bellingham, are dramatically located to be visible from afar. Others are located adjacent to dramatic landscape features. Those at Sewingshields, just north of Hadrian's Wall, lie beneath the spectacular outcrop of Queen's Crags in a relationship which is unlikely to be entirely coincidental. The location of many other cairns and cairn cemeteries is less easily explained. Often, no doubt, the locations of such ritual sites would be determined by cultural concerns relating to earlier activities: some are clearly located with regard to earlier ceremonial or 'sacred' sites.

At least three round cairns were built close to the previously discussed Neolithic cairn at Dour Hill, and a cist of probable Bronze Age date was actually built into the structure of this already ancient Neolithic cairn, which must have been of great mythical significance to local Bronze Age people. Hints of a similar process can be seen at Lordenshaws, near Rothbury, where many Bronze Age burial cairns are set out in an area well known for its concentration of Neolithic rock art. Some cairns here are clearly related to panels of rock art in a way which cannot be down to chance, and work elsewhere in Northumberland and further afield has suggested that the sacred power of the rock art was drawn on in different ways by Bronze Age societies (Beckensall and Frodsham, 1998). Some burial cairns were built directly over panels of rock art, while others incorporated slabs of rock art quarried from nearby decorated panels. These practices may relate to the growing importance of certain individuals in the society of the time.

The fact that rock art, previously present in the landscape for all to see, was now sealed within the burial monuments of individuals suggests a reworking of the previous understanding of these sacred symbols (Waddington, 1998). Much research remains to be done with regard to the chronology of rock art, and it may well be that the quarrying and re-use of decorated bedrock within ritual monuments was common

practice well before the end of the Neolithic. This is indeed suggested by the incorporation of carved rocks, some of which may have originated as parts of ecorated outcrops, into Neolithic monuments such as the Dour Hill long cairn, the Matfen standing stone, the Duddo stone circle and the Milfield South henge (Waddington, pers. comm.). Nevertheless, the use of rock art in early Bronze Age burials is in itself an intriguing practice which would certainly repay particular study.

The Goatstones, near Simonburn, form a so-called 'four poster' (four stones arranged to form a square). There is a link here with the rock art discussed above, as the SE stone displays 13 cupmarks. The Three Kings (one has fallen) form another such four-poster in the Border Forest above Byrness. The stones, of local sandstone, are taller and more impressive than the Goatstones, although the once impressive views from the monument are now concealed by the extensive coniferous forest which envelops the site.

The Three Kings site was excavated in the 1970s and, although the centre had been previously much disturbed, sufficient evidence survived to demonstrate that it had once contained a burial cairn. Its excavators described it as:

not a mighty monument. It is a family-sized stone circle built long after the times when Neolithic people banded together in communal efforts to raise vast earthworks or to haul gigantic stones to Avebury and Stonehenge

(Burl and Jones, 1972, 13).

Four posters are most common to eastern Scotland, around Perth and Aberdeen, together with some in Scotland, but they are generally rare elsewhere. Excavations in Scotland suggest that they date from about 1800BC. Perhaps communities in North Tynedale and Redesdale enjoyed closer social links with communities to the north than to the south in these far distant times. The stone circle on Dod Law for example has recently been reassessed and confirmed as a four poster (Waddington, pers. comm.), implying that links with areas to the north were important for some early bronze age groups, occupying the valleys that form the main routeways into Scotland.

Although they could subsequently be used for secondary burials, most Bronze Age burial cairns appear to have been originally constructed for a single primary burial, often within a cist. The little firm dating evidence that we have suggests that these primary burials appear to be rather earlier (about 2000BC) than the Bronze Age settlements described above. However, future excavations may well close this gap to some extent. Alternatively, it may be that occupation of the hills at the time that many cairns were initially constructed was still seasonal, with the first permanently occupied villages following slightly later. Or perhaps the building of a burial cairn was one of the first acts in the settling of new upland areas, thereby stating a community's rights to a particular area of land. In this case, the primary burials will always tend to be slightly earlier than dates obtained from associated settlements, even if the cairns remained in use for secondary burials over perhaps several centuries.

Clearly, some individuals were buried with considerable ceremony, suggesting that they were held in high regard by those that survived them. The focus on particular individuals has led many archaeologists to conclude that Bronze Age society was more hierarchical than that of the Neolithic, and that a system of local chiefdoms had evolved by this time. Such a system may have been based upon a complex web of kinship networks, with individual status being to a large extent hereditary. This is borne out, to some extent, by the number of children, especially neo-nates who were accorded individual burial (c.f. the child in the cairn at Turf Knowe). They would not have had time to acquire any status positions in their brief lives and so may have been part of an hereditary social system.

The power of the elite was probably maintained through the control of long-distance exchange networks linked to the supply of copper and tin for bronze-working. Bronze Age chiefs may have held power in their own right, in contrast to earlier periods when the most powerful figures were probably priests or shamen, who only wielded power through the perceived legitimacy of their links with the gods or the ancestors.

No particularly grand houses have been recognised in any Northumberland Bronze Age villages, however, so these chiefs, if they existed, appear much more visible in death than in life. It is important to remember that funerals are about much more than simply burying the dead. Established funeral rituals, including the provision of exotic grave goods, may have been as much to do with legitimising the claims to authority of a new generation as with celebrating the life of the deceased.

What happened to the majority of the population in death remains something of a mystery, although the recent excavations at Turf Knowe, Ingram, suggest that the ashes from many cremations may have been inserted into the sides of such cairns, or simply scattered over them. Such activity could continue for many centuries after the deposition of a primary burial. Without any accompanying grave goods such cremations would not have been recorded during antiquarian excavations which were aimed primarily at the recovery of pots and other objects, so more modern excavations, such as those at Turf Knowe will be necessary to resolve this one way or the other. An alternative is that cremations could have been scattered elsewhere, perhaps even on the fields, which may well have been regarded as ritual constructions as well as simply places to grow crops. Another possibility is that people were disposed of in 'wet places'.

There is much evidence for the ritual deposition of valuable bronze objects in bogs and pools throughout Britain after the climate turned wetter from about 1200BC. Some such deposits could have been made as 'gifts to the gods' at the same time as ashes from a funeral pyre were scattered. Whether or not the dead were disposed of in this way, there is much evidence for the deposition of bronze objects in wet places in the vicinity of the National Park (Burgess, 1968).

There are other cases of Bronze Age or Iron Age objects being recovered from wet places, sometimes quite high up in the hills such as the bronze cauldron from Alnhammoor in the Upper Breamish Valley. Clearly, whatever the motivation behind it, the deposition of valuable metal objects in wet places was by no means an unusual occurrence. Many more such hoards must still await discovery, and it will be interesting to subject one to modern techniques of investigation when the opportunity arises.

Mention has already been made of the probable 'sacred' nature of Simonside in earlier prehistory, and in this context it comes as no surprise to find that many Bronze Age burial cairns are located on the summit, the flanks and around the base of this special hill. Two late Bronze Age bronze swords, very rare finds from Northumberland, have also been recovered from Simonside, where they had apparently been deliberately buried in about 1000BC.

Further evidence for the special importance of Simonside at this time comes in the form of burial cairns several miles away which appear to have been carefully aligned upon it. Perhaps the best such example can be seen on Wether Hill, Ingram, where the recently excavated burial cairn (Topping, 2004) is located on a ridge with the apex of its 'egg-shaped' surrounding wall pointing almost due south in the direction of Simonside. Had this cairn been built a few metres up or downslope then Simonside would not have been visible from it. Various interpretations of this are possible, but it surely cannot be entirely coincidental that the monument is so unambiguously aligned on Simonside.

The impressive Hare Cairn, in a generally uninspiring landscape setting on the Otterburn Training Area, is sited with the brooding mass of Simonside just visible on the eastern horizon where it neatly frames the strangely conical profile of the natural hill known as Black Stitchel. Interestingly, a recent survey (Hedley and Quatermaine, 2004) found no evidence of Bronze Age settlement or agricultural activity on Simonside. Clearly, this was a special place, set apart from the everyday agricultural landscape of the surrounding lowlands.

Iron Age

We have seen that many upland settlements of undefended timber roundhouses were apparently abandoned during the late Bronze Age. The upland landscape itself, however, was certainly not abandoned. Subsequent centuries were dominated by the construction of increasingly elaborate defended settlements culminating in the impressive hillforts which crown so many hilltops throughout the Cheviots. Although some archaeologists have explained the decline of Bronze Age settlements in an entirely negative way, through theories of environmental catastrophe and associated plagues, it now seems as though the decline of such sites was bound up with the complex social developments which led eventually to the building of defended settlements and hillforts, along with linear boundaries which appear to reflect a growing need to mark out territorial divisions on the ground.

As was argued earlier, Iron Age archaeology has to an extent been dominated by the study of hillforts and defended settlements, which is understandable given the impressive nature of these sites. However, north-east England has seen very little archaeological investigation of hillforts, and we are still quite ignorant as to the origins and functions of these monuments. The desire to know more about them led the National Park Authority to set up its flagship *Discovering our Hillfort Heritage* project (*see below*).

Hillforts may actually have served a number of different functions, which may well have changed through time. While they have traditionally been seen as defensive refuges, where people and stock could find safe haven in times of conflict, it is just as likely that they were 'statements of prestige', perhaps built by heads of local clans or kinship groups. That is not to say that they may not also have served as defensive sites on occasions, and in some ways it is tempting to envisage Iron Age society in the uplands as essentially similar to that of the Border Reivers some 2000 years later, with most wealth held in the form of cattle and more or less constant cattle rustling the order of the day. If this was the case then the majority of the hillforts can be seen as the equivalents of the medieval towers and bastle houses.

No two hillforts are the same. While they vary in size, by far the largest is that on Yeavering Bell (Pearson, 1998; Frodsham, 1999) - although what may be the remains of an even larger hillfort may lie beneath the medieval castle at Norham (Oswald, pers. comm.). Yeavering Bell consists of a tumbled stone rampart, originally up to 2.5 metres high, which encloses an area of 5.6 hectares, within which are the still visible platforms of about 130 timber-built roundhouses. The construction and maintenance of so many timber buildings demonstrates the abundance of local mature woodland, despite the clearances of earlier times. Presumably, such woodland was carefully managed and used for a multitude of purposes including the provision of timber for building and fuel. Also within the fort, around the eastern summit of the Bell, is a large ditched enclosure of uncertain purpose which is demonstrably later than some of

the house platforms. The slight remains of a much earlier burial cairn can also be seen within this ditched enclosure.

We have already suggested that Yeavering Bell may have had sacred significance in earlier times, but during the Iron Age one or more individuals had the power to order the construction of this massive hillfort, suggesting perhaps that power now lay firmly in the hands of living individuals, rather than by reference to the ancestors of the old sacred landscapes. The fort ramparts were built of stone quarried from the very fabric of the old 'sacred mountain', and several ancient quarry faces can still be recognised within the fort interior.

It is interesting to note that the fort walls would have been bright pink when first constructed, as the local andesite is this colour when freshly quarried. After just a few years' exposure to the elements, it weathers to a dull grey. (This process can be seen in local drystone walls today, where repairs often show as pink patches in long lines of grey). The use of this pink stone was, of course, necessitated by the fact that it was the only stone available here, but the use of colour in local prehistoric monuments is a subject that might repay greater study as work elsewhere suggests that red and pink may have been significant colours way back in prehistory.

There has been a tendency amongst scholars of the Iron Age to scoff at such suggestions, and to interpret hillforts as primarily functional, defensive settlements. Symbolic elements of various types, however, are often incorporated within hillfort architecture. For example, Yeavering's main entrance (perhaps its only original entrance) appears to be aligned southwards towards the great domed profile of Hedgehope (the second highest of the Cheviot Hills). Everyday, a fraction before noon, the residents of the fort could look through the entrance and see the sun at just about its highest point of the day directly over Hedgehope.

Regardless of all this fascinating, but ultimately unprovable, conjecture, the Yeavering Bell hillfort must have been of considerable political importance. Some people resident within it may have exercised control over the wider landscape, and possibly over the residents of other Cheviot hillforts. Indeed, Yeavering is on an altogether different scale to all the other Northumberland hillforts, and perhaps belongs to a group of large forts in southern Scotland (including Traprain Law and Eildon Hill North) which may prove to be considerably older than most of the more 'standard' sized hillforts (Rideout *et al.*, 1992, 139-143). We currently have no scientific dating evidence for the initial construction of the Yeavering hillfort, and while most archaeologists would suggest a date of around 300BC, it is entirely possible that it could be much older, perhaps dating from not long after 1000BC. Only excavation can provide an answer to its origins and its chronological relationship with surrounding sites.

George Tate (1863b), in an admirable, early, attempt at what we would today term 'landscape archaeology', excavated within the Yeavering hillfort and in a number of surrounding settlement sites in an attempt to better understand the hillfort within its immediate landscape setting. His results, although fascinating in many respects, almost inevitably leave many issues relating to the date and function of the hillfort unresolved. A recent survey (Pearson, 1998) suggests that excavations using modern techniques could potentially tell us a great deal about the communities that resided within the fort. For example, there is much variation in the size of 'roundhouses' within the fort, not all of which need necessarily have been dwellings. Some of the largest structures cluster around the entrance and it is quite feasible that some of these were for communal use. Others may have been specifically for industrial or agricultural activity. Of those that were dwellings, whether or not variation in size reflects any variation in the status of their occupants remains unknown.

Having established that there is relatively little that we can say with any degree of certainty about the founding of the Yeavering hillfort, it will come as no surprise to learn that there is equally little to be said for sure about its eventual abandonment. Hope-Taylor (1977, 267) found some evidence for occupation of the hillfort through into Roman times, but suggests that this amounted to no more than 'desultory, small scale use or occupation of its interior during the second, third and fourth centuries'. Perhaps, at some point during the Roman era, the main functions associated with the hillfort were transferred to the base of the Bell, where the Anglian 'palace' site of *Gefrin* was eventually established in the early medieval period.

In contrast to Yeavering, most Cheviot hillforts occupy an area of less than a hectare, but some are crowded with roundhouses and may have housed populations of several dozen individuals (*see below*). Although they display much variety in form, with each representing a response to its local environment, these sites may all be regarded as part of the same general tradition. It has been suggested that they may have been occupied on a seasonal basis, but there is no reason why most, if not all, should not have been permanently occupied. They may also have acted on occasions as ceremonial sites, where members of the local area could gather for festivals as they did at the great communal monuments of the Neolithic.

Several hillforts were preceded by 'palisades'. These were, in effect, wooden hillforts, consisting of a number of timber roundhouses contained within a timber fence. They were probably built from about 800BC during the early Iron Age, and most had become hillforts with earth or stone ramparts by about 300BC. In a few cases these palisades did not develop into hillforts and were abandoned. One of the best such examples can be seen above Harden Quarry at Biddlestone, where the construction trenches for the timber palisades and roundhouses can still be seen in the turf. Why such construction trenches should remain as visible surface features in the Cheviots is not understood, but the relative lack of earthworm activity in the acid soils here, coupled with the lack of later cultivation in comparison to other regions where such slight remains do not survive as surface features, may well have something to do with the explanation.

Other examples can be seen at High Knowes above Alnham, where a presumably later hillfort was built, conceivably to replace the palisades, at a lower altitude but in a more strategic position (Jobey and Tait, 1966). At Ell's Knowe, in the College Valley, excavations (currently unpublished) by Colin Burgess in the 1970s recovered evidence of a double palisade underlying a promontory fort with substantial stone ramparts, though neither palisade nor hillfort was dated.

Wether Hill, Ingram (Topping, 2004) provides a classic case of a palisade replacing an unenclosed settlement before being replaced in turn by a hillfort. The original construction (not to mention the subsequent maintenance) of such a palisade would have necessitated the felling of two hectares or more of mature woodland, so the clearance of natural woodland presumably continued unabated, leading to further impoverishment and erosion of upland soils. It has been suggested that the idea of earth and stone ramparts arose out of a lack of available timber to build palisades, but, whatever the reason, stone ramparts were being constructed by about 300BC.

The progress from palisade to hillfort with single rampart, to more complex hillfort, and often to a later non-defensive settlement on the same site, is known as the 'Hownam sequence' after the excavated site of Hownam Rings in the Scottish Cheviots (Pigott 1950). This general sequence can be difficult to prove at any one site without excavation, although it can sometimes be predicted on the basis of air photography or ground survey. It may have been followed at several Cheviot sites, including perhaps Wether Hill (Topping, 2004).

Building stone was readily available in the hills, and some extremely impressive hillforts were constructed. Some of the most spectacular examples are sited on the very edge of the uplands, and it may well be that their occupants exercised control over both upland and lowland areas. Humbleton Hill, in the north-east corner of the Park, is a particularly imposing fort which displays at least two main phases of rampart construction (Waddington *et al.*, 1998). Several circular stances for roundhouses can be seen here, as can a large outer enclosure that may be even older than the fort. This site is famous as the location of the Battle of Homildon Hill in 1402, immortalised in Shakespeare's Henry IV, part I.

Gleadscleugh, only about 1km from Humbleton, is a promontory fort. Its ramparts cut off the only natural approach onto a steep sided, and thus naturally protected, platform on which several house platforms can be seen. The upper Breamish Valley, above Ingram, contains the remains of ten sites which could be considered as hillforts, including the imposing and accessible Brough Law where areas of surviving wall facing in the ramparts demonstrate the skill of the Iron Age stonemasons. A further ten hillforts are located in the College Valley, including the magnificently sited Great Hetha (*see below*).

Further south in Coquetdale, the dramatic ramparts of Harehaugh Camp command what must always have been a strategic position above the confluence of the Grasslees Burn and the Coquet, controlling movement between the Coquet Valley and Redesdale. At the time of writing, a small scale excavation project is underway at Harehaugh, and while it will be some time before all the finds and samples have been analysed it is interesting to note that evidence of ironworking has been found.

Not far from Harehaugh is Lordenshaws, where a fine hillfort was constructed in a landscape already rich in older remains such as rock art and burial cairns. Back in the Cheviots, at Ilderton Dod, a substantial rectilinear enclosure, shown as a 'moat' on some maps, is probably of Iron Age date. Similar sites are known at Manside Cross (in Harwood Forest, near Elsdon) and beneath Bremenium Roman fort (discovered by geophysical survey (Crow, 2004). Another D-shaped enclosure, in a non-defensive position, is sited close to Harehaugh Camp, on the opposite side of the Grasslees Burn, where it may have functioned alongside the hillfort to regulate access along the valley. None of these sites have been excavated, and the nature of their relationship to the more conventional hillforts is unknown.

With the exception of Wether Hill, for which a comprehensive radiocarbon sequence is gradually emerging, Brough Law is the only true hillfort within the National Park to be scientifically dated. A single radiocarbon determination suggests that the stone ramparts here (which were apparently not preceded by any sort of palisade) were constructed in c.200BC (Jobey, 1971).

Recent detailed survey work, undertaken as part of the National Park Authority's *Discovering our Hillfort Heritage* project (set out in detail *below*) has demonstrated that many hillforts are complex, multi-period monuments, occupied over several centuries and modified many times. Their eventual abandonment is not well understood. It used to be thought, not unreasonably, that the hillforts were abandoned in the face of Roman military threat in the late first century AD, but evidence from Broxmouth hillfort, East Lothian, suggests that this was replaced by a settlement of undefended stone roundhouses during the second century BC.

Such undefended settlements can be clearly seen to overly the ramparts of many Northumberland hillforts, though no such examples have been scientifically dated. It may be, therefore, that hillforts had been abandoned long before any Roman ever set foot in Northumberland, but exactly why this should have occurred is not known. A popular book about Cheviot hillforts (Oswald *forthcoming*), based on the results of the *Discovering our Hillfort Heritage* project, contains much further information about these dramatic sites.

Excavations elsewhere in north-east England and southern Scotland suggest that society at this time was probably dominated by a 'warrior aristocracy', with much effort going into the production of prestige objects including swords and spears of bronze and iron, personal ornaments (rings, armlets, brooches and beads), horse trappings and chariot fittings. Although some evidence for local, small scale, iron working (in the form of small lumps of slag) has been recovered from a handful of Iron Age sites in the Park, the production and consumption of prestige objects was presumably under the ultimate control of a ruling elite, whose power was to some extent demonstrated and maintained through the use of such objects. It may be that each hillfort in the Park was occupied by a 'head man' and his entourage, perhaps numbering several dozen individuals, all of whom owed their allegiance to a regional or tribal chief. If this is so, then the relative size and grandeur of the forts may reflect the relative importance of their occupants, with the most powerful individual in the region perhaps residing at Yeavering.

In discussing the hillforts, we must not lose sight of the fact that many regions, including the southern half of Northumberland, most of County Durham, large parts of Yorkshire, Cumbria and Lancashire are relatively devoid of them. Although many plough-flattened enclosures, quite probably lowland equivalents of the upland forts, have been recorded from the air in some regions, the distribution of these is not as dense as that of hillforts in the Cheviots. The relative lack of forts elsewhere cannot be explained simply by a lack of suitable hills, and a cultural explanation must be sought. The answer may well lie in the tribal groups of the time. Although the historical sources are far from clear, during Roman times the north-east of Northumberland seems to have been within the territory of the Votadini, while southern Northumberland and the other areas mentioned above were apparently held

by the Brigantes. (Brigantian territory seems to have included all land between the Humber and south Northumberland, extending from coast to coast, up Tynedale and into Redesdale on the western side of the Cheviotsand this suggests that the Brigantes may have been a confederation of many smaller tribes).

The boundary between the Votadini and the Brigantes is thought by some archaeologists to have lain on the Tyne, but it may have been rather further to the north, perhaps on the Coquet. It should be pointed out that there is no conclusive proof that the Votadini extended south of the Tweed, and it may be that another tribe, the name of which is lost in time, occupied north-east Northumberland, perhaps based at Bamburgh and Yeavering. Such an arrangement would tie in neatly with the post-Roman kingdoms of Gododdin and Brynaich. However, most archaeologists refer to north Northumberland as Votadinian territory, and this general consensus will not be questioned further in this account.

These Roman-British tribal groupings may already have coalesced out of smaller Bronze Age chiefdoms by the early Iron Age, and for whatever reason small community groups within Votadinian territory opted to build and maintain small hillforts, while this was not such common practice amongst the Brigantes. This is of course a very simplistic explanation, and there are occasional impressive hillforts elsewhere (such as Warden Hill at the junction of the North and South Tyne), but in general terms people outside the 'hillfort zone' of the Cheviots and Coquetdale seem to have lived in small, relatively unpretentious farmsteads rather than grand hillforts. Many such farmsteads, both within and outside the hillfort zone, may await discovery beneath the visible remains of our so-called 'Roman-British farmsteads' (see below), as was the case when the sites at Hetha Burn (College Valley) and Kennel Hall Knowe (North Tynedale) were investigated.

Many unenclosed roundhouses may also prove to date from the Iron Age, such as that at Linhope Burn (Topping, 1991), and without recourse to excavation it will remain impossible to date such sites with any degree of accuracy. It is probable that most people throughout the Iron Age lived in such undefended homesteads, and that our understanding of everyday life at this time has been to an extent distorted by an over emphasis on hillfort studies. If recent work has taught us anything it is that hillforts must be considered as complex multi-phase monuments within complex multi-period landscapes, and that they should not be studied in isolation (Oswald, 2004).

Iron Age dwellings, whether within hillforts or elsewhere, could be of an impressive size and certainly should not be regarded as flimsy 'huts'. One of the timber houses excavated at High Knowes was fifteen metres in diameter (Jobey and Tait, 1966), while at least three houses at Yeavering Bell have diameters in excess of ten metres (Pearson, 1998).

Recent studies, using a combination of ethnographic research and archaeological survey and excavation, have suggested that a considerable amount of symbolic architecture was incorporated within Iron Age houses. The houses are all circular and generally open to the east, towards the sunrise, and each may have 'acted as a microcosm of the universe, with the passing of time measured around the walls of the house' (Parker Pearson, 1996, 119). It will be fascinating, in due course, to seek to apply such ideas to the many hundreds of roundhouses surviving within the Northumberland National Park.

If Iron Age society was ruled by a warrior aristocracy, then the wealth of such a ruling class must have been based, ultimately, on agricultural production. Until recently it was thought that Iron Age society in the Northumberland uplands was based on extensive cattle ranching, overseen by a bunch of 'Celtic Cowboys'. Very early in the twentieth century, however, D.D. Dixon had already observed the correlation between some agricultural terraces and hillforts. He notes that:

Care must be taken not to confuse these traces of terrace cultivation with the rigs and balks of the Common field of the village, occasionally found near villages of ancient origin, but belonging to a much later period. In the case of those narrow terraces seen on the face of Lord's Seat, at Alwinton, their peculiar formation, their close proximity to Gallow Law camp, as well as the distance from the village..... seem to point to their connection with a primitive system of cultivation, coeval with the occupation of the camps and hill forts in the immediate neighbourhood.

(Dixon, 1903, 111)

Dixon's observations have now been backed up by air photography, which has demonstrated that extensive tracts of land were under arable cultivation during the Iron Age (Topping, 1989).

This evidence for Iron Age agriculture comes largely in the form of 'cord rig', narrow cultivation ridges, some of which might be the result of ploughing while some may have been hand dug using iron spades. The cord rig fields were presumably used to grow cereals and perhaps some vegetables. The rigs and intervening furrows would have helped with drainage, and must have worked in much the same way as the Medieval rig and furrow fields which are such a common feature of rural Northumberland.

Although it is difficult to date cord rig, it has been found to underlie Roman forts and camps, for example at Greenlee Lough near Hadrian's Wall (Gates, 2004), so we know that at least some of it dates to pre-Roman times. In some places, for example in Upper Coquetdale, vast tracts of cord rig survive, sometimes without any obvious associated settlements. These field systems were positioned to take advantage of the fertile Cheviot soils, and the introduction of iron tools must have helped with the efficient working of them. Elsewhere, agricultural terraces and lynchets probably date from the Iron Age.

During the Iron Age, just as in the later Bronze Age, the dead were generally disposed of in ways that have left no discernible trace in the archaeological record, and there is little obvious archaeological evidence of religion. However, various ancient sources refer to human and animal sacrifices, sacred animals, severed heads and numerous 'Celtic' gods. Although archaeological evidence is hard to find, Iron Age people clearly led complex spiritual lives, probably coming together at specific times of the year for festivals based on the agricultural calendar, the origins of which may be sought back amongst the first farmers of the Neolithic. Julius Caesar, writing in the mid first century BC, explained that religious life amongst the native Britons was under the control of the Druids, and that most religious festivals took place at sacred places in the natural landscape rather than at designated 'ceremonial' monuments.

The tradition of ritual offerings in wet places, which as we have already seen probably owes its origins to the onset of wetter conditions from about 1200BC, remained in force throughout the Iron Age. The 'bog bodies' (such as the now famous 'Lindow Man' from Cheshire), which are occasionally found in north-west England and elsewhere, may represent human sacrifices in such places, though none has been recorded in Northumberland.

4.3 Discovering OurHillfort Heritage (*This section is based on Steven Speak's original assessment report fot the DOHH Project, a copy of which is in the DOHH archive at NNPA HQ in Hexham*).

The original aim of this project was to assess the current condition of all the Iron Age hillforts in the Northumberland National Park, enabling them to be studied as part of a single project for the first time. Rather than simply producing a list of sites requiring conservation work, the brief was extended to include the production of an outline research agenda for hillforts and the Iron Age in and around the National Park. The results certainly reinforce the view that these monuments, each of which forms an essential element of the Park's historic landscape, are collectively a resource with enormous potential for research and interpretation.

The 42 hillforts within the Northumberland National Park represent one of the most outstanding archaeological resources within Great Britain. Their close distribution alone sets them in a class apart from the 'ordinary' hillforts elsewhere in the country, whilst their setting in an upland environment means that they offer an unsurpassed potential for relating their chronology to complete archaeological landscapes. The table below gives a full listing of those sites within the National Park boundary.

TABLE 1:Hillforts by Alphabetical Listing

Site name	SMR	NGR
Brands Hill	NT 92 SE 16	NT 9825 2417
Brough Law	NT 9I NE 29	NT 9985 1635
Camp Knowe	NT 90 NW 2	NT 9256 0782
Campville	NT 90 SW 10	NT 9478 0251
Castle Hill, Alnham	NT 91 SE 9	NT 9800 1094
Castle Hills, Alwinton	NT 90 NW 16	NT 9202 0711
Cochrane Pike	NU 01 SW 7	NU 0077 1388
Ell's Knowe	NT 82 NE 75	NT 8723 2779
Ewe Hill NW	NU 01 NW 27	NU 0042 1682
Ewe Hill SE	NU 01 NW 26	NU 0090 1668
Fawcett Shank	NT 82 SE 2	NT 8872 2308
Gleadscleugh	NT 92 NW 15	NT 9491 2906
Great Hetha	NT 82 NE 47	NT 8855 2740
Greaves Ash	NT 91 NE 1	NT 9650 1640
Harbottle Castle	NT 90 SW 3	NT 9325 0481
Harehaugh	NY 99 NE 6	NY 9695 9980
Hartside Hill	NT 91 NE 28	NT 9873 1577
Hethpool Bell	NT 92 NW 11	NT 9020 2880
Humbleton Hill	NT 92 NE 56	NT 9666 2829
Ingram Hill	NU 01 NW 28	NU 0114 1577
Kilham Hill	NT 83 SE 20	NT 8957 3113
Little Hetha	NT 80 NE 70	NT 8861 2804
Lordenshaws	NZ 09 NE 2	NZ 0548 9925
Meggrim's Knowe	NT 91 NE 2	NT 9644 1591
Mid Hill	NT 82 NE 45	NT 8813 2957
Middle Dean	NU 01 SW 1	NU 0042 1463
Monday Cleugh	NT 92 NE 39	NT 9561 2849
Northfieldhead Hill	NT 91 SE 26	NT 9838 1198
North Black Hagg	NT 82 NE 16	NT 8835 2504
Pawston Hill	NT 83 SE 23	NT 8505 3185
Prendwick Chesters	NT 91 SE 3	NT 9847 1498
Ring Chesters	NT 82 NE 24	NT 8670 2890
Middleton Dean	NT 92 SE 41	NT 9978 2194
Sinkside Hill	NT 82 NE 5	NT 8841 2628
South Knock Hill	NT 91 NE 39	NT 9920 1646

St Gregory's Hill	NT 92 NW 43	NT 9161 2979
Staw Hill	NT 83 SE 7	NT 8844 3010
Tosson Burgh	NU 00 SW 3	NU 0234 0048
Ward Law	NT 81 SE 14	NT 8641 1326
West Hill	NT 92 NW 31	NT 9097 2950
Wether Hill	NU 01 SW 2	NU 0130 1443
Witchy Nook	NY 9 9NE 4	NY 9817 9935
Yeavering Bell	NT 92 NW 62	NT 9280 2931

As was outlined above however, their study has been largely ignored during the past 50 years and of the 42 sites listed above, 10 have no surveyed plan whatsoever, and only four have been tested by excavation during the post-war years (one of which remains unpublished).

The tables below indicate those sites with plans and those at which excavations have taken place.

Site name	Surveyor	Date
BROUGH LAW	Hogg, A H A	1943
	? Jobey, G	1964
	Jobey, G	1965
	Jobey, G	1976
	RCHME SE Cheviots	1990S
CAMPVILLE	RCHME SE Cheviots	1990S
CASTLE HILL, ALNHAM	Anon	1935
	Jobey, G	1964
	Jobey, G	1965
	RCHME SE Cheviots	1990S
COCHRANE PIKE	Jobey, G	1965
	RCHME SE Cheviots	1990S
ELL'S KNOWE	Burgess C (Unpub.)	1978
EWE HILL NW	RCHME SE Cheviots	1990S
EWE HILL SE	RCHME SE Cheviots	1990S
GLEADSCLEUGH	Jobey, G	1965

TABLE 2: Hillfort Plans

GREAVES ASH	Wightman	1856-62
	MacLauchlan, H	1867
	Anon	1935
	Hogg, A H A	1943
	Jobey, G	1964
	RCHME SE Cheviots	1990S
GREAT HETHA	Jobey, G	1965
HARBOTTLE CASTLE	NCH	1938
	RCHME	1990S
HUMBLETON HILL	Jobey, G	1965
	Waddington, C	1998
HAREHAUGH	MacKenzie	1825
	Dixon, D D	1903
	RCHME SE Cheviots	1990S
	Waddington, C	1998
HARTSIDE HILL	RCHME SE Cheviots	1990S
INGRAM HILL	Hogg, AHA	1942
	Hogg, AHA	1948
	Hogg, AHA	1956
	Hogg, AHA	1964
	Hogg, AHA	1976
	Jobey, G	1976
	RCHME SE Cheviots	1990S
LORDENSHAWS	Hedley, R C	1889
	Dixon, D D	1903
	NCH	1935
	Jobey, G	1964
	? Jobey, G	1976
	RCHME SE Cheviots	1990S
	Topping, P	1993
MEGGRIM'S KNOWE	Hogg, AHA	1943
	RCHME SE Cheviots	1990S
MONDAY CLEUGH	Lynn, F	1904
NORTH BLACK HAGG	Topping, P	1990
NORTHFIELDHEAD HILL	RCHME SE Cheviots	1990S
PAWSTON HILL	TWM	1994 -2
RINGCHESTERS	Jobey, G	1965
SINKSIDE HILL	Jobey, G	1965

SOUTH KNOCK HILL	RCHME SE Cheviots	1990S
TOSSON BURGH	Hedley, R C	1892
WARD LAW	Charlton, D B	1977
WEST HILL	Jobey, G	1964
WETHER HILL	Jobey, G	1965
	RCHME SE Cheviots	1990S
WITCHY NEUK	? Dodds, M H (ed)	1940
	Wake, T	1939
YEAVERING BELL	Hutchinson	1776
	Jobey, G	1964 ?
	Jobey, G	1965
	RCHME SE Cheviots	19 <mark>90S</mark>

The following sites have no plans (those accompanied by an asterisk only have plans from pre-1945 and are not up to modem standards):

Camp Knowe, Castle Hill Alwinton, Fawcett Shank, St Gregory's Hill, Hill, Little Hetha, Meggrim's s Knowe*, Mid Hill, Monday Cleugh*, Prendwick Chesters, South Middleton Dean, Staw Hill, Hethpool Bell, Tosson Burgh* and Witchy Neuk*

TABLE 3: Hillfort Excavations

It must be noted:

- that these excavations are all to be considered in the modern category of trial trenches,
- that some have no associated archives several are unpublished, and
- that the location of some artefacts is unknown.

Site	Excavator	Date
BROUGH LAW	Tate, G	1860s
	Jobey, G	1970
ELL'S KNOWE	Burgess, C (Unpub)	1970, 78
GREAVES ASH	Tate, G	1856-62
HAREHAUGH	Waddington	1994
INGRAM HILL	Hogg, A H A	1942, 48, 56

	Jobey, G	1970
LORDENSHAWS	Unknown	18??
	Unknown	1889
PRENDWICK CHESTERS	Tate, G	1856-62
S. KNOCK HILL	Tate, G	1856-62
WETHER HILL (environs only)	Topping, P	1995-2003
WITCHY NEUK	Wake	1939
YEAVERING BELL	Tate, G	1856-62
	Hope-Taylor, B	1950s, 77

In summary, the archaeological resource presented by NNP hillforts is poorly represented by site plans: even the most recent RCHME plans are suitable only for comparative purposes and are at too small a scale for use during an excavation. Reports have been published on a series of pre-and post-war excavations at two NNP sites, at Witchy Neuk 1936 (Wake, I939) and Ingram Hill 1939 and 1948 (Hogg, 1942, 1956), and only four NNP hillforts have been excavated post-war, all by trenching on a small scale: Brough Law (Jobey, 1971), Ell's Knowe (Burgess, *unpub.*), Yeavering (Hope-Taylor, 1977) and at Harehaugh (small excavation to study damage only; Waddington *et al.*, 1997).

4.4 UNPRIORITISED LIST OF RESEARCH TOPICS ORGANISED ALONG TRADITIONAL CHRONOLOGICAL LINES.

Palaeolithic/Mesolithic

- Re-assessment of all extant lithic collections pertaining to the Park in local, regional and national museums and also material in private possession. This work is needed to:
 - i) Make a full assessment of the nature and extent and quality of the available lithic record and
 - to try and set the current state of knowledge on a firmer chronological footing. Such a re-assessment would also allow for the identification of potentially early and late Mesolithic material

and facilitate a more detailed discussion of regional changes in lithic technology over time.

- iii) To provide greater resolution in defining raw material sources and raw material procurement and use strategies in assemblages across the region.
- iv) Such work would also allow for the identification of potential functional variability between sites on the basis of a quantitative analysis of inter-assemblage variability.
- It would be desirable to see some research excavation of scatter sites defined by field walking and surface collection. This would allow an assessment of sub-surface features and their relationship with material in the plough zone. It would also give some insight into site formation processes and the extent of sub-surface damage to early sites caused by recent/historical ploughing.
- Assessment of rock shelters within the Park boundary. Given the lack of ploughing within the Park, which severely limits the potential for traditional fieldwalking, rock shelters may well prove to be significant locations for the recovery of Late Upper Palaeolithic and Mesolithic material. Areas around rock shelters might also be sampled by test pitting. The possibility exists that such locations might yield important environmental data relating to Palaeolithic/Mesolithic lifeways. Recovery of Mesolithic material from upland locations in this way would make a major contribution to ongoing debates about the nature of seasonal land use and Mesolithic territoriality. By the same token the possibility exists that material in association with lithic assemblages may well be suitable for dating by radio-carbon assay.
- Continued monitoring and assessment of areas of burnt and/or eroding peat in the uplands so that comparisons can be made between early upland activity in the Cheviots and the better known areas of the Pennines and the North York Moors to the south.

- Assessment of the impact of Mesolithic groups on the landscape and vegetation cover of the area of the Park. Such an assessment could only be realistically carried out as part of a long-term programme of sediment coring with resultant pollen analysis. This would allow for the identification of clearance phases that could be radio-carbon dated. The Park mires and bogs may well prove to be a useful context in which to further develop techniques of Fine Resolution Pollen Analysis as pioneered by Prof. Ian Simmons at Durham University. Of even more benefit, however, might be the targeting of sediments with localized pollen catchments such as palaeochannels, kettle holes and cut off lakes. The potential of this work has been documented most recently by Moores *et al.* (1999) and Passmore *et al.* (2002). This would be an important contribution to knowledge as the present state of our understanding of the impact of human groups on the landscape throughout the whole of prehistory in the Park area is limited and restricted to information from only a handful of sites.
- A programme of fieldwalking should be drawn up for those areas of the Park where ploughing does occur. The aim should be to walk every ploughed field within the boundary of the Park when these become available for access. Standardised methodologies for artefact collection should be applied and it is hoped that such work might be undertaken by local, community based archaeological groups.
- Evidence for the nature of the transition between the Mesolithic and Neolithic periods has proved persistently elusive and research within the Park area should be directed towards clarifying the nature of this transition. This could be achieved by targeting deposits that are likely to span the period in question (c. 5000 3000BC). As the EH Research Agenda document says:

Periods of transition offer an opportunity to focus on aspects of continuity and change. As such, these periods enable the exploration of cultural trends, the study of the degree to which practice and custom is socially-embedded, theories of stability and instability, and through these, greater insight into periods of apparent stability in social, economic and political actions.

(Olivier, 1997, 43)

Neolithic

- The methods of introduction, the character and the development of pastoral and arable agricultural practices. This is a wide-ranging topic and one that would cover the whole of the Neolithic period. It is, however, vitally important to understand how the first farming communities within the region interacted and how they exploited the area. Detailed pollen analysis would be an essential element of this research topic.
- The development of ceremonial monuments and their environs e.g. Long and Chambered Cairns: This class of site needs further investigation to establish date, structure and context within the contemporary landscape.

Large Round Cairns: These sites are generally assumed to be Early Bronze Age, but it may be that they are in fact Neolithic in date. Some investigation of this class of site needs to be carried out. They are so numerous in the region, but they have been poorly investigated since the nineteenth century.

Henges and Stone circles: The relationship between these two classes of sites needs clarification. There have been no modern investigations of stone circles and standing stones in the Park area. A more thorough investigation of their distribution, local environment and relationship to other classes of monument would be useful.

Evidence for Neolithic trade and exchange. The known distribution of stone axes within the Park is interesting, and probably relates to areas of axe use and discard (Burgess, 1984, 133 – 136; Young, 1994, 1-12). A programme of petrological analysis may lead to the identification of the rock sources used for axe manufacture and this in turn will contribute to the development of our understanding of trade and exchange mechanisms in the area. In order to

further understand the utilization of local rock sources for axe manufacture, fieldwork could be usefully undertaken at a number of the Cheviot Andesite outcrops to prospect for axe factory sites.

Prehistoric rock art, most notably cup and ring marked outcrops and stones, represent some of the earliest confirmed evidence for artistic expression in England. Recent research, has not only highlighted the importance and vulnerability of this resource, but it has also demonstrated the existence of gaps in our understanding of fundamental issues, such as dating, and the relationship of rock art to society, economy, land use and ritual, etc. (Beckensall, 1995; Beckensall et al., 1991; Frodsham, 1996). Although it is broadly accepted that the majority of this art is Neolithic, research is needed to refine the chronology of rock art within the Park area, especially given Beckensall and Frodsham's recent suggestion that some of it may in fact be Bronze Age in date (1998). Attempts should also be made to relate the art to its landscape context. To this end a programme of trial trenching around rock art sites seems desirable. This would be aimed at recovering dating and related artefactual evidence and may shed some light into the kind of activities that went on at rock art sites and how that activity altered over time.

Bronze Age

- The chronology, form and function of settlement sites and related features including field boundaries and cairnfields etc. More work is desperately needed on this topic in an effort to move away from simplistic assumptions about settlement chronology and morphology. Excavation of further sites is needed with a view to recovering both dating evidence and more evidence for the subsistence and other activities associated with Bronze Age settlements inside the Park.
- The issue of Bronze Age settlement on what is now perceived as marginal land should also be addressed. In the past archaeologists have been too ready to accept that there was wholesale desertion of the uplands of Britain after the middle Bronze Age (*i.e.* around 1200BC). Recent research has

shown that this is not the case (Young and Simmonds, 1995, 1999; Young, 2000) and further research on this topic involving pollen analysis (to give insights into land-use practices) and the excavation of both unenclosed and palisaded settlements and related features such as field boundaries and cairnfields is essential.

- Reassessment of all artefactual material from excavated cairns and barrows in the Park area. This should be done with a view to gaining insights into contemporary ideas relating to ritual practice, social structure and social relations.
- Further research should be carried out on the distribution, form and siting of round barrows and cairns within the Park. A GIS could be used to examine the significance of recurrent patterns of barrow and cairn location. These may well give proxy insights into the state of the contemporary tree cover in the Park area and as such this information would be a useful adjunct to the data that would emerge from the proposed programme of pollen analysis in the region (*see above*).
- Continued landscape survey in areas where we have gaps in the data e.g. North Tynedale. This could be developed in conjunction with the proposed programmes of excavation outlined above.
- Consideration of artifact sequences (especially pottery and metalwork) and patterning in their contexts of use and deposition. This will assist with dating and burial practices as well as industrial activities, organization and the sequence of technological innovations.
- A programme of chemical and physical analysis of all Bronze Age metalwork finds from the National Park would give great insights into the origins of the metal used in artifact manufacture and ultimately greater insights into the local and long distance trade and exchange contacts of Bronze Age groups and individuals within the area.

Iron Age

• A priority should be the refinement of our knowledge of the chronology of the whole range of supposedly Iron Age sites within the Park. This could be

achieved by a programme of targeted excavation aimed at a representative sample of site types to recover reliable samples for absolute dating

Hillforts throw up their own special set of problems in terms of research agendas and many of these have been set out in the design documents for the *Discovering our Hillfort Heritage Project*. Some major areas areas for future research are set out below:

• Hillfort Function(s). Within the NNP every research opportunity must be taken to select sites which offer the most potential for recovering information based on all of the following premises relating to hillfort function:

Unfinished sites Defence (against whom?) Defended granaries Defended settlements Periods of abandonment Ritual centres Status symbols Industrial centres Centres for a ruling elite

It is likely that in the life of any particular site any or all of the above functions are possible. Also, the wider implications of the role of the hillfort within the contemporary community must be considered.

• It would also be important to examine evidence for continuity/discontinuity of the regional socio-economic structure during periods of potential social change caused by (among other things):

i) climatic disruption leading to a decrease in the quantity of available agricultural land and

ii) the Roman military presence (perhaps 30,000-strong) at the end of the Iron Age.

- The relationship between hillforts and scooped enclosures. Available evidence suggests that these non-defensive enclosures represent the farmsteads of any given community; their distribution, within the Breamish Valley for example, implies a strong relationship with an individual central hillfort.
- Related to the above point information needs to be gathered on the the *territoria* of hillforts. In some instances these can be readily distinguished by topographical features or by the non-defensive demarcation lines of cross-ridge dykes, as at Wether Hill or Castle Hill, Alwinton. These dykes are strongly related to natural features in the landscape and imply that adjacent hillforts were occupied simultaneously.
- The relationship between hillfort developments and climate change remains one of the fundamental aspects of hillfort studies and far greater emphasis needs to be applied to the collection of raw data and palaeo-environmental evidence to help clarify some of the issues raised here. As currently understood, the climatic deterioration at the end of the Early Bronze Age, whether caused by the Icelandic Hekla-3 eruption or some other cause, coincided with the onset of a very different Later Bronze Age including ever more complex hill-top defences.
- The relationship between Roman and 'Native'. In the past this has been approached through the examination of Roman material recovered from 'Native' sites and vice-versa. There is no clear model of the relationship, and where once an internal reorganisation of hillfort interiors (for example, from ring-groove structures to those with stone foundations) was attributed to a Roman presence, it may be more reasonably attributed to a pre-conquest change in agrarian or other practices still underway during the Roman period. It has been suggested that at its height the Roman presence totalled 30,000 troops on the northern frontier requiring 9855 metric tons of grain per year (on a basis of 0.9kg grain per day per man Gates, 1982, 39). There is little
conclusive evidence of contemporary fields around Roman forts, although they are known at Wallsend and Housesteads.

- Hillfort relationships with field systems and the relationship between arable farming and stock rearing. The field systems around hillforts include cord-rig, various widths of ridge and furrow and terracing (Topping, 1998). There is much to be learnt from non-invasive field studies, aimed at the examination of the direct physical relationships between successive phases of stone clearance, cultivation and enclosure. Distinctive walled trackways are integrated into field systems linked with sites at Greaves Ash, Lordenshaws, Monday Cleugh and Yeavering Bell.
- The relationship between different forms of structure within hillforts, their use, their structural obsolescence and their life-span; in particular differences between scooped platforms, ring-groove and stone-founded structures of differing diameters. Do these differences reflect a chronological sequence, preference, selection of site, availability of raw materials, or an underlying belief structure, such as hut-circle entrances frequently facing the rising sun?
- The dynamics of hillfort abandonment. The several possible modes of desertion are susceptible to identification by excavation.

4.5 GENERAL / CROSS-PERIOD RESEARCH THEMES RELATING TO PREHISTORY

• Collation of Finds and Site Archives

As a precursor to, and in conjunction with, any period based research programmes it is essential to consolidate our knowledge of the primary research record available for the Park area. This can be achieved by a concerted effort to identify the location, nature, scale and integrity of all of the surviving archives remaining from past excavation and survey work within the Park. This would facilitate ease of reference for researchers interested in particular aspects of early work done in the area and it would also allow for better management of the surviving archive material.

• Analysis of archaeological formation processes in the Park area.

A broad understanding of the cultural and non-cultural processes that have acted over time to produce the existing archaeological record in the Park area is essential if we are to make meaningful archaeological comparisons between the different areas of the Park. We need to develop an awareness of the impact of differential destruction, preservation and recovery processes in the formation of present day, observable archaeological distributions.

- Residue analysis on ceramic vessel contents to enhance what is already known about prehistoric diets, ceremonial drinks/offerings etc. Similar work might be undertakenton stone tools and other artefacts with the potential to demonstrate surviving residues.
- Isotope analysis of human bones to identify origins of early inhabitants.
- Targetted dating to improve chronological understanding for the prehistoric period.

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