An Archaeological Research Framework for Northumberland National Park

Resource Assessment, Research Agenda and Research Strategy

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SUMMARY

The Archaeological Research Framework for Northumberland National Park was produced as a result of the Regional Research Frameworks initiative, promoted by English Heritage in collaboration with Local Authorities. By bringing together a series of discussion papers it was designed to produce a meaningful and effective, yet flexible, structure for decision making in relation to archaeological research within the National Park.

Northumberland National Park has over 4,000 known archaeological sites, a number which is steadily increasing each year as new records are created and existing records refined. This includes 424 Scheduled Ancient Monuments and 228 Listed Buildings, and part of the Hadrian’s Wall World Heritage Site (which has its own Research Framework). This record is based upon decades of research carried out by Universities, private contractors and consultants, by community groups and private individuals. Such work has contributed significantly to understanding the archaeology and the historic character of the National Park’s historic environment, but the majority of projects occurred opportunistically without a strategic framework to enable the prioritisation of research.

This document, and the full version available on the National Park website, gives a detailed overview of what we know about Northumberland National Park, what we need to know and where opportunities for further research exist. It is not a final report in any sense, but a working document which we hope you will use to delve into the area’s rich archaeological heritage and that you will be inspired to carry out your own research.

In line with the aims for Research Frameworks, the document also contributes to the provision of advice and decision making within the planning process. It can also inform priorities for the distribution of resources and inform the management of the archaeological resource through conservation projects. Through connecting research to conservation, the informed conservation approach, the outcome is a holistic understanding of the historic environment that is vital for its effective management.
PREFACE

This framework for archaeological research within the Northumberland National Park comes about as part of a national scheme, under the aegis of English Heritage, to re-kindle a ‘research culture’ in British Archaeology. It has long been recognised by both professional and amateur groups that there are regional disparities in levels of research activity across the country and in our knowledge of the archaeological resource itself.

One way to overcome this, and to put archaeological research work onto a much sounder footing, is to recognise the importance of regional settings. Regional perspectives permit comparisons of land use and settlement between adjacent landscape types as well as providing geographical frameworks for the study of change in settlement, environment, economy and society over longer periods of time.

Once regional research frameworks, with their assessments of the regional archaeological resource are completed for the whole of the country then regional sequences may be characterised and compared to indicate the advances or gaps in knowledge between regions, as well as highlighting historically significant zones and boundaries. This will be a very important step forward for both professional and amateur archaeological groups as it will enhance our understanding of the regions in which we carry out our own field research.

Regional research frameworks are also needed to assist in the implementation of policies and research strategy. To do this they must be fluid and open to regular review. It is also important that any research framework is not applied with a ‘shopping-list’ mentality, but rather as a framework which enables decision making and debate. It should not preclude academic development or the creation of new concepts.

English Heritage believes that research frameworks should:

- **Provide an infrastructure and means of validating the decision making inherent within the planning process.** (Obviously, within the context of the Northumberland National Park this is an important rationale for the development of an archaeological research framework with its related strategy for implementation).

- **Assist in the formulation of priorities for the distribution of resources on a national scale.** (This is another important reason to have a specific National Park research strategy in place. Without it we may be unable to secure funding for archaeological work from national and international bodies in the future)
• **Couple curation and research.** (Again, within the context of the National Park, this is an important reason to have a research framework in place. An assessment of the archaeological resource in the region is central to the preparation of the research framework. This in itself is an important exercise, providing as it does, a better understanding of what we think we already know about the archaeology of the area. Ultimately we cannot manage what we do not fully understand).

**ACKNOWLEDGEMENTS**

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INTRODUCTION

The Northumberland National Park contains over 3000 known archaeological sites and the number is growing daily. The quality of the Park’s archaeological landscapes is reflected in the book *Archaeology in Northumberland National Park*, published by the Council for British Archaeology in 2004 (Frodsham, 2004). This book included reports on the many important projects undertaken in the National Park during the decade leading up to its publication, all of which have contributed significantly to our understanding of the Park’s archaeology. These projects, however, took place opportunistically and without a strategic framework to enable the prioritization of research. This document provides just such a framework for future projects within the National Park area.

Several of the overview sections within the present document have been extracted from *Archaeology in Northumberland National Park* – these are acknowledged in the text. The section on the ‘Discovering Our Hillfort Heritage Project’ (DOHH) contained within the paper on Prehistoric Archaeology is based on Steven Speak’s original assessment report for the DOHH Project, a copy of which is in the DOHH archive at NNPA HQ in Hexham.

This document brings together a series of discussion papers intended to establish a meaningful framework for archaeological research within the Northumberland National Park area. The overall document comes as a result of the Regional Research Frameworks initiative, promoted by English Heritage in collaboration with local authorities, and designed to produce an effective, yet flexible, structure for decision making in relation to archaeological research. In each of these papers we have followed the structure set out by English Heritage in its *Frameworks for the Past* document (Olivier, 1997, 4-6). In this it is envisaged that the Research Framework will comprise of:

- **The Resource Assessment**: An overview of the current state of knowledge and understanding in the region that in turn allows the setting of...

- **The Research Agenda**: Recognition of the potential of the resource, gaps in knowledge and an unprioritised list of research topics. The Agenda informs...

- **The Research Strategy**: A prioritized list of research objectives (seen as flexible over time), furthered by the implementation of specific Research Projects, the results of which are envisaged as feeding back into our knowledge of the resource. This should have the knock on effect of changing the National Park Authority’s research agenda and thus its archaeological research strategy over time.
Each discussion paper within the overall document has been paginated so that it can be used as a stand-alone document. This approach will also facilitate ease of revision as the Research Framework itself evolves and develops.

The overall aim is to further our understanding of the Park’s rich and diverse archaeology in a structured and adaptable way. The Northumberland National Park Framework should feed into the planned North-East Regional Research Framework for the Historic Environment.

The papers presented deal with Prehistoric Archaeology; Roman Archaeology Beyond the Wall; Early Medieval Archaeology; Later (High) Medieval Archaeology and Industrial/Post-Medieval Archaeology. A separate discussion paper on Palaeo-environmental research within the Park is also developed here.

**THE NATIONAL PARKS AND ARCHAEOLOGY**

In 1949 an Act of Parliament created the first 10 National Parks in England and Wales, of which Northumberland National Park was one. The Act set out the following priorities for the Parks:

- Conservation
- Public enjoyment
- Protection of the local community.

The agenda for activities within the National Parks as a whole was focused on areas of ‘natural beauty’ and within the broad framework of conservation and enhancement in these areas, the archaeological heritage received some protection, albeit, initially indirectly. The Parks were also given the power to negotiate site/monument/landscape management agreements with the local community and within NNP this has meant working closely with local landowners and farmers, the Forestry Commission and the Ministry of Defence. The latter negotiations were particularly important since a significant part of the National Park is occupied by Otterburn Military Training Area.

In 1968 the Countryside Act specifically included archaeological interests in the promotion of educational and study facilities within the National Parks and in 1991 Professor R. Edwards produced a discussion document on the National Parks entitled *Fit for the Future*. This contained a wide range of suggestions for the general development of the Parks and it gave serious consideration to archaeology. The Edwards Report outlined three reasons why archaeology should figure more largely in the development of countrywide National Park policy, namely:
• Archaeology is a fundamental element of the landscape, and forms part of its beauty and interest.

• National Parks provide extensive, important examples of upland archaeology not preserved elsewhere.

• Rural and landscape archaeology need more attention, and the National Parks could provide opportunities for further work in these two related areas.

The report also highlighted several key issues for consideration by the National Parks:

• Did existing powers allow them to protect archaeological sites and landscapes adequately?

• Could they improve access to and interpretation of, archaeological sites and

• Could they co-ordinate archaeological research in an organized way?

It was recommended that attention should be given to enhancing the archaeological data-base (Sites and Monuments Record -SMR), and that a higher priority should be given to archaeological research, with the Parks strengthening their links to English Heritage and academic institutions.

Furthermore in relation to the protection of landscapes it was suggested that the Parks should consider the use of Landscape Conservation Orders and Rural Areas of Archaeological Importance Orders. It also recommended that English Heritage should devolve site and monument management to the National Parks and that the Parks should negotiate access, management and interpretation agreements with landowners for a representative range of archaeological sites.

In the Government response to the Edwards’ Report it was suggested that the wording of the original legislation of 1949 should be changed to read ‘To protect, maintain and enhance the scenic beauty, natural systems and land forms, and the wildlife and cultural heritage of the area’ in order to take into account the importance of the human impact on the landscape through time.

In 1994 the Northumberland National Park produced its Second Review of the Park’s Plan taking into consideration the findings and recommendations of the Edward’s Report. In the introductory section the review set out a vision of the role of the Park:
‘Our essential vision for the future of the National Park is of a partnership with the community of the Park to conserve its characteristic beauty and the natural and cultural heritage, both for its own sake and in order that it may continue to be a source of refreshment, inspiration and delight to those who visit it.’

With regard to archaeology it stated that the main objective was:

‘To help protect sites and landscapes of archaeological importance and ensure the preservation of significant buildings and groups of buildings of architectural and historic interest’.

In addition it also foresaw a situation where:

‘…the importance of the historic landscapes and buildings (was) fully recognised and their conservation (became) a priority.’ (NNPA, 1994).

The Park Authority has made clear, general, commitments in line with National directives with regard to archaeology. The overall structural framework of archaeology within the Park currently focuses on:

- Conservation and assessment of landscapes, sites and collections.

This is achieved through scheduling, land management agreements, assisting in the Monument Protection Programme, surveys, and collaboration with surveying bodies such as English Heritage (c.f. Discovering our Hillfort Heritage Project), aerial photography, (the Park Authority has an extensive collection of air photographs commissioned from T. Gates), excavation and evaluation work carried out in response to presenting circumstances and as part of a structured research programme (e.g. Upper Breamish Valley Project, in conjunction with Durham University).

- Supporting and developing national, regional and local research frameworks,

This has been done in conjunction with English Heritage, regional universities (Newcastle upon Tyne and Durham), local groups, (NAG) and professional archaeological organizations (The Archaeological Practice at Newcastle upon Tyne amongst others). The Park Authority has encouraged archaeological research into areas within its boundaries that have been highlighted as of National importance.

- Protection of sites and buildings of importance.
• Development of a NNP specific research programme.

This last point was regarded as a high priority in the Edwards Report and this is the central thrust of the present document.

As will be seen by anyone reading this document there is much here that deals with archaeology outside the National Park boundary. This information has been intentionally included to provide a context and background to aid in the broader understanding of the National Park archaeological resource.

REFERENCES


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OUTLINE HISTORY OF PREVIOUS PALAEO-ENVIRONMENTAL RESEARCH IN NORTHUMBERLAND AND NORTHUMBERLAND NATIONAL PARK

Introduction

Despite the wealth of archaeological features of all periods within Northumberland as a whole and the Northumberland National Park in particular, very little published palaeo-environmental research has been carried out in the last 50 years or so. This is in marked contrast to the situation in County Durham, Cumbria and south-east Scotland, all of which have seen a significant amount of published work in this field.

There is also a very obvious imbalance in terms of the spread of research activity within Northumberland and the Park, with most of it having taken place south of Redesdale, leaving the northern half of the Park largely unstudied (though Tipping has done some excellent work on the palaeo-environments of the north Cheviot area).

As a result, our understanding of the human impact on the environment from prehistory into the historic period is patchy and underdeveloped. For example, it is incredibly difficult to make comparisons between the vegetation cover and variations in it in different parts of the county (and in the Park) at various points in time. Nor do we have detailed information on soil development or the human exploitation of animals and plants over time. Here we set out the history of research under a series of headings:

• Palynology (pollen analysis)

• Plant Macro-Fossils (cereals and plant remains)

• Faunal Research (animal bones)

• Soil Science

• Fluvial Geomorphology
Palynology

The following table lists all available, (that is published), pollen diagrams in Northumberland. The year of publication and an indication of the presence/absence of any associated radiocarbon dates, is also given.

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<th>SITE NAME</th>
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<td>Muckle Moss</td>
<td>NY799 668</td>
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<td>Camp Hill Moss</td>
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<td>Dumayne and Barber, 1994</td>
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<td>Coom Rigg Moss</td>
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<td>Manning et al., 1997</td>
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<td>Moores and Passmore, 1999</td>
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<td>NT957 172</td>
<td>Topping, 1990-91</td>
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<td>Linhope Burn*</td>
<td>NT995 273</td>
<td>Clapperton et al., 1971;</td>
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<td>Tipping, 1992; Harrison and Tipping, 1994</td>
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<td>Borek, 1975</td>
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<td>Bradford Kaims,</td>
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<td>Bamburgh</td>
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*inside NNP

Table 1 – Pollen sites in Northumberland

The following table provides a list of published pollen sites outside Northumberland, but relevant to any discussion of the vegetational history of the region:
Table 2 – Relevant pollen sites outside Northumberland

Since the 1970s it could be argued that pollen diagrams in the British Isles have generally been constructed to document the impact of human communities on their contemporary vegetation cover. Prior to this time they were mainly produced to give botanists and ecologists an understanding of ‘natural’ ecology and forest history. This can be clearly seen in the history of palynological research in Northumberland.

As early as 1931 Arthur Raistrick and K. B. Blackburn produced a diagram from Heathery Burn Moor with this very aim in mind (Raistrick and Blackburn, 1931) and Blackburn’s work at Broadgate Fell (1953) and Falstone (unpublished) was similarly aimed at simply documenting observable vegetation changes over time without giving any thought to the human role in the alteration and manipulation of forest cover.

As M.C. Pearson’s 1954 PhD thesis on The Ecology and History of Some Peat Bogs in West Northumberland illustrated, causal mechanisms for changes in forest composition were invariably seen as ‘natural’ i.e. climate change, variation in local topographical conditions etc. This point was further reinforced in Pearson’s published discussion of the pollen diagram from Muckle Moss just south of the Roman fort at Housesteads (Pearson, 1960).

As was the practice at the time, the Muckle Moss diagram was zoned and phased on the basis of the generalized scheme drawn up by Godwin in 1940. This involved using particular tree species and their rates of growth and development as markers for the onset of different environmental conditions, for example the transition between pollen zones VI and VII – ‘the Boreal – Atlantic transition’ - was deemed to be marked by an increase in the presence of Alder pollen which was supposed to herald in a period of wetter climate. By the same token, the ‘Elm Decline’ was simply seen as the
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boundary between pollen zone VIIA and VIIB (the so-called ‘Atlantic’ – ‘sub-Boreal’ transition). There was no discussion of the potential of the diagram for the elucidation of the human impact on the localized environment.

Bartley’s 1960s research at Bradford Kaimes, Embleton’s Bog and Longlee Moor, all near Bamburgh on the Northumberland coast, was again geared up solely to chart localized vegetational changes, without any reference to the impact of anthropogenic activity in the respective areas (Bartley, 1965). It was, however, an excellent piece of work that dealt for the first time in detail with the vegetational history of the Late Glacial period in the area.

Chapman’s research at Coomb Rigg (1964–65) and the pollen diagram from Wooler Water, produced by Claperton et al. (1971), are two of the last examples of palynological work that was done to the overall exclusion of any consideration of the human impact on the landscape.

In 1979 Davies and Turner produced a seminal paper on pollen analysis in Northumberland. Their work at Fellend Moss, Steng Moss, Broad Moss and Camp Hill Moss, produced (with the exception of Broad Moss) detailed pollen diagrams with radiocarbon-dated horizons. This ushered in a sea-change in terms of approach to this aspect of environmental reconstruction research. For the first time inter-regional comparisons of land-use activities were possible and, as we will see below, a real attempt was made to integrate the reconstructed environmental history with the archaeological evidence for human activity in the catchment areas of the bog sites that were sampled.

In the course of the 1980s only one pollen diagram, that from Quick Moss, produced by Rowell and Turner (1985) was published in Northumberland. In the 1990s however, the pace of research quickened. Lisa Dumayne’s 1992 PhD thesis, carried out from Southampton University, examined ‘Late Holocene Palaeoecology and Human Impact on the Environment of Northern Britain’ and it contributed substantially to the debate around the impact of the Roman army on the landscape in the environs of Hadrian’s Wall (Dumayne, 1992, 1993a, 1993b, 1994). In 1994 she published the results of her research on three bog sites along the line of the Wall, one of which (Fozy Moss) lies inside the Park boundary (Dumayne and Barber, 1994).
In this paper a case was made for substantial spatial variation in the intensity of human interference with the forest cover along the line of Hadrian’s Wall. At two of her sites she documented significant Iron Age land clearance immediately before the coming of Rome, but at Fozy Moss it was suggested that the greatest impact occurred immediately after the Roman invasion and that it was intimately linked to the building of the Wall itself. There has been much debate about this point. McCarthy has argued that radiocarbon dating cannot be precise enough to allow the kind of conclusions that Dumayne and Barber put forward to stand unchallenged (1995). Manning et al. (1997) used pollen sequences from dated archaeological features (Roman fort ditches at Vindolanda) to show that the area around the fort (and by extrapolation around the Wall area and Fozy Moss itself) was devoid of trees as early as 85AD and that the documented clearance episodes probably had nothing to do with the building of the Wall. The argument rumbles on! (see below) (Dumayne and Barber, 1997; McCarthy, 1997).

Away from Hadrian’s Wall Macklin et al. have documented episodes of Holocene alluviation related to human impact on Callaly Moor (1991) and they have also shown that the Tyne basin area is an important resource for understanding Holocene climate change and human vegetational impacts (1992). Moores has continued palynological research on old river channels in the North Tyne and Redesdale area (Moores, 1998; Moores et al., 1999) with exciting results. This work has demonstrated that intensified patterns of land-use can be documented in these lowland areas from the Neolithic period onwards.

Tipping’s work in the north Cheviots, (on the Scottish Border, just outside the Northumberland National Park) has made a massive contribution to our understanding of the Mesolithic/Neolithic period in terms of vegetational history and this research has also been instrumental in reinforcing the idea that human impact is regionally and temporally varied (Tipping, 1996).

Most recently the NNPA itself has commissioned palynological work at Bloody Moss on the Otterburn Training Area (Moores, 1996; Moores and Passmore, 1999) and at Caudhole Moss in the Simonside Hills (Manning, 1996; Moores and Passmore, 1999). The site of Broad Moss has also been re-cored with a view to obtaining radiocarbon
dates for the sequences first documented by Davies and Turner in the 1970s (Passmore and Stevenson, 2001).

A further major contribution to the environmental history of Northumberland came in 1998 when Andrew Moores completed his doctoral thesis on ‘Palaeoenvironmental Investigations of Holocene Landscapes in the North Tyne Basin, Northern England’. This incorporated a range of research techniques and produced data from a series of sites in both upland and lowland locations that allowed for a diachronic discussion of human impacts on the region’s environment. In particular, this work has enhanced our understanding of regional scale human interference with the vegetation cover, through the production of a series of radiocarbon dated pollen diagrams. Special emphasis was placed on Mesolithic impacts, the development of arable and pastoral farming in the research area, the impact of Bronze Age, pre-Roman Iron Age and Romano-British populations on their environment and post-Roman vegetation dynamics and later human activity. In addition the research also highlighted the importance and potential of riverine palaeochannel sediments for the reconstruction of flood plain environments using pollen analysis.

This brief historical review reinforces two key points:

First that there remain some serious gaps in our knowledge and

1) That there is a fieldwork bias towards the southern and eastern parts of the county generally, and the southern part of the NNPA (south of Redesdale) in particular.

**Plant Macrofossils**

The development of research into plant macrofossils in Northumberland only really took off in the 1980s and this was mainly due to the work of Marijke van der Veen on English Heritage funded and related projects in the EH Biological Laboratory at Durham University. Her work has subsequently been expanded upon by Jacqui Huntley. Obviously, plant macrofossils are rare on archaeological sites and only survive under specific circumstances, namely through charring or waterlogging. The table below lists all published sites (by period) in Northumberland where plant macrofossils have been recorded and analysed.
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Table 3 – Sites in Northumberland producing plant macro-fossils.
As the discussion below shows, this material gives us a clear but regionally biased insight into elements of past diet in Northumberland. However, data from the area of the NNP is sadly lacking.

**Faunal Remains**

As with research into plant macro-fossils, work on faunal remains in the county has only recently begun in earnest. Again it could be argued that this was largely due to the impact of the work of Sue Stallibrass and others at the EH Biological Lab at Durham University. The pattern of survival of faunal remains in the region is largely biased to lowland sites, away from acidic upland soils, and once again evidence from the area of the NNP is slight. The following table lists by period, all of those sites in Northumberland that have produced evidence for faunal remains.
<table>
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*Table 4 – Sites in Northumberland producing faunal remains*
Soil Science

This heading is used as a shorthand term to cover all research that has dealt with the formation and development of soils within the area, whether these processes are the results of natural or humanly influenced activities.

From an archaeological point of view very little research has been carried out in relation to this particular topic, in fact very little pedological work at all has been carried out within Northumberland.

1992 saw the publication of a paper by Richard Tipping that sought to identify the causal mechanisms that underlay the development of major prehistoric valley in-fills in the Cheviots, and in 1994 Roger Mercer and Richard Tipping produced a further discussion of prehistoric soil erosion in the eastern Cheviots. They concentrated their efforts on the Bowmont, Harthope and Breamish valleys and all of their sample areas lay just outside the National Park boundaries. The overall aim of the work was to establish a chronology for soil erosion processes and the results of their research are dealt with in more detail below.

More specific, project based work has been carried out by Clogg and Ferrel (1991) at a variety of prehistoric settlement sites within the Park area. Their aim was ‘to examine the potential for the elemental analysis of soils in the investigation of areas of upland activity with particular reference to farming practices on prehistoric settlements’ (1991, 43). They carried out a phosphate analysis at Woolaw, Netherhouses East, Coppath Burn, High knows A and B, Brough Law and Greaves Ash and while they were mainly interested in using the technique to identify evidence for variation in farming practice during the Iron Age at these sample sites, their hope was that the results of their work would also provide a contribution to refining soil classifications in the area.

The National Park Authority’s own research project, in conjunction with Durham University, in the Ingram Valley has also made a significant contribution to our understanding of soil development in the area. The 1999 excavation season examined a series of possibly prehistoric and later cultivation terraces and a detailed analysis of soil development within them was carried out by Shiel and Slater (ASUD, 2000).
Fluvial Geomorphology

This is another developing research area within the region, pioneered by the Dept. of Geography at Newcastle University. Using the techniques of ‘geo-archaeology’ Passmore et al. (2002) have argued that their research allows for the production of a synthesis of the mutual development of river valley environments and their archaeological records and that ultimately this will lead to the constructions of frameworks that will facilitate the better management of both types of resource.

Such work requires an initial differentiation between:

alluvial (river terraces, palaeo-channels, alluvial fans) and colluvial landform assemblages by detailed field mapping and survey. Of particular importance here is the identification of alluvial terrace scarps that not only demarcate alluvial surfaces of different age, but also reflect periods in which rivers have entrenched their channel beds in response to changing local and/or regional water and sediment regimes. Analyses of the thickness and lithostratigraphy (e.g. grain size, bedding structures) of sedimentary sequences are typically facilitated by river bank sections, machine excavated trenches (including aggregate quarries) or sediment cores; these allow detailed reconstructions of past river channel and floodplain depositional environments, relative rates of alluviation, and evaluation of the presence or absence of buried soils.

(Passmore and Macklin, 1997, 14)

Initially the work has focused on the Tyne Basin and studies ‘have aimed to evaluate both the patterns and controls of Holocene river channels and flood plain development, and to enhance archaeological records in the basin’s river valleys’ (Passmore and Macklin, 1997).

In 1991 the first clear statement on the importance of this work came in Rumsby’s unpublished doctoral thesis entitled ‘Flood Frequency and magnitude Estimates based on Valley Floor Morphology and floodplain sedimentary sequences: the Tyne Basin, North-east England’. This was followed up in 1992 by two papers by Macklin
et al. (1992a, 1992b) which sought to explore the relationship between climate, river channel behaviour and human activity in the Tyne basin. Rumsby and Macklin have produced a detailed discussion of these two interrelated phenomena (1994).

David Passmore’s first contribution to this area of research was also in 1994 when he completed his PhD thesis at Newcastle University on ‘River Response to Holocene Environmental Change: The Tyne Basin, Northern England’. In the same year he published a paper that attempted to provenance the source of fine-grained alluvium deposits in the Tyne valley and these were tied in to changing land-use patterns over time on the valley sides (Passmore and Macklin, 1994).

Passmore has subsequently gone on to be a mainstay of geomorphological survey and analysis in the northern region, and in 1997 along with Mark Macklin he published a significant overview of research on the Tyne Basin (Passmore and Macklin, 1997). A further review was published in 1998 (Macklin et al., 1998).

More recently the research emphasis has shifted a little and in 1998 Tipping produced a chronology for Late Quaternary fluvial activity in the Milfield Basin. This has been followed up by Passmore, Waddington and Houghton who have recently published an impressive geoarchaeological survey of the Milfield Basin (Passmore et al., 2002). This was based on assessment work that they had carried out in the mid-late 1990s for English Heritage.

Moores’ 1998 PhD thesis has also demonstrated the importance of this sort of research in North Tynedale and Redesdale (Moores, 1998).
ASSESSMENT OF THE CURRENT STATE OF KNOWLEDGE RELATING TO THE PALAEO-ENVIRONMENT OF THE NORTHUMBERLAND NATIONAL PARK AND RELATED AREAS

Palynology

Early Holocene Vegetation

Immediately after the retreat of the Last Glacial ice sheets c. 10,000 years ago soils began to develop in Northumberland and plants began to re-colonize the area vacated by the ice. As Tipping has demonstrated (1996) by 7000 cal. BP all of the major forest forming tree taxa had colonized the Cheviot area. He shows that here, as in other parts of the northern region (Davies and Turner, 1979), there was considerable regional variation in forest composition. We can contrast an oak / elm / hazel woodland around The Merse with those in the Bowmont valley that seem to be dominated by hazel and birch. In the latter, oak was poorly represented and elm not present at all. Oak occurs at Sourhope some 800 years after it had colonized the areas around Yetholm Loch and Din Moss, and alder is the last tree to reach the northern parts of the Cheviots, c. 7000 – 7200 cal. BP.

In Coquetdale, at the recently sampled sites of Bloody Moss on the OTA and Caudhole Moss in the Simonside Hills (Moores and Passmore, 1999) we have another view of the vegetation cover in the early period. At Caudhole Moss around 7030 cal. BP it seems that a mixed deciduous woodland predominated, comprised of pine, birch, oak and some hazel understorey. The data in the diagram suggest a fairly closed forest with little open ground. The first appearance of Alder occurs later here than in the north Cheviot at c. 6450 cal. BP.

- Onset of Peat Formation and the Impact of Mesolithic Communities on the Vegetation Cover.

The processes that lead to peat formation have been discussed in detail by Moore (1973, 1975, 1987a, 1987b, 1988, 1989). Waterlogging of the land, creating an anaerobic micro-environment, is a pre-requisite for peat formation and Moore suggests that this situation can arise due to the combination of a number of factors:

- Climatic change
• Anthropogenic forest clearance

• Use of fire

• Over-grazing by both wild and/or domesticated animals.

All of these effectively remove tree cover and break the evapo-transpiration cycle.

The fact that peat seems to develop in many upland locations at the time of the Later Mesolithic has led many workers to speculate on the potential impact of human forest manipulation as a catalyst for the initiation of peat growth (Simmons, 1996).

Moores and Passmore (1999) have pointed out that peat development may also be very closely related to ‘local topographic and hydrologic conditions……and prevailing climate’ (1999, 19). Indeed their work at Bloody Moss and Caudhole Moss has illustrated the potentially complex web of interrelated activities that may have come together to promote peat growth. At Caudhole Moss peat growth was initiated around 7000 cal. BP while at Bloody Moss peat did not start to develop until c. 5000 cal. BP and Moores and Passmore put this 2000 year difference down to localized variation in site conditions. Caudhole Moss occupies a basin that is more likely to become waterlogged, due to relatively impeded drainage, while Bloody Moss is on a spur with fairly free drainage.

Indeed, at Caudhole Moss, Moores and Passmore suggest very strongly that peat growth may have been initiated as a result of climatic downturn, documented in ice core evidence and in the evidence for increased river meandering and down-cutting activity recently recognized in Redesdale and North Tynedale (Moores, 1998; Passmore, 1994).

Pine stumps have been found at the base of the peat in Caudhole Moss, but there is little direct evidence of anthropogenic activity in association with them. They have been dated to c. 7000 cal. BP, precisely at the time of the documented, small-scale, climate fluctuations referred to above. However the complexity of the situation is shown when Moores and Passmore say:

These short lived…….processes have been linked to later fluctuations in Pinus woodland elsewhere in Great Britain, as worsening edaphic
conditions and hydrological change caused the species to become waterlogged and then buried by accumulating organic matter. The possible influence of humans cannot be completely discounted, however, as clearance of the pine woodland may have led to the edaphic changes necessary to bring about peat formation.

(1999, 20)

By contrast the later peat formation at Bloody Moss may be linked more closely to human activity. As Moores and Passmore point out the presence of heather pollen in the core prior to the first evidence for peat growth seems to attest to some degree of anthropogenic forest clearance and an opening up of the forest cover (1999, 21). This, in turn, ties in with pollen data from valley floor sites in Redesdale (Moores, 1998, Moores et al. 1999) and archaeological evidence from Milfield (Waddington, 1996, 1998), which suggests that pastoralism and cereal cultivation were both occurring in the immediate area in this period.

At Sells Burn around 260m O.D. the onset of peat development occurs around 3975 cal BC. Moores has suggested that at this site the impact of Mesolithic groups may have been instrumental in promoting peat formation (1998, 191). The tree cover still remained quite substantial in this area despite the onset of peat growth.

Moores was at pains to point out that the development of peat, certainly in the North Tyne basin, was not synchronous and thus cannot be solely attributed to climatic conditions. As he says;

Inter-site differences in altitude, topography, underlying geology, soil type and aspect, although important, are deemed here to be insufficient to account for the chronological differences in the onset of peat formation alone. Palynological records of these sites are comparable to those found elsewhere in Britain…., suggesting that there was human involvement in the process of localized deforestation which altered hydrological regimes and led to paludification. Thus in certain localities, peat inception may represent the earliest discernible impact of human populations on the environment. (1998, 193)
In the north Cheviots, Tipping has documented openings in the woodland at Sourhope and at Yetholm Loch after 6500 – 6600 cal. BP. At Sourhope he has recorded decreases in alder and a concomitant rise in grass pollen, accompanied by evidence for the presence of open country herbs not previously recorded. Tipping suggests that this is all evidence for anthropogenic interference with the forest cover, possibly using fire as the major tool and promoting increased grazing activity by wild animals. The evidence for similar activities at Yetholm Loch is, he believes, more tenuous, but still evident (1996, 23).

He has argued that the synchronicity of these early anthropogenic episodes indicates that there was a human presence throughout the course of the Bowmont Valley in the Later Mesolithic period, but that the real impact of human intervention was only felt in a significant way in the upper reaches of the river. He has suggested that the oak – elm- hazel woodlands of the lower reaches might not have been as ‘sensitive to change’ as the hazel – birch – oak woods deep within the valley. The woodland in more upland locations may have been easier to manipulate (1996, 23 - 24).

Tipping is quick to point out that in the Southern Uplands of Scotland we have even earlier dated episodes of potential anthropogenic interference with the forest cover e.g. at The Dod c. 8500 cal BP (1996, 24).

By the same token, Moores and Passmore (1999, 21) have noted an increase in heathland plants and heather at both Bloody Moss and Caudhole Moss during the late Mesolithic and into the early Neolithic periods. They have suggested, in line with Waddington’s arguments for the sandstone uplands around the Milfield Basin, that these plants are indicative of small scale clearances that may have been linked with grazing either by wild or domesticated animals.

Work by Moores on valley floor sites in the North Tyne area also holds out the fascinating possibility that forest manipulation was going on in order to encourage the production of plant food, especially hazelnuts (Moores, 1998, 193 - 198). This was clearly evidenced at the site of Drowning Flow (Moores, 1998, 202). Also of particular importance here is the work carried out at Brownchesters Farm, just outside the Park boundary. Here a series of cores from the river terrace deposits has shown clear evidence for anthropogenic activity in the Mesolithic period. The core from
Brownchesters Terrace T3 may even have some really early evidence for the occurrence of cereal pollen i.e. pre 7500 cal. BC which, if correct, would be incredibly early for experimentation with cereal agriculture.

None of the diagrams from the southern end of the Park seems to have a long enough chrono-stratigraphic record to provide information on the impact of Mesolithic groups in this part of the region, however the available data from the rest of the study area suggests that later Mesolithic hunter-gatherer groups may well have been manipulating the localized forest cover either to promote edible plant growth or to make hunting easier.

As we have seen from the available pollen record, one important impact of even a temporary opening up of the forest cover would have been the promotion of grass growth and the increase in browse availability to animals such as red and roe deer, wild cattle (aurochs) wild pig etc. which roamed the Post Glacial forest. There is the suggestion that this clearance was effected by burning of the understorey vegetation and experiments in the USA by Dills and others have shown that by using fire in this way a small group of people can have a disproportionate affect on the vegetation cover, producing some quite amazing figures for increased grazing and browse resource as the burned areas regenerate (Mellars, 1976).

- **THE ELM DECLINE AND THE NEOLITHIC PERIOD**

  Within the context of the NNPA, the above topics are contentious. The Elm Decline is a phenomenon that has been discussed in detail by both palynologists and archaeologists. It is poorly represented within the boundaries of the NNPA, being documented at only two sites, Fellend Moss and Steng Moss and at neither of these is it radiocarbon dated. As a result we have to rely on Tipping’s work, to the north of the Park in the northern Cheviot area of southern Scotland, to gain an insight into the potentially very interesting regional variations in this phenomenon.

  Since it was first identified as a pan-European occurrence, the elm decline has traditionally been seen as the key marker for the introduction of the Neolithic way of life (arable/pastoral farming). This position has been radically altered over the last fifteen years or so and it is now seen firmly as a phenomenon that occurs within the Neolithic. As Tipping says:
Two much discussed lines of evidence have led to this review: firstly the apparent synchronicity of the event throughout Britain, and secondly the occurrence of cereal pollen grains, the clearest palynological indicator of agriculture, in pre-elm decline contexts.

(Tipping, 1996, 25)

The fact that the Elm Decline is a phenomenon that seems to take place at roughly the same time over most of Britain has led some workers to suggest that it could not possibly be an anthropogenic phenomenon, since what we know of the population at the time suggests that it was not large enough to bring about such a widespread change. Disease (similar to modern Dutch Elm Disease) is one of the factors currently invoked to account for the seeming rapid spread and synchronous occurrence of the Elm Decline. Indeed the finding of the remains of the elm bark beetle *Scolytus scolytus* from Elm Decline related deposits at Hampstead Heath in London, adds some weight to this theory (Girling, 1986).

Recently however, Tipping and others have suggested that the Elm Decline may not be as uniform, or synchronous as the received view implies (Tipping, 1996; Simmons and Innes, 1987; Kenney, 1993) and he has shown quite dramatically that the northern Cheviot region bears this out.

At Yetholm Loch the decline in elm pollen is dated to 5550–5300 cal. BP, while no decline can be seen at Sourhope as the tree was not locally present. At Din Moss, however, the Elm Decline is a prominent feature on the diagram and it is dated by three radiocarbon dates to between 6402 – 6035 cal. BP and 6290 –5935 cal. BP (Hibbert and Switsur, 1976). Thus the Elm Decline at Din Moss occurred approximately 3-500 years earlier than the one documented at Yetholm Loch. The two locations are only 4km apart and one is forced to agree with Tipping when he says, that such a ‘degree of diachroneity over such a short distance is perhaps hard to equate with the idea of a rapidly disseminating disease’ (1996, 25). Minerogenic sediment in the Yetholm Loch profile, which occurs directly after the Elm Decline, may well be related to soil erosion that followed general tree clearance (Tipping, 1996, 25).
The decline at Fellend Moss occurred around 4000 – 3900 uncal. BC and that at Steng Moss occurred at c. 3400 – 3300 uncal. BC (Davies and Turner, 1979). Both of these sets of dates are estimates based on estimated rates of peat growth and they should only be taken as broad indicators of when the phenomenon occurred. That said they are fairly late when compared the general range of dates available for the Elm Decline (Smith, 1981; Kenney, 1993).

If the Elm Decline is now seen as a phenomenon that occurs within the Neolithic, this surely begs the question of what we actually do know about the impact of our earliest farming communities on the vegetational record of the area that is now the National Park?

As we have seen earlier there is a growing body of data that might allow us to argue that hunter-gatherer groups had a direct impact on tree cover, albeit at a small scale. Large areas of what is now the Park, however, do not seem to have been impacted upon by Neolithic groups at all. Around Fell End Moss and Steng Moss, both areas show consolidated tree cover, dominated by Birch, Oak, Alder and Hazel, with no evidence for substantial human interference (Davies and Turner, 1979, 801).

A similar situation seems to have occurred at Sourhope while at Din Moss, at exactly the same sort of time, the countryside was being opened up and cereals were being grown (c. 5900 cal. BP) (Tipping, 1996, 27). It must be borne in mind that all of this was happening before the first evidence for an Elm Decline at Yetholm Loch and the picture merely serves to reinforce the complex and localized nature of early prehistoric land-use in the region. Clear evidence for renewed human activity around Sourhope only occurs as late as 3900 cal. BP. (Tipping, 1996, 27).

By way of a further contrast we can point to a late onset of peat growth at Swindon Hill c. 5400 cal. BP, within the early Neolithic. Alder and Birch were present at the base of the diagram, and grassland seems to have been in existence at the time of peat growth initiation, along with docks and bracken. Cereal type pollen is present at Swindon Hill c. 4800 cal. BP (barley, oats/wheat) but clear evidence for an opening up of the landscape around the sample site does not occur until c. 3900 cal. BP. Cereals were grown in close proximity to this site throughout the Bronze Age and into the Iron Age (c. 2750 cal. BP) (Tipping, 1996, 27).
There is, then, some degree of data to suggest a marked Neolithic presence in the northern Cheviot area. Waddington (2000, 33 – 44), however, has queried the whole nature of the Neolithic in Northumberland, arguing for a greater continuity of hunter/gatherer practices than has previously been the case. If he is correct then the picture that is emerging from the pollen record is one that simply represents an intensification of earlier exploitation processes.

This last observation may have some import when we consider the reasons for the seeming lack of discernible Neolithic material culture in the uplands of the region. We have a dearth of recognizable Neolithic dwelling structures in the area – but these would simply not have been needed if a fairly mobile economy was still being pursued, and the flimsy structures that may have been used would have left little archaeological trace. By the same token more solid structures could be present in the uplands but they may lie beneath layers of accumulated peat or under later alluvial and colluvial soil deposits.

Tipping (1992) has demonstrated the likelihood of the latter possibility through his work at Powburn at the mouth of the Ingram Valley. Here he has recovered a polished Neolithic stone axe from beneath later prehistoric gravel deposits. Later episodes of soil erosion may also have removed archaeological data from the earlier Neolithic period. The dearth of upland settlement evidence seems even stranger when we consider the mass of data for Neolithic activity in areas like the Milfield Basin.

The notion of continuity in terms of landscape use is clearly reinforced when we look at the data from Drowning Flow and Bloody Moss (Moores 1998, 210). At both sites there is a gradual expansion of heathland vegetation between 4000 and 2500 BC with a corresponding reduction in tree pollen, though at Drowning Flow around 3000BC there seems to be a period of slight regeneration of hazel woodland.

Neolithic activity in valley floor locations is documented at Brownchesters Farm, terrace T5 (Moores, 1998, 210). Pollen data from the palaeochannel here suggests a constant human presence from around 4000BC, with sustained levels of cereal cultivation. As Moores points out ‘The quantities of these cereals are significantly greater than equivalent values for the same period in the upland cores’ (Moores, 1998, 211).
A massive increase in grass pollen has been noted at this site around 2300BC and Moores suggests that this episode marks the onset of large-scale clearance of the valley floors in this part of Redesdale (1998, 211). This contention is supported by data from palaeochannel T6 at Brownchesters, the infill of which seems to have accumulated at a very rapid rate from 2300 – 1700BC. The pollen record from this location corresponds well with that from T5. Overall, then, there would seem to be evidence for a concerted Neolithic presence in the valleys that corresponds well with Tipping’s data from the upland Cheviot Massif.

The palynological research on palaeochannel in-fills is of immense importance from an archaeological point of view in that the results generated contradict the long held view that there was only minimal human impact on the vegetation cover of the Northumberland lowlands outside of the area of the Milfield Basin.

In lowland areas immediately outside of the NNPA, domestic Neolithic sites are known at Thirlings and the pollen diagram from Akeld Steads shows open country and an increase in grass pollen around 6000cal. BP. Pollen from Ribwort Plantain, Mugwort and members of the cabbage family also suggest clearance for crop cultivation, though no cereal pollen was recorded (Borek, 1975). Similarly we have clear evidence for Neolithic (post Elm-Decline) activity in the diagram from the Wooler Water (Clapperton et al. 1971; Tipping, 1996, 28).

In addition to these early data from the lowland pollen diagrams we can also point to the massive increase in evidence for ritual activity in the Later Neolithic in lowland areas e.g. the Milfield henge complex etc. (Harding, 1981). Late Neolithic ritual activity is also attested in the uplands on the valley floors at Hethpool and Threestoneburn, where two stone circles are located. Similarly, the finding of a sandstone boulder decorated with cup and ring marks in the Powburn quarry, again from beneath 3m of colluvial gravel deposits, reinforces the impression that some present day valley floor sediments mask the Neolithic land-surface.

Thus we have a dichotomy in the Park area when we consider the Neolithic. There is clear evidence for a Neolithic presence in the region when we scrutinize the pollen record, but this is in stark contrast to the lack of physical traces for this presence that...
survive in the archaeological record. Detailed research questions raised by this observation are dealt with in section 3.

- **Early Cereal Cultivation**

As noted above there may be some evidence for precocious cereal production in the Late Mesolithic/Early Neolithic in Redesdale, at Brownchesters, just outside the Park boundary (Moores, 1998).

Within the area of NNPA, early cereal cultivation is documented in the pollen diagrams from Fellend Moss, Steng Moss, Broad Moss and Fozy Moss. At Fellend Moss, despite evidence for a series of small-scale clearance episodes in the Bronze Age period, the first cereals are not documented until after a level that is radiocarbon dated to AD2 ± 45 uncal. AD. The data from Steng Moss suggest an earlier occurrence of cereals (barley and wheat) in the area, but this is still only in the Late Bronze Age/Early Iron Age in terms of date. At Broad Moss, barley is also present in very small amounts along with weed pollen from plants associated with cultivation and again in Bronze Age contexts. (Davies and Turner, 1979)

The recently cored site of Bloody Moss on the Otterburn Range has produced cereal pollen from contexts dating to c.1500BC, again a clear Bronze Age date, and this is paralleled at Drowning Flow where the date for taxa related to cultivation seems to lie around 1000BC (Moores, 1998). By the same token Dumayne recorded small-scale cultivation at Fozy Moss between 1575 cal. BC and 835 cal. BC and she attributes this to agricultural activity occurring within developing, semi-permanent, clearings over a period of some 400 – 700 years (Dumayne, 1992).

Valley floor data from Brownchesters indicates an increase in the occurrence of cereal pollen from the Early Bronze Age period onwards (Moores, 1998, 219). This is in direct contradiction to the picture that could be constructed if we were simply to rely on the dominant upland peat bog data.

It is interesting to note that even when we do get evidence for cereal pollen it is never in large amounts and always in the context of small-scale, seemingly temporary, clearings, particularly in the uplands. In the Cheviot uplands at Din Moss cereals are recorded close to 5900 cal. BP and as Tipping points out this occurrence is very early
indeed. At Swindon Hill cereal type pollen is known from 4800 cal. BP and barley, oats/wheat are well represented at this location.

Again then there would seem to be a dichotomy between the northern and southern halves of the Park that urgently needs to be addressed.

- **THE BRONZE AGE: A CHANGE IN IMPETUS. (C. 2500 – 800BC)**

The period we call the Bronze Age is perhaps most significant for the gradual change from the ancestral, monument dominated landscapes of the Neolithic to the settlement and agriculture dominated landscapes of the Iron Age and later periods. From the middle Bronze Age onwards, that is from around c.1500 BC, we start to see the impact of human action made much more manifest in the pollen record.

At Bloody Moss a marked increase in heathland species has been recorded at the start of the Bronze Age, in association with a major peak in charcoal that Moores and Passmore suggest may be indicative of a large scale fire (1999, 24). They have argued that this is evidence for an anthropogenic episode of forest clearance related to the promotion of heather as fodder for grazing animals. Similar, continued heathland development occurs at Drowning Flow and Sells Burn. At the former site there is a marked increase in heather pollen, which seems to indicate a period of drying out on the bog surface. This may be related to climatic amelioration at the start of the Bronze Age, which in turn may have promoted an increase in stock grazing on the bog surface itself (Moores, 1998, 218).

By the same token lowland locations also saw an increase in arable agriculture in the early Bronze Age period, especially river valley environments e.g. Brownchesters Farm in Redesdale (*see above*) (Moores, 1998, 245 - 247).

It is perhaps significant that we start to see clearance episodes in the uplands from around the middle Bronze Age and this may well tie in with the theory that as the Bronze Age climate ameliorated, and as the population may have increased in the region, there was a gradual expansion of settlement and agricultural activity out of lowland areas (which continued to be cleared and farmed) and on to what we would now perceive as ‘marginal’ habitats (Burgess, 1984, 1985; Young and Simmonds,
1995; 1999; Young, 2000). These regions had been exploited in the Neolithic, but this exploitation certainly seems to have intensified in the Bronze Age.

If we examine the data from Fellend Moss, Steng Moss and Broad Moss for the Bronze Age phase we can see an increase in the numbers of small-scale, temporary, clearance episodes that occurred.

At Fellend and Bloody Moss, small clearances seem to have begun in the early Bronze Age. Davies and Turner argued that these were linked to pastoral activities as they were accompanied by increases in grass, ribwort plantain and dock pollen, without any evidence for cereal growth. The peak of this activity has been dated to 1738 +/- 60 uncal. BC, at Fellend Moss and the whole series of episodes documented here may have lasted for some 200 years.

The Steng Moss diagram shows a complicated picture of seemingly repeated small-scale clearance episodes in the period after the Elm Decline. A localized peak of this activity is documented around 1644 +/- 45 uncal. BC when the curves for ribwort plantain and the light demanding ash become continuously represented and there is an increase in grass pollen. Again this is interpreted as indicating a move towards pastoral exploitation of the area around the bog (Davies and Turner, 1979, 793). Further, almost rolling, episodes of small-scale human intervention in the forest occurred with two clear peaks of intensity dated to 1065 +/-45 uncal. BC, and 636 +/-45 uncal. BC. Davies and Turner suggested that these two periods of small-scale clearance might both have lasted around 250 years (1979, 793). It is in the context of these, clearly, middle Bronze Age phases of interference that we see the first cereals (barley and wheat) occurring in the region around Steng Moss.

After the second of these episodes, the rate of peat growth at Steng Moss increases dramatically from about 6.5 cms. per year to some 44.7 cms. This may well be related to the climatic downturn documented from other sources, around 1250 – 1000 cal. BC.

Broad Moss has recently been re-cored and at the time of writing, radiocarbon dates for the new diagram are eagerly awaited (Passmore and Stevenson, 2001). Davies and Turner’s earlier work was not dated by radiocarbon, but they suggested that at this site, too, a pattern of clearances similar to that documented at Fellend and Steng Moss.
could be observed. Moore’s work at Drowning Flow, Sells Moss and Bloody Moss also reinforces the notion of a continued human presence in the Northumberland uplands, with continued clearance activity being documented throughout the later Bronze Age and into the Iron Age (Moores, 1998, 226).

If this is the case then we have irrefutable evidence for a recurrent and continuous human presence in the uplands of the Park area from certainly the early part of the Bronze Age. There seems to be no support for the argument, put forward by Burgess (1984, 1985, 1989), that as a result of the documented climatic deterioration towards the end of the Bronze Age, large tracts of the upland landscape were deserted by the population (see Young 2000; Young and Simmonds, 1995, 1999, for a more detailed discussion of these arguments and an alternative to them).

A crucial question here, then, is how does the evidence for quite detailed and well-developed Bronze Age field systems and settlements in parts of the Park tie into the picture of small-scale, temporary clearances that is detailed in the pollen record? Obviously there is a need for:

- greater temporal resolution in terms of the dating of the archaeological features and
- further work in the northern section of the Park to produce pollen diagrams that cover the Bronze Age period in some detail. These in turn also need to be well dated by radiocarbon assay.

This is discussed in more detail below.

**IRON AGE/ROMAN FOREST CLEARANCE AND LAND-USE**

Recent field survey by Topping and others (Topping, 1989) suggests that throughout the Iron Age in the region there was a rise in population and a concomitant intensification in land-use strategies, with a growing component of arable agriculture starting to emerge. There has been much debate within Northumberland generally about the impact of Iron Age communities on the vegetation cover, relative to that of the incoming Roman Army (see below) and while earlier theories suggested that the major impact on tree cover came about as a result of the Roman presence in the Wall area that hypothesis has now been challenged. It is currently suggested that by the late
Iron Age much of the landscape was open and utilized for agriculture and that this trend continued and intensified in some areas throughout the Roman period. This certainly seems to have been the case to the north of the Park around Yetholm Loch where Tipping’s palynological research has shown that by the late Iron Age there was a phase of activity which saw the removal of most of the tree cover and the appearance of oats and rye with the maintenance of a high percentage of pasture land. He believes that this is the first emergence of a planned and maintained agricultural landscape in this region (Tipping, 1994, 15). These debates are set out in more detail below.

Evidence for pre-Roman Iron Age activity varies in the pollen diagrams from the area of the Park. At Fellend Moss, immediately south of Hadrian’s Wall, there appears to be little evidence for intensive land-use in the Iron Age. Around AD 2 the pollen curves for Gramineae, Plantago Lanceolata and Rumex and Pteridium pollen do start to rise. At 168 cms in the diagram (dated by extrapolation to c. 148 +/- 45 AD) these plant types show a massive increase that was linked by Davies and Turner to the construction of Hadrian’s Wall (1979, 789).

At Steng Moss by way of a contrast, between contexts dated from 578BC to 20BC, the levels of grass and other ‘open country’ pollen types remain the same as in the preceding Bronze Age and the process of forest clearance and small-scale agricultural activity seems to have continued at almost the same kind of pace. At c. 118 cms, a level dated to 20BC, there is another massive rise in herbaceous pollen and this peak was maintained until 84cms at a level dated to AD460. Again this was interpreted as the result of the impact of the Roman army on the northern landscape.

Davies and Turner (1979, 796) argued that at Broad Moss, there was a continued interest in pastoral farming right through the Iron Age with cereal pollen (mainly of barley) occurring only rarely even into the Roman period.

At Drowning Flow, as at Broad Moss, grazing seems to have intensified throughout the Iron Age and into the Roman period (Moores, 1998, 229), and at Sells Burn and Bloody Moss a similar picture emerges, with massive increases in grass pollen along with the pollen of plants normally identified as ‘weeds’ associated with pastoralism e.g. Ranunculaceae, Rumex spp., Potentilla, Chenopodiaceae, Plantago lanceolata.
In the valley floor areas of Redesdale there is a lack of pollen data covering the Iron Age/Roman periods as suitable palaeochannels have yet to be identified. It seems likely, however, that most of the lower lying valley floor land was cleared of trees by the Iron Age (Moores, 1998, 230).

The work of Dumayne (e.g. 1992, 1993) and Dumayne and Barber (1994) has been central to the key debates that have raged over the nature and extent of the impact of the Roman army on the vegetation cover around the Wall. The bog site of Fozy Moss is particularly important in the context of the present discussion. Here Dumayne and Barber argued that there was only slight evidence for human impact on the tree cover during the Iron Age (1994, 167). This is in marked contrast to Fozy Moss Phase FZMd1 where a massive and seemingly rapid episode of forest clearance takes place from cal. AD 130. During this episode, tree pollen drops to c. 7% of total pollen in the diagram. Open country species show a massive increase and cereal pollen occurs.

Dumayne and Barber associated this phase of almost total deforestation with the building of the Roman forts at Vindolanda, Carrawburgh, Carvoran, Great Chesters, Chesters and Housesteads. They also documented a marked forest regeneration phase beginning c. cal. AD 370 which, they argue, was tied into the desertion of the frontier line and the forts associated with it.

They contrast the picture from Fozy Moss with that built up from Glasson Moss and Walton Moss in Cumbria, further along the line of the Wall. Here there seems to have been a trend towards more continuous clearance episodes throughout the Iron Age. At all three sites, however, the marked decrease in tree cover highlighted at Fozy Moss within the Park, has been clearly recorded. Radiocarbon dates from all three sites could be taken to indicate that the clearance phases relate to the construction of Hadrian’s Wall. The pollen diagram from Muckle Moss would also seem to show the same scale and type of forest clearance at this time (Dumayne and Barber, 1994, 171).

Dumayne and Barber go on to discuss other evidence for an increase in forest clearance and related arable activity in Roman contexts from a range of locations in County Durham and Northumberland (1994, 171). Much of this, they suggest, was brought about because of the increased demand for wood for fort building and other military activities. Their conclusions suggest that:
there is spatial variation in the extent of clearances during Roman times, and this is related to distance from Roman structures, the distribution of native settlement and environmental factors.

(1994, 172)

McCarthy (1995, 1997) and Manning et al. (1997) have been critical of Dumayne and Barber’s conclusions about the state of the vegetation cover around Fozy Moss, and the impact of pre-Roman Iron Age communities upon it. All have highlighted the potential problems of trying to reconcile radiocarbon dates, pollen diagram stratigraphy and historically dated episodes of human activity, and Manning et al.’s work on pollen from clearly dated ditch sections at the Vindolanda fort has suggested that there was a significant ‘native’ input into clearance activity before the arrival of Rome. The situation is thus still not fully resolved.

Moores has developed a further scathing attack on the way in which the pollen diagram from Fozy Moss was constructed and interpreted (1998, 235 – 239). He points up a contradiction between the archaeological data around Fozy Moss, which show evidence for a significant human presence from the Bronze Age onwards, and the limited insights provided by the pollen sequence (1998, 235 –36). He makes a further incisive point when he notes that the Roman period did not appear to bring about any increase in the quantities of cereal pollen recorded from upland pollen diagrams. His site at Sells Burn, which is the closest upland bog site to the main area of Roman activity, does not show any significant increase in cereals until the period of the Roman withdrawal from the line of the Wall. As Moores says, ‘This suggests that Roman arable agriculture was no more extensive than that of the preceding indigenous Iron Age people’ (1998, 243). This is certainly an area of research requiring further clarification.

- **IMMEDIATELY POST-ROMAN VEGETATIONAL RECORD**

As Moores has pointed out (1998, 244) the arguments around what happened to the vegetation of the northern region when the Romans withdrew are as contentious as those highlighted above. Within the NNP there is clear evidence for forest regeneration at Fozy Moss, though this regenerated woodland was dominated to a large degree by Hazel. Dumayne and Baber have suggested that this is indicative of a
collapse in social and economic structure, leading to an abandonment of settlements along the line of the Wall (1994). Davies and Turner (1979, 789) have argued that at Fell End Moss the landscape stayed open until the seventh century AD and, in direct contrast to Dumayne and Barber, they have suggested that there was a period of stability after the Romans left.

At Steng Moss, which is well to the north of the Wall, the picture that emerges is one of tree cover regeneration at cal. AD 500+/− 60. Davies and Turner argued (1979, 794) that this went on for most of the Anglo-Saxon period and that it was not until around A.D. 865 that evidence emerged in the pollen record at Steng Moss for further short-lived agricultural activity.

At Broad Moss, however, we again see a potential continuity of arable activity. Davies and Turner (1979, 796) suggested that the Saxon ‘Palace’ site at Yeavering (only 8.3 km away from Broad Moss) and the activities relating to its occupation may have been responsible for the continuation of arable farming and overall stability in the area.

It may well be that there was, again, much localized variation in terms of land-use patterns in the immediate post-Roman period and this is further highlighted by Moores’ research. At Drowning Flow and Bloody Moss, there is no evidence for regeneration after the Roman period. Moores argues that the areas around both sites were covered with extensive heathland vegetation along with some hazel scrubland (1998, 244). Sells Burn in contrast does show a modest and short-lived regeneration of the tree cover in the immediately post-Roman period, with hazel again being the dominant species, though birch and alder do make an appearance (1998, 245).

The valley floor locations in Redesdale show a significant phase of arable agricultural activity up to c. AD 685. At Brownchesters there is a marked peak of Avena-Triticum pollen (oats/wheat) that Moores has interpreted as a move towards much more intensified crop production. Again, this flies in the face of the accepted wisdom that tends to support the notion of economic collapse at the end of Roman occupation of the north.
• **EARLY MEDIEVAL AND LATER VEGETATIONAL HISTORY**

The period after the tenth century AD is very difficult to discuss from a palynological point of view. In the past palynologists have frequently failed to give these periods as much attention as they have lavished on the prehistoric periods. Detailed chronologies are notably difficult to establish because many radiocarbon dates have been focused on periods of earlier activity. All of this makes it extremely difficult to reconstruct overall patterns of vegetational change within the area of the Park in the Medieval and later periods and this is unfortunate given the turbulent history and rich archaeological record of the period.

At Fellend Moss, a sequence of late radiocarbon dates was obtained and these showed that around 1050 AD there was a rapid rise in herbaceous pollen curves in the diagram. This was linked with increased evidence for crop cultivation and *cannabis* pollen makes an appearance as well as barley and rye (*Secale*). Grass pollen values are also exceptionally high in this phase of activity as are values for *Plantago lanceolata*. Both of these would indicate that there was considerable pasture-land within the bog’s catchment area (Davies and Turner, 1979, 789). Increases in hazel pollen were also taken as an indication that this plant was being managed, probably through coppicing. Davies and Turner suggested that this increase in farming activity was linked to the impact of Norse settlement on the east coast of Northumberland, which, they argued, had driven much of the local population into the uplands (1979, 790). This remains a highly speculative interpretation.

Throughout the Norman period and up until the sixteenth century it appears that the area around Fellend Moss was less densely settled. A final phase of forest clearance is documented at AD 1516, and this seems to continue without interruption up until the present day. Wheat, barley and rye pollen has all been recorded in the later levels at Fellend Moss (Davies and Turner, 1979, 790).

Davies and Turner also suggested that movement of the local population from the coast into the uplands, as a result of Scandinavian settlement, accounted for the peak of agricultural activity dated to AD 865 at Steng Moss. Here again, after this phase, they have documented much Medieval clearance up until the early fourteenth century. In the period preceding the fourteenth century AD, the area around Steng Moss was administered by the de Umfraville family from their castle at Elsdon. After this period...
the area was in the hands of the Crown and with this changeover there seems to have been an episode of marked forest regeneration. Davies and Turner suggest that this regeneration is to be linked with the activities of Scottish raiding parties that precipitated the abandonment of many farmsteads (1979, 794). After this period tree pollen declines and the pollen of grasses and other herbaceous plants increases. The maximum extent of arable seems to have occurred around 1825 AD when cereal pollen was as high as 12% of the total tree pollen.

Moores has documented an increase in grass pollen at Bloody Moss over the period from c. AD 575 – 990. This occurred at the same time as an increase in cereals, and after this period cereal pollen is documented throughout the rest of the core. A similar situation prevails at Sells Burn, though at Drowning Flow, cereal pollen was not recorded after the Roman period (Moores, 1998, 248).

Immediately outside the area of the Park, the valley floor has produced relevant data from two in-filled palaeochannels, at Brownchesters and from the upper sequences of the pollen diagram from Snabdaugh Farm (Moores, 1998, 248). The Brownchesters data suggest a period of constant human activity until about AD 1250. There is much evidence for cereals, constant tree pollen levels and many anthropogenic indicator species. At Snabdaugh, indicator species and cereals increased throughout the medieval period.

On the basis of this kind of information, Moores has suggested that, for the early part of the medieval period:

…it would appear that agriculture continued to be concentrated in the lower altitude areas of the North Tyne basin. Anthropogenic interference with the natural vegetation seems to have remained at similar levels through this period with there being no indication that forest regeneration occurred either in upland or lowland areas.

(1998, 249)

As regards later medieval activity, we have no data as there are no lowland palaeochannel fills that have been dated to the relevant time period. Moores does, however, present some evidence from his upland pollen diagrams, which all show a marked decline in hazel pollen percentages that he dates to about 1700AD on the
basis of information from other northern pollen diagrams. The reasons for this phenomenon may be climatic but Moores suggests that it could also be the result of intensified upland land-use.

**Plant Macrofossils**

As noted above we are fortunate that a full review of plant remains from archaeological contexts in the northern region has been carried out (Huntley and Stallibrass, 1995). Within the area of the Northumberland National Park evidence is only slight however.

**MESOLITHIC**

No plant macrofossils have so far been published for the Mesolithic period. On-going research by Clive Waddington at Howick on the coast is, however, producing masses of evidence for hazel nut exploitation in a late Mesolithic context (Waddington, *pers. comm.*).

**NEOLITHIC**

Only two published sites in the whole of Northumberland have so far produced Neolithic data. These are Whitton Hill and Thirlings, both just outside of the Park area, on its north-eastern edge. Both sites have produced a few grains of naked barley whilst Whitton Hill also produced a grain of emmer wheat and nine fragments of hazel nut and Thirlings also produced twenty three fragments of glumes and spikelets from emmer wheat and 1587 fragments of hazel nut shell (van der Veen 1982a, 1982b).

While this evidence is obviously slight, it must be remembered that across the country generally little macrofossil data for the Neolithic actually survives. The two sites noted above might allow us to suggest that although cereal cultivation was being practiced in the region during the Neolithic, there was still an interest in the collection of wild foods. This would seem to further reinforce the notion of a continuation of ‘Mesolithic lifeways’ into the later period.

**BRONZE AGE**

We fare no better in the Bronze Age. Again only two sites in the whole county have produced plant macrofossil remains. These are Whitton Hill Site 2, a later Bronze Age
site dominated by ring ditches, dating to 800 – 900BC (van der Veen, 1984) and Hallshill another mid-late Bronze Age settlement site consisting of a timber round house (van der Veen, 1992).

Both sites are located just outside the boundary of the Park. The former has produced evidence for barley and spelt cultivation in the area while the latter has produced significant amounts of emmer wheat along with spelt. A small amount of both naked and hulled barley was also being cultivated and the sampling revealed two seeds of cultivated flax along with weed seeds.

**Iron Age**

Given the heated debate over the extent of Iron Age/pre-Roman forest clearance and cultivation activity it is something of an anti-climax to view the paltry number of excavated and published sites of Iron Age date that have produced plant remains. Once again, for the whole of the Northumberland we are only dealing with five sites, Murton, Dod Law and Chester House all of which are outside the Park boundary and Fawdon Dene and the cultivation terraces at Plantation Camp, Brough Law in the Breamish Valley in the heart of the Northumberland National Park.

Chester House is a rectilinear enclosure that showed up as a crop mark. Excavation revealed hulled barley, spelt and emmer wheat in small amounts (Holbrook, 1988). Murton and Dod Law are both hillforts and both are of late Iron Age date. Murton produced hulled barley and some wheat was recorded. Barley and wheat chaff was also recovered. Both emmer and spelt wheat types were identified and van der Veen notes that this is of interest given that by this period, further south, spelt had superseded emmer (van der Veen, 1985a). The plant remains from Dod Law were dominated by hulled barley though a few grains of naked barley were present. Chaff from emmer and spelt wheat was also recorded (van der Veen, 1992).

The recent NNPA/Durham University excavations at the enclosed settlement at Fawdon Dene in the Breamish valley have produced charred cereal grains of barley and pelt wheat and fragments of charred hazelnut shells (ASUD, 2001c, 28).
ROMAN

For the Roman period, Huntley and Stallibrass have divided the available information into military and non-military categories (1995). To date, there are no non-military sites within the Park area that have produced plant macrofossil data, but at Doubstead, on the coastal plain near the village of Scremerston, Jobey’s excavations in 1980 produced evidence for the cultivation of 6-row barley. This took the form of two carbonized cereal grains and a section of carbonized rachis from a pit in the center of the excavated area (Jobey, 1980, 8–9; Donaldson, 1980, 18–19; van der Veen, 1992).

At Thornborough Scar to the east of Corbridge, again outside of the Park area, van der Veen has identified rye grain and chaff from contexts dated to AD 200–400 (van der Veen, 1983b).

Along the line of the Wall, within the Park, there are several excavated military sites that have produced both waterlogged and charred plant macrofossil evidence. At Peel Gap, carbonized wheat and barley grains were recovered (Huntley, 1989e) and a similar picture emerged from the excavations at the Chesters bridge abutment (Huntley, 1992c). Small samples of grain have been recovered from recent work at Housesteads (van der Veen 1982c; 1982d).

EARLY MEDIEVAL

There are no early Medieval (C 5th – C 11th AD) sites within the Park area with plant macrofossils and similarly we have no High Medieval sites.

LATER MEDIEVAL

For the later period a range of sites around the perimeter of the Park, within Northumberland show that farming activity and the movement of grain etc. over fairly long distances were quite complex activities. At The Hirsel in Berwickshire, Cramp’s excavations of twelfth century context deposits relating to an early church, revealed much evidence for carbonized oats, bread wheat and barley. The presence of Chaff also suggested that some of these grains had been processed on-site (Huntley, 1984). The Medieval midden at Jenny Bell’s Well on Lindisfarne has also produced evidence
for carbonized bread wheat, barley, oats, peas and beans (van der Veen, 1984; O’Sullivan and Young, 1995).

At Newcastle a range of different sites has produced both carbonized and waterlogged plant macrofossil remains. Discussion of these is beyond the scope of the present paper (see table above for references to published reports).

**POST-MEDIEVAL**

Again, for the post-Medieval period we have a dearth of macrofossils from the area of the Park. Some insight into how important cereal cultivation probably was can be seen in the number of corn drying kilns identified by Charlton in her recent survey of the Otterburn Training Area. She has located some 14 corn dryers of various forms in addition to 3 millstone quarries, 5 mill sites and 18 creeing troughs (Charlton, 1996).

Charlton and Day excavated a corn dryer at Loaning Burn within the Park. This had been active over the period 1604 – 1866, and sampling of the material within the kiln bowl revealed 80% oat grains and 20% barley among the preserved grain finds. This gives some insight into the kind of activities that were going on in areas that are now considered marginal for crop cultivation (Donaldson, in Charlton and Day, 1982, 163).

**Faunal Remains**

**MESOLITHIC**

As with the evidence for plant macrofossils discussed above, we have no Mesolithic data from the National Park area. Only two locations within the county (both on the coast) have so far produced Mesolithic faunal remains. At Howick, Waddington’s ongoing excavations on a late Mesolithic structure have produced red deer bones and at Low Hauxley, Bonsall’s excavation of Bronze Age burial cists eroding from the sea cliff have produced evidence for later Mesolithic midden material stratified beneath the later features. This has so far yielded evidence for fish remains, mammal bones and marine mollusca, in association with a radiocarbon date of c.5000BC from one of the shells (Bonsall, 1984).
Neolithic

Neolithic faunal material is equally rare, with one of the pits in the Ewart pit alignment, in the Milfield Basin, producing two indiscriminate animal bone fragments (Miket, 1981). A perforated red antler macehead of late Neolithic date was also recovered from the boulder clay at Newsham, near Blyth on the Northumberland coast (Allason-Jones, 1980).

Bronze Age

Clearly dated Bronze Age evidence from the whole county amounts to some burnt winkle shells in the cists at Low Hauxley (Bonsall, 1984), and the situation is only marginally better for Iron Age sites.

Iron Age

At Fawdon Dene, in the Ingram Valley, the recent NNP/Durham University excavations have produced cattle, sheep, pig, horse and dog bones from Iron Age settlement contexts (ASUD, 2001c, 31). This is the only such material from the Park area at the present time.

At Burradon in the south east of the county, Jobey’s excavations revealed a few poorly preserved fragments of cattle bones and teeth (Hodgson in Jobey, 1970). Jobey’s excavations at the site of Kennel Hall Knowe, in advance of the construction of the Kielder Reservoir, also produced animal remains. This site dates from the late Iron Age into the Roman period and James Rackham reported on some 437 bone fragments from a pit associated with one of the round houses. Identified species included cattle sheep/goat, pig and fowl. This is an early find of domestic fowl. Most of the bones derive from the heads and feet of the animals and it was thought that the deposit represented primary butchery activity (Rackham, 1977a, 1977b).

The final Iron Age site in Northumberland that has produced faunal remains is the hillfort at Dod Law West, excavated by Chris Tolan-Smith (1988 – 89). Several contexts from between the ramparts, produce heavily burnt samples of animal bone that were mainly from either cattle or horse. A radiocarbon date on wheat chaff associated with the bone material placed the material in the first centuries BC/AD.
Roman

Much more is known about faunal assemblages from Roman military sites within the Park area. Woodfield’s account of excavations on six turrets along the line of the Wall (1965), produced only small amounts of animal bone, dominated by sheep/goat, with some cattle, pig and horse present. Oyster and mussel shells were also recovered.

The Carrawburgh Mithraeum has produced evidence for chicken bones (which may be the end result of offerings made in the temple), as well as pig and sheep/goat (Platt, 1951a, 1951b; Fraser, 1951).

Much larger faunal assemblages are documented from fort sites proper. At Vindolanda the excellent preservation conditions have the potential to give a detailed insight into faunal exploitation patterns over a long time-period. As Stallibrass has said, however, very little post excavation work has been undertaken on the animal bones and other faunal remains. In 1970 Cowley examined a small sample of material from a late fourth century well in the Headquarters building. This was dominated by cattle and sheep/goat, and Hodgson (1970) also studied another small collection from the south gate of the Diocletianic fort. Small sheep and large numbers of cattle bones were recorded.

Excavations at the Chesters bridge abutment (Stokes, 1993) produced material from 2nd - 4th century contexts, again dominated by cattle. These seem to have been working cattle and, whose bone morphology (in contrast to that visible on the bones of cattle from food debris deposits) suggested that they had been used to pull heavy vehicles.

Outside of the National Park, in the county at large, Corbridge has yielded a huge sample of animal bones spanning the first to fifth centuries AD (Hodgson, 1967, 1968; Meek and Gray, 1911). A very high frequency of cattle bone was recorded (higher than that from forts further south in Britain). Most of the animals had survived at least two winters but there was no real evidence for very old animals in the assemblage. Over 40% of the sheep/goats identified had also died at the end of their second year.
As Stallibrass has highlighted, many of the forts along the Wall were subject to excavation in the nineteenth and twentieth centuries, but animal bone was not recorded. We know that at sites like Housesteads, the conditions for bone preservation are good, but much bone has probably not been curated after excavation (Stallibrass, 1995, 143).

There are no Roman Non-military sites with recorded faunal remains from anywhere in the country (Stallibrass, 1995, 154, fig. 24).

**EARLY MEDIEVAL**

For the early Medieval period (5th – 11th centuries) the ‘royal’ site of Yeavering and its adjacent associated henge monument, with its Saxon phase, are of particular importance. Hope-Taylor’s excavations at Ad Gefrin highlighted the potential for the differential preservation of animal bone across the site. The site is on glacial sands and in the main would be too acidic for good bone preservation. However, some 2500 fragments of bone were recovered and analysis by Higgs and Jarman showed that sub-or young adult cattle were dominant (1977).

At the Yeavering henge highly calcined animal bone was identified from later Anglo-Saxon industrial contexts, but this was not identified to species (Tinniswood and Harding, 1991).

The early Medieval layers at the monastic site of Jarrow have produced evidence for cattle, sheep, pig and also horse, goat, cat, dog, and red and roe deer with much evidence for the exploitation of poultry (Noddle, 1987). Very little fish bone was recovered from Saxon levels when compared with the figures for the late Medieval period. Stallibrass has speculated that this may be a true representation of the role of fish in the early period (Stallibrass, 1995, 159).

O’Sullivan’s excavations on Lindisfarne in 1997 in the area of the village’s museum produced evidence for Saxon activity in the earliest levels of the site (O’Sullivan, 1985). As might be expected fish bones were in abundance in all layers and birds, marine mollusca and crustacea formed an important part of the diet in all of the phases of Medieval activity (Allison *et al.*, 1985).
The ninth/tenth century settlement at Greenshiel, also on Lindisfarne, has produced much faunal data. Cattle dominated the finds with many of the animals being under two years old at time of death. Sheep and goat were also present and fish remains were recorded in abundance. Mussels, whelks, cockles and periwinkles were also present in large numbers (Beavitt, O’Sullivan and Young, 1990; O’Sullivan and Young, 1991, 1992, 1995; Brown et al. 1995).

**Late Medieval**

Major urban excavations at Newcastle have produced a vast range of faunal remains. Discussion of these is beyond the scope of the present paper (see table above for references to published reports).

Berwick–upon-Tweed has good animal bone preservation (Hunter, 1982; Seller, 1982) and Medieval occupation layers in parts of the town have shown not been disturbed by post-Medieval activity. The town played a central role as a supply base for the English army during its frequent forays into Scotland. In pre-twelfth century contexts cattle and sheep were present and cod bones were recovered. From the twelfth to thirteenth centuries cattle and sheep were again dominant, but red deer, rabbit and chicken were also recorded. Cod was again present. The assemblage from 13th – 14th century levels was the same with the addition of horse, and this situation prevailed into the later phases of the occupation activity.

Prudhoe Castle has produced a faunal assemblage dominated by cattle and sheep (Davis, 1987), while the ecclesiastical site of Jarrow has produced a mass of bone data, again dominated by cattle, but with a high proportion of chicken bones. A wide range of wild bird bones has also been identified. Fishing activity is mainly represented by the bones of Cod, Ling and Haddock (Noddle, 1987).

Lindisfarne Village has produced evidence for cattle exploitation, but also the continued hunting of wild animals such as red and roe deer and Whale. Rabbit bones have also been recovered (Allison et al., 1985).

Limited sampling of the material from the Jenny Bell’s Well midden on Lindisfarne, to the south west of the village has revealed much information relating to molluscan, bird and fish exploitation (Rackham, 1985). The species of sea fish present in the midden change over time from the 13/14th century layers into material dating to the 17th century. Cod was absent from all samples though it was present in the village
excavations. Cattle horn cores were present in large number in the earliest layers of the midden (Beavitt, O’Sullivan and Young, 1990; O’Sullivan and Young, 1991, 1992, 1995; Brown et al., 1995).

POST-MEDIEVAL
Again, Newcastle has produced a vast amount of faunal data for the post-Medieval period (see Table above for full references). Post-Medieval deposits from Jenny Bell’s Well on Lindisfarne are dominated by marine fish bone (Stallibrass, 1987) and bones of seal and whale were recovered from later deposits in the village excavations (O’Sullivan, 1985; Beavitt, O’Sullivan and Young, 1990; O’Sullivan and Young, 1991, 1992, 1995; Brown et al., 1995).

Soil Science
Mercer and Tipping’s (1994) attempts to examine the prehistory of soil erosion in the northern and eastern Cheviots has a great importance for the northern half of the Northumberland National Park. Two of the river valley catchments that they examined are squarely within the Park’s boundaries – Harthope Burn and the River Breamish – and a further sample area, the valley of the Halter Burn, is located only a kilometer to the west of the Park’s western boundary.

In order to establish a chronology for soil erosion events it is essential to examine what are termed ‘sediment sinks’. As Mercer and Tipping highlight two major sediment sinks are river terraces and alluvial fan deposits. Both of these are ‘areas of long term sediment storage’ (Mercer and Tipping, 1994, 11). It is also essential to be able to trace the sources of the sediments under study if we are to move beyond statements of a generalized nature about the processes behind sediment build up.

The earliest terrace accumulation in the Halter Burn is dated to 2557 – 2407 cal. BC and deposition of fluvial sediments in the Wooler Water, into which the Harthope Burn drains, took place after 2184 – 2034 cal. BC. At Powburn, in the Breamish Valley, Tipping has identified one major terrace fill over 5.5km long, 1.5km wide and up to 6m thick (Tipping, 1994, 14). Four radiocarbon dates have been obtained from organic levels in the channel in-fills and it seems that gravel deposition and infilling began in the period 820-390 cal. BC.
On a stream feeding into Yetholm Loch soil erosion is evident from in-wash stripes in the gravel fill at around 200 cal. BC. This episode seems to stop around 204 – 346 cal. AD (Tipping, 1994, 14).

On the basis of these data Tipping has suggested two main phases of soil instability in the northern and eastern Cheviots. The first relates to the Early Bronze Age and can be seen in the deposits in the Halter Burn and the Wooler Water catchment areas. The second phase of soil erosion seems to center on 400 – 200 cal. BC as evidenced by the data from Yetholm Loch and the Breamish Valley. This episode certainly seems to have ended at Yetholm between 200 and 350 cal. BC (Tipping, 1994, 15).

There is much debate about the causes of the Bronze Age episode of soil erosion. Tipping argues for a combination of both climatic downturn and anthropogenic activity in terms of tree clearance and agricultural practice, however there is little dated archaeological evidence for the early Bronze Age in terms of settlement sites (Tipping, 1994, 15 – 21).

For the later period Tipping is more convinced that the soil instability is caused by human activity. This explanation is strengthened by the fact that in the late Iron Age there are no climatic episodes that could be invoked as an alternative causal mechanism of soil erosion and movement. The soil in-wash stripes in the river terrace deposits can, he believes, be closely correlated with pollen data for large scale clearance and in archaeological terms with the development and spread of ‘enclosed farmsteads’ and ‘scooped settlements’ (Tipping, 1994, 16). He also suggests that the so called ‘cultivation terraces’ visible in the Breamish and Bowmont valleys may, in the main, date to the period of late Iron Age soil instability, being an attempt to arrest the process (1994, 16-17).

Within the Park area itself specific, project orientated, research has also a potential contribution to make to this debate. The joint NNP/ University of Durham project in the Breamish Valley has sampled a series of cultivation terraces at Plantation Camp (ASUD, 2000, 9 – 15). This has provided detailed information about terrace construction. A detailed soil analysis was carried out by Dr. R. Shiel and Mr. M. Slater of Newcastle University, in order to understand ‘how the soils on the terraces had formed, how they had been utilized and how they compared to the natural soils on the surrounding slopes’ (ASUD, 2000, 12). This work showed that the terraces have
their own distinctive soil types which have evolved as a result of the terrace building and subsequent agricultural activity. Elsewhere on the slopes, soils were leached and podsolized but on the terraces the soils were less leached and of Colluvial Brown Earth type.

The A horizon of the terrace spoils seems to have been produced by soil movement from up slope of the terracing, tying in with the ideas expressed above that terrace construction may have been an attempt to slow down the process of soil erosion. A horizon material also appeared to be well mixed, probably due to agricultural activity (ASUD, 2000, 13).

A major problem here though is the fact that the dating of the terraces and related agricultural activity is difficult and further dates from meaningful, sealed archaeological contexts are needed before firm conclusions can be reached (ASUD, 2000, 25). This is a point that is pursued further below.

Further, project based, soil work has been undertaken by Clogg and Ferrell. They have carried out geo-chemical survey, measuring soil phosphate content at a range of sites within the NNP (1991, 43 – 50). As stated above, the aim of the research is to ‘examine the potential of the elemental analysis of soils in the investigation of areas of upland archaeological activity with particular reference to farming practices on prehistoric settlements’ (Clogg and Ferrell, 1991, 43). Their published results from Woolaw, suggest that the technique may be useful but we await further corroborative data.

**Fluvial Geomorphology**

The Tyne Basin catchment area has been studied intensively and it now has the most comprehensibly investigated and well-dated published record of Holocene fluvial activity in Britain. Eleven reaches of the basin have been mapped, cored and dated from the period 6000 cal BC to the present. Several phases of river incision and alluviation have been documented and these would seem to correspond to climatic shifts to cooler and wetter climatic conditions at: 5000-4000 cal BC; 1400 – 500 cal. BC; 80 – 540 cal. AD; 950 – 1100 cal. AD; 1350 cal AD and 1750 cal. AD. Research has shown that river response to climate change varied markedly in different parts of the basin (Macklin, 1999, 526).
Within the National Park, in the middle reaches of the North Tyne, a 0.5 km reach of the river has been studied at Snabdaugh, some six kilometers west of Bellingham. This part of the valley has a catchment area of c. 429 square kilometers. Six river terrace levels have been identified in this area (Passmore and Macklin, 1997, 20; Passmore 1994, Fig 2.5).

In the late Pleistocene and Early Holocene this part of the valley was characterized by fluvial entrenchment and the formation of a late Pleistocene terrace that still survives some 5-6m. above the present channel bed. As Passmore and Macklin have highlighted there is great potential for the preservation of multi period archaeological remains on terrace deposits of this age (Passmore and Macklin, 1997, 20). In the Postglacial period, down-cutting and lateral erosion, in association with periodic episodes of alluviation saw the formation of a series of terraces dated between the late Pleistocene and c. 4860 BC (T2), c. 3800 – 1500 BC (T3) and c. 750 – 1260 AD (T4). Passmore and Macklin believe that these may have truncated and reworked Holocene and earlier alluvial fills and associated archaeological features and artifacts (1997, 20).

The complexity of riverine activity in the Snabdaugh area can be seen in the following quotation from Passmore and Macklin’s work:

> Fluvial activity during and after the Medieval period has, however, in marked contrast to that in valleys of the south Tyne, been characterized by limited lateral channel migration and a net tendency towards alluviation of the valley floor. In particular development of terrace T5 between c. 1350 – 1600AD and extending possibly as late as the early 19th century, appears to have been concurrent with widespread overbank alluviation of fine-grained sediments that locally buried earlier T4 surfaces (Fig. 2.5). Subsequent alluviation of T6 sediments during and after the mid 19th century has, in contrast been confined to a narrow zone adjacent to the course of the present river.

(1997, 21)

What this means is that alluviation during the latter part of the Holocene has almost certainly covered Iron Age and later archaeological surfaces and has probably ensured the preservation of organic rich river channel in-fills and some buried soils.
The channels in this area have preserved timber with tool marks, that has been dated to c. 760 – 210 BC (Passmore, 1994) and also pollen and plant remains that have a very high potential value for palaeo-environmental reconstruction (see Moores, 1998, 98 – 162 and discussion above). Moores has significantly advanced the work of Passmore and Macklin in this area of the North Tyne basin.

Most recently a similar programme of geomorphological mapping has taken place in the Milfield Basin, just to the North east of the NNP (Passmore et. al., 2002). Here again a series of different landforms of varying age has been recognized and recorded.

As the research in both the North Tyne Basin and the Milfield Basin indicates this approach to the study of the riverine environment has great potential for allowing the integration of both archaeological and palaeo-environmental information. The identification of infilled palaeochannels offers great opportunities for lowland based palynological research (see Moores, 1998) that should complement the ‘traditional’ upland pollen work that everyone is familiar with. There are several areas of river valley within the Park area that might yield fruitful results if they were tackled in a similar way (see below).
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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 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 prehistory, based upon fieldwork and excavation programmes carried out on numerous 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

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 archaeology-related 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 Filpope 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 Waddington, 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. 4000 bc 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-Neolithic 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 Nolithic 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 these 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.
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(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 revisited 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 multivallate, 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).
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
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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 Thirloom 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 shamans, 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 chief's, 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.
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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 Cheviots and 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.
DISCOVERING OUR HILLFORT HERITAGE *Iain Hedley and Steven Speak*

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.

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<tr>
<th>Site name</th>
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<td>Brough Law</td>
<td>NT 91 NE 29</td>
<td>NT 9985 1635</td>
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<td>NT 9256 0782</td>
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<td>Campville</td>
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<td>NT 9478 0251</td>
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<td>Castle Hill, Alnham</td>
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<td>NT 9800 1094</td>
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<td>Greaves Ash</td>
<td>NT 91 NE 1</td>
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<td>Harbottle Castle</td>
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<td>Harehaugh</td>
<td>NY 99 NE 6</td>
<td>NY 9695 9980</td>
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Table 1 – Hillforts by Alphabetical Listing

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.

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Table 2 – Hillfort Plans

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

Camp Knowe, Castle Hill Alwinton, Fawcett Shank, St Gregory's Hill, Hill, Little Hedha, 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

(NB. 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).

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, 1939) 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 Knoue (Burgess, unpub.), Yeavering (Hope-Taylor, 1977) and at Harehaugh (small excavation to study damage only; Waddington et al., 1997).
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OUTLINE HISTORY OF PREVIOUS ARCHAEOLOGICAL RESEARCH IN NORTHUMBERLAND AND NORTHUMBERLAND NATIONAL PARK.

Introduction
Any discussion of the Roman archaeology of the Northumberland National Park is dominated to a certain extent by the World Heritage site of Hadrian’s Wall. The present document will not deal with the area of the World Heritage Site as it has recently been the subject of an English Heritage Management Plan and a Research Agenda and Framework is being specifically devised for it by a wide ranging group of partners led by English Heritage.

The area to the north of the Wall, which includes most of the National Park, has often been ignored when detailed discussions of the impact of Rome have been written, yet there was arguably as much ‘action’ here in the Roman period as in the areas to the south of the Wall. By AD 79 the Roman governor, Agricola had advanced probably as far as the Tay and he may have built Dere Street which cuts through the central section of the National Park. In AD 83 he defeated the northern tribes at the battle of Mons Graupius and a whole chain of forts and a road system was constructed up the eastern side of the country as far as the southern Highlands, with forts at the mouths of most of the major glens. By AD 90, however, all of the installations north of the Forth-Clyde line were evacuated and abandoned and the army would have again marched through the Park area on its move back to the line of the Stanegate, the road built through the Tyne gap to link Corbridge with Carlisle. After AD 122 Hadrian’s Wall consolidated the ‘frontier’ until AD 139 when Antoninus Pius, who succeeded Hadrian as emperor, decided on a campaign into Scotland which culminated in the construction of the turf built ‘Antonine Wall’ on the Forth-Clyde line around AD142. By AD 169 this ‘frontier’ too had been abandoned and the army had again pulled back to Hadrian’s Wall.

With the visit of the emperor Septimius Severus to Britain in 208AD a further Scottish campaign was planned and the armies again marched up Dere Street. This campaign was brought to a close when the emperor himself died at York in AD 211 and again the Hadrian’s Wall line was returned to. Here the ‘frontier’ line remained until the Roman withdrawal in the fifth century AD (AD 410 and the Rescript of Honorius) (Welfare, 1992, 36-42).
Thus the area to the north of the Wall was a bit like a beach, a liminal zone, ‘betwixt and between’, repeatedly washed over by the ebb and flow of the military campaigns. We should also not forget that the area of the Wall itself may have been overrun by incursions of ‘barbarians’ from the northern regions on at least two occasions - first in the 180s and then again in the Barbarian Conspiracy of AD 367 (Welfare, 1992, 36-42). We should not underestimate the effects of all of these activities on the indigenous communities in the region and on their relations with the Roman colonizers. Did the ease with which the Roman army was able to move through the area between the Tyne-Solway and the Forth-Clyde lines imply a compliant native community? Many of these changes of tactics and plans must have left some lasting imprint in both the military and non-military archaeological record north of the Wall.

As a result, and for ease of study and discussion, this paper concentrates on the archaeology of the Roman period beyond the Wall area, and this has been simply divided into military archaeology and ‘native’/civilian aspects. In reality, however, this division is a simplistic one, but will suffice for the purpose of this review.

**Military Archaeology**

Given the chain of events outlined above it is surprising how little research has been carried out on the military sites beyond the Wall. In this section we deal with Roman Forts, Temporary/Marching Camps and Roman Roads.

**Roman Forts**


The nineteenth century excavations tended to concentrate on the internal buildings. Richmond’s excavations concentrated on the NW angle of the fort defences, the area west of the north gate, the west gate itself and the internal area of the fort on its NW side (1936). Beryl Charlton’s work was carried out along the lines of the internal roads in advance of service pipe laying in 1981, and Crow’s programme of research,
on behalf of the NNPA, has examined various aspects of the fort’s archaeology, using a variety of ‘state of the art’ geophysical prospection techniques. The following extract from the county SMR gives a concise summary of the nature of his work:

‘First season of survey and excavation carried out by Department of Archaeology, Newcastle University under direction of Jim Crow, in summer 1992. An outline plan of the fort was prepared at 1:500 scale recording the fort platform and all modern buildings within. The earthworks on the south side of the fort wall were also surveyed at 1:500. A vernacular building survey was carried out on the Bastle and Rose Cottage. Structural recording of the west wall of the fort was done through elevation drawings and rectified photography. Also recorded were the north-west angle, the west gate, the collapsed curtain at the south interval tower and two sections of curtain near the south-west angle; drawings made at 1:20. Limited excavation to assess the need for consolidation was carried out at the north-west angle. Two areas were investigated by geophysical survey - the south exterior of the fort and the west side of exterior.

A second season of work was undertaken by the Department of Archaeology, Newcastle University in June 1993. A plane table survey at 1:500 scale was carried out on the earthworks outside the fort between the site of the east gate and the north-west angle. The agger of Dere Street was noted to the east of the north-east angle, running in a north-westerly direction to a known crossing of the Sills Burn. Structural recording concentrated on the south curtain, in particular the exposed west interval tower, using rectified photography and elevation drawings. ……….. Two decorated building stones were noted - a merlon cap stone and a decorated monolithic window head.

A limited excavation was carried out at the north-west angle to investigate the area excavated by Richmond in 1935. The line of the curtain wall in the west farm gate was revealed by vehicle erosion over the winter of 1992/3. Two or three facing blocks were exposed and badly damaged by farm vehicles in the summer of 1993. Geophysical survey continued in 1993 with two areas investigated, i) the field west of the fort, partly examined in 1992; and ii) part of the fort interior, including a sample area previously excavated in the 19th century, and the site of the headquarters building and the Lambing Garth.
A third season of surveying and recording took place in June 1994 by Newcastle University and GeoQuest Associates. In 1994 attention was focused to the east of the fort. A small excavation investigated the line of a field drain cut across Dere Street; topographical survey continued to the east and north of the fort; and geophysical survey investigated the field immediately to the east, known as the 'Square field', and sampled the south end of the adjacent field to the south called 'the Bogs'. Within the fort the ruined buildings in the north quarter were recorded. Dere Street was examined at a point 35m east of the fort and three main road surfaces were recognised with estimated widths of 7.4m, 9m and 6.5m (earliest to latest (after c.AD165?)). The alignment of Dere Street was confirmed by resistivity and magnetometer surveys in the 'Square Field' showing the clear line of road-side ditches set 12m apart.

Fieldwalking of 'the Bogs' revealed Dere Street as a spread of stones, confirming that the road is being damaged by ploughing. The junctions of two branch roads were also seen in the resistivity survey, one towards Holystone and one running west to the east gate of the fort. Geophysical survey of the south-east angle of the fort revealed that four ditches existed outside the fort. Two areas of firing - bread ovens, pottery kilns or corn drying kilns - were also identified between the fort defences and Dere Street, none have so far been found within the fort.

The South Interval Tower was consolidated in 1994 after the removal of an ash tree in 1993 and recording of the stonework. Stonework had been further displaced by sheep in winter 1993-94 and stone masons from Arbeia Roman Fort (South Shields) carried out the consolidation. Work was observed by an archaeologist who identified Roman pottery within the blocking stonework. The pottery comprised 3rd century samian, and mortaria, and a possible local orange fabric.

Phase four of the project took place in 1995. This comprised geophysical survey that relocated the line of the aqueduct from Petty Knowes towards the south gate of the fort. The line of Dere Street was also investigated along with associated features to the south east of the fort and a rectilinear features south west of the fort which may have been a temple or shrine. A ground radar survey of selected areas around the fort confirmed the presence of an enclosure partially underlying the fort to the west. This had previously been located by geophysical survey and suggests the fort was built on the site of an earlier defended enclosure. Ground radar also surveyed the fort ditches, the annexe, Dere Street and the vicus. Excavation was targeted at the results of
geophysical survey results from 1994 in the area of the vicus along Dere Street. Three trenches were opened and the largest demonstrated that significant structural features survive within as little as 0.15m below the present ground surface. A comprehensive documentary survey of post-Roman occupation was carried out detailing the history of the site from the first documented habitation in 1552.

The 1996 season continued the location and evaluation of features found by geophysical survey. The rampart and ditch of the Flavian annexe in the west field were located. Also found was a stone-lined drain and features associated with later occupation in this area. East of the fort, possible traces of earlier roads and occupation were investigated. A predecessor of Dere Street may have been located to the east of the current alignment and over 0.5m below it. To the south of the fort the area previously tentatively suggested as a bath house or Mithräum was excavated but, apart from field drains, the results were inconclusive.

To the east of the fort, a programme of ground penetrating radar survey has revealed the profile of multiple ditches; they showed a distinctive 'W' profile. Augering in the area of the possible Iron Age enclosure below the west annexe of the fort suggested a manmade feature rather than a geological anomaly as argued by geophysics.

In 1997 attention was focused on testing the results of the 1996 work which showed it was possible to integrate the 19th century plan of the site with the modern survey of the structural remains and topography. This was carried out by means of limited excavations on two areas within the fort: 1) the south east corner of the headquarters building and 2) the south angle tower west of the south gate; and also served to validate results of ground penetrating radar survey at the south east angle of the fort. It was found that it is not possible to apply a uniform correction to integrate the plans and that the maximum divergence was in the region of 1.5m.’

(Northumberland County SMR).
Temporary/Marching Camps, Semi-Permanent Camps and Permanent Fortlets

Within the Park area there are 17 recorded Roman military camps of the sort highlighted in the heading above, with the one at West Woodburn lying just outside of the Park boundary. These are listed in the table below.

<table>
<thead>
<tr>
<th>SITE NAME</th>
<th>N.GRID REF.</th>
<th>EXCAVATED Y/N</th>
<th>REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bagraw</td>
<td>NY 84999650</td>
<td>N</td>
<td>Maclauchlan, 1852, 29; Richmond, 1940, 120; Welfare and Swann, 1995, 72 – 73.</td>
</tr>
<tr>
<td>Temp/Marching Camp</td>
<td>NY81859985</td>
<td>Y</td>
<td>Maclauchlan, 1852, 36; Colingwood and Richmond, 1969, 13; Welfare and Swan, 1995, 75-77</td>
</tr>
<tr>
<td>Bellshiel</td>
<td>NY80679883</td>
<td>Y</td>
<td>Maclauchlan, 1852, 35; 1864, 64, sheet v; Richmond, 1940, 122, fig. 33; St. Joseph, 1933-34, 239-240; 1935, 240; Welfare and Swann, 1995, 77-79</td>
</tr>
<tr>
<td>Dargues</td>
<td>NY86009376</td>
<td>N</td>
<td>Maclauchlan, 1852, 29 – 30, map 5;</td>
</tr>
</tbody>
</table>
An Archaeological Research Framework for Northumberland National Park

<table>
<thead>
<tr>
<th>Camp</th>
<th>Coordinates</th>
<th>Temp/Marching Camp</th>
<th>References</th>
</tr>
</thead>
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<tr>
<td>Temp/Marching Camp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Yardhope</td>
<td>NT 90890091</td>
<td>N</td>
<td>Welfare and Swann, 1995, 119 – 120.</td>
</tr>
<tr>
<td>Temp/Marching Camp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silloans</td>
<td>NT 82210068</td>
<td>N</td>
<td>Richmond and St. Joseph, 1941; Welfare and Swann, 1995, 123-125</td>
</tr>
<tr>
<td>Temp/Marching Camp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sillsburn North</td>
<td>NT82540006</td>
<td>N</td>
<td>Welfare and Swann, 1995, 125-127</td>
</tr>
<tr>
<td>Temp/Marching Camp</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Temp/Marching Camp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Woodburn</td>
<td>NY89578742</td>
<td>N</td>
<td>Welfare and Swann, 1995, 133 - 134</td>
</tr>
<tr>
<td>Temp/Marching Camp</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The earliest surviving record of any of these sites was made in 1752 when an anonymous surveyor produced the first recorded drawing of the Chew Green camps (Macdonald, 1917, 167-168). This was followed by General William Roy’s survey in the 1770s, included in his ‘The Military Antiquities of the Romans in North Britain’ (Roy, 1793; Macdonald, 1917, 202, 215 – 216). It was almost another sixty years before the Duke of Northumberland’s Surveyor, Henry Maclauchlan, carried out further work on any of the sites listed, recording the camps at Bagraw, (Maclauchlan,
1852, 32) Birdhope, (Maclauchlan, 1852, 35), Bellshiels, (Maclauchlan, 1852, 36), Dargues, (Maclauchlan, 1852, 29–30) and Featherwood West (Maclauchlan, 1852a, 39; 1852b, pl. vi). Since that time, all of the camps and fortlets have been examined by the former Royal Commission on the Historical Monuments of England (now English Heritage) as part of a national review of Roman Camps that resulted in the publication of Welfare and Swan’s ‘Roman Camps in England: The Field Archaeology’ in 1995.

Very little excavation has been carried out on any of the camps in the Park area. In the 1930s J.K.St. Joseph sectioned a rampart at Birdhope Camp 2 and showed it to be constructed of turf (St. Joseph, 1935). Similarly Richmond and Keeney carried out trial trenching work at Chew Green in 1936 (Richmond and Keeney, 1937). Most recently Clive Waddington recorded a section through the bank of the Sills Burn South camp that had been produced by natural erosion (Waddington, 1993) and in 1995 the Archaeological Practice from Newcastle University carried out a geophysical survey and archaeological evaluation at the Bellshiels camp as part of the OTA ‘Options for Change’ exercise (NUAP and LUAU, 1996). In 2002 further work was carried out at Bellshiels by ASUD in advance of road widening as part of the ongoing ‘AS90 Project’.

**Roman Roads**

Within the area of the Northumberland National Park north of the Wall, only two Roman roads are known; the main north-south route-way of Dere Street and a branch road from it that runs from the High Rochester fort, via Coquetdale and Whittingham Vale eastwards to meet the so-called Devil’s Causeway at Low Learchild. (The Devil’s Causeway branches off Dere Street to the north of Corbridge. It runs up the eastern side of the county and is thought to have headed for an as yet unlocated fort/harbour, possibly at Berwick or Tweedmouth).

Dere Street ran northwards from the centre of the Roman military command in the region, at York. From Corbridge it passed through Hadrian’s Wall at Portgate and its course is now followed most of the way to High Rochester by the modern A68. From High Rochester, Dere Street runs along the valley of the Sills Burn, over Foulplay Head to the western shoulder of Thirlmoor. From here it passes the camps and fortlets at Chew Green, rising up to 480m. O.D. on top of Brownhart Law. After this it runs
N.N.W. to the fort at Elginhaugh near Dalkeith and then on to the Antonine Wall (Welfare, 1992, 42-43).

As with all other aspects of Roman archaeology beyond the Wall, little work has been done on these roads. The earliest detailed survey of Dere Street (or Watling Street as it was known in the nineteenth century) was carried out by Henry Maclauchlin for the Duke of Northumberland in the period 1850 – 51 (Maclauchlin, 1852a; 1852b). Maclauchlin also produced a detailed survey of the Devil’s Causeway, which he began in 1857 and completed in 1859. This latter work included an account of the High Rochester/Whittingham branch road (Maclauchlin, 1864a; 1864 b).

All of the north’s Roman roads were re-examined in some detail in the 1960s and 70s by Ivan Margary for the publication of his *Roman Roads in Britain* (1973). He discusses the section of Dere Street within the Park in detail (1973, 484) but his interpretation of the line and condition of the road has been queried (NUAP, 1996, 12).

In the Otterburn Training area in the mid 1940s a modern road was built through the ranges from Redesdale Camp. This followed the course of Dere Street up the Sills Burn, and Ian Richmond commented on the work carried out between Foulplay Head and Harden Edge in 1945, describing the Roman road as a 28 feet wide, 3 feet high, bank or agger made of clay, surfaced with broken shale (Richmond, 1948, 103 – 117).

In the 1970s, re-cutting of the ditches of the military road revealed the metalling of Dere Street in several places (NUAP, 1996b, 26), and more recently in the 1990s work by Newcastle University Dept. of Archaeology in connection with the Bremenium (High Rochester) Research Project, has seen four sections cut through Dere Street (Crow, 1993; 1995). In the autumn of 1995, The Archaeological Practice at Newcastle University and the Archaeology Unit of Lancaster University carried out a joint archaeological assessment of various areas of the Otterburn Range as part of the ‘Options for Change’ Programme (NUAP and LUAU, 1996). This entailed detailed survey and excavation work in the Dere Street corridor between NY825 995 and NT 805 075, around the Featherwood area. Geophysical survey and test excavation proved the line of the road and the nature of its makeup in several places (NUAP and LUAU, 1996, 27 – 32). In 2002 a further section was cut across Dere
Street near the Silloans Temporary Camp by staff from ASUD as part of the on-going work relating to infra structural changes on the range in the light of the deployment of the AS90 gun (ASUD, Forthcoming).

The High Rochester/Whittingham branch road was studied by Richmond and Askew in 1936 (Richmond and Askew, 1939) and it was excavated in 1936 by Hunter Blair (Richmond and Askew, 1939, 51-53). This excavation took the form of a section across the line of the road to the west of Holystone. In 1992, again as part of the High Rochester Archaeological Project, geophysical prospection was undertaken to the south east of the fort (Crow, 1993). This survey showed the branch road joining Dere Street some 100m south of the fort’s eastern entrance (Geoquest, 1994, 5). This work would seem to confirm Maclauchlan’s 1864 observation that ‘about 110 yards to the south of the junction of the Watling Street with the eastern entrance (of the fort), a Roman way appears to have branched off to the eastward’ (1864, 48) (NUAP and LUAU, 1996, 33). The NUAP and LUAU joint project located the line of the road to the west of the modern Yatesfield/Stewartshiel road and also to the west of the Dudlees/Davyshiel road, near the military airstrip (NUAP and LUAU, 1996, 33 – 35).

‘Native’/Civilian Archaeology
In this section we deal with settlement sites of various forms which have no seeming military connections, and also with religious sites.

Settlement Sites
The study of Roman native/civilian settlement archaeology in the north of England, generally, has been dogged by problems of archaeologists’ own making. In the past, simplistic assumptions have been made about settlement morphology and chronology (Young, 1987). That said, George Jobey’s initial observations on settlement morphology, distribution and development still have much to recommend them, especially given the dearth of modern excavation data from the northern region generally.

Rectilinear Settlements
In 1960 Jobey produced a review of what he termed Rectilinear Settlements of the Roman Period in Northumberland (1960). These were a group of settlement types of markedly similar morphology, spreading across the eight miles or so of countryside between the Wall and the Rede confluence and extending up into Redesdale proper.
and along the North Tyne valley. They consist almost invariably of a rectilinear stone or earth built perimeter, often accompanied by an exterior ditch. The single entrance gives access to a raised causeway that runs between sunken yards on either side to an elevated section at the rear of the enclosure. Here between two and five stone-built circular huts can usually be found (Jobey, 1960, 10).

He proposed the following classification scheme, based on field observation:

**Category A:** these sites have all of the characteristics listed in the paragraph above.

**Category B:** ‘Rectangular and sub-rectangular stone enclosures which contain circular stone huts and sometimes enclosed courts but do not fit easily within the above category. In plan they vary as between the rather irregular outline at Milking Gap, a site certainly occupied in the early Roman period, and the clearly co-ordinated planning at Tower Tye……it seems reasonable to regard these particular settlements as belonging to the Roman period’ (1960, 32-33)

**Category C:** ‘Homesteads consisting of one or possibly two circular stone huts within a rectangular enclosure. They appear to be no larger than would accommodate a single family, and sometimes possess a slightly scooped forecourt. They come very close to the Crock Cleugh type of homestead in the Cheviot area and S. Scotland.’ (Jobey, 1960, 33)

**Category D:** ‘Multiple ditched rectangular sites of which only two are known at the moment in the county. These are at Manside Cross and Ewsley Fell Plantation. …… Their context is not certain, and defences might be taken to point to a pre- or post-Roman date. On the other hand a date in the Roman period is conceivable…’ (Jobey, 1960, 33)

After this the classification deals with moated farms and other sites that are probably of post-Roman/Medieval date (Jobey, 1960, 33-34).

In 1960, Jobey believed that these settlements were all of Romano-British date and certainly no later than the second century AD. At this time only West Gunnar Peak, Carry House, Bridge House, West Longlee and Riding Wood had seen any excavation (1960, 24). As Burgess has highlighted (1984, 164 – 166), Jobey’s excavations in North Tynedale, just outside the Park boundary, in advance of the construction of the Kielder Reservoir, upset this fairly straightforward view of the dating of rectilinear settlements. In the period 1972 – 1976, Jobey excavated sites at Tower Knowe,
Belling Law and Kennel Hall Knowe, all of which work demonstrated the existence of timber construction phases beneath the stone built rectilinear forms (Jobey, 1973a, 1977b, 1978b). Associated radio-carbon dates from Belling Law and Kennel Hall Knowe ‘leave little doubt that rectilinear stockaded farmsteads were established well before the arrival of Roman rule’ (Burgess, 1984, 164).

The Redesdale area also contains settlements of curvilinear form, similar to those identified by Jobey as being specifically of ‘Cheviot’ type. Burgess has argued that this area, within the National Park, was an interface zone where the two forms of settlement overlapped. He has also suggested that the supposed differences between Cheviot and North Tyne type settlements has been overstated in the past (1984, 166).

Two morphologically distinct, settlement types have been identified in the Cheviots and the northern hills:

**Scooped Settlements**

In 1962 Jobey first discussed the appearance in the area of what have become known as ‘scooped’ settlements. These are defined as ‘walled enclosures, generally lying in non-defensive positions on sloping hillsides, containing a number of oval or circular scooped floors separated by walls or unexcavated ridges’ (Jobey, 1962, 47). They are found in greatest numbers over the border in Scotland and initially it was thought that they were of medieval origin. Jobey’s review, however, and subsequent work in Scotland and Northumberland has shown that they belong in a general late Iron Age /Romano-British context (Jobey, 1962; Feachem, 1964; Burgess, 1970) and that they may well have been re-used in the medieval period (Burgess, 1984, 167).

**Enclosed Stone-Built Settlements of ‘Cheviot’ Type**

Jobey’s 1964 account of this type of site, lists over 90 examples, most of which lie within the boundaries of the National Park (Jobey, 1964, 63 – 64). They consist of circular or oval enclosures ‘or in final form… irregularly shaped agglomerations of stone huts and courtyards’ (Jobey, 1964, 42). He noted that the ‘homestead unit’ of one or two huts lying within the enclosure wall ‘is not found frequently in complete isolation, but generally forms part of a larger group’ (1964, 42) and that in some locations larger ‘villages’ have evolved ‘by way of a collection of smaller units in close proximity to each other though not in physical contact, or by the addition of
extra cells to an original nucleus....’ (1964, 44). The best example of this is the settlement at Greaves Ash.

When Jobey was writing none of the sites under discussion had been subjected to excavation since the nineteenth century – and the situation has not changed today. Dateable finds were few and several had been lost by the time Jobey began his work, however he was confident of a Romano-British date, citing possible fourth century coarse pottery from Worm Law and fragments of glass armlet or pendants from Swint Law and Greaves Ash in support of this hypothesis. Rotary querns of possible first or second century date were also recovered from Earle Whin and Pike House (Jobey, 1964, 58 – 59).

In 1984 Colin Burgess suggested that the distinction between scooped settlements and ‘Cheviot’ type settlements might well be more apparent than real. He noted the fact that the ‘Cheviot’ type settlements occurred on both sides of the Anglo-Scottish border and that the scooped settlements were largely a phenomenon of Scotland, with only a few stragglers coming over into Northumberland (1984, 166). A distribution map of the two types, he argued (see Jobey, 1966, fig. 8):

contributes to the suspicion that here one is dealing essentially with the same monuments given different names by two different survey units operating on the two sides of the Border……...and there seems every chance that a classic Northumberland Cheviot settlement with deeply scooped building stances, such as Haystack Hill (Jobey, 1964, fig. 10), on the other side of the Border, with different surveyors could have emerged on paper as a scooped settlement.

(1984, 166).

This is an interesting observation and he furthers his argument by reference to the settlement complex on Coldberry Hill, where a Cheviot style settlement and adjoining scooped enclosure are integrated in a well-preserved patch of ancient landscape with its own tracks and field boundaries. ‘Here the scooped enclosure had to be scooped because it was deliberately sited backed into a steep hill-slope, whereas the nearby Cheviot settlement was placed on more level ground’ (1984, 166 – 167). His excavation of the supposed scooped site at Hetha Burn has contributed much to our understanding of these sites (Burgess, 1970; 1984, 167 – 171) (see below).
In 1997, at the instigation of The Northumberland National Park Authority, an archaeological survey and historical assessment of the Greaves Ash site was carried out by Tyne and Wear Museums Service. This contained a comprehensive review of previous work on the site and a new survey of the earthworks (Stobbs and Speak, 1997).

**Religious/Burial Sites**

Beyond the area of the Wall, religious and burial sites are a rare occurrence. In 1980 a Romano-Celtic temple to the god Cocidius was discovered near Yardhope and excavated in the same year (Charlton, 1996, 34; Charlton and Mitcheson, 1983), and two years before its discovery, the Romano-British cremation cemetery at Petty Knowes near High Rochester fort was also excavated.

In 1850, the Duke of Northumberland’s land agent, William Coulson, had excavated four masonry-built tombs in the area, including the one surviving monumental stone structure (Charlton and Mitcheson, 1984, 1). The cemetery lies a mere 400m south of the Roman Fort, to the west of Dere Street, and the main area of activity consists of some 75 barrows indicated by low grass covered mounds. Overall some 93 potential burial sites have been recorded (Charlton and Mitcheson, 1984). One fifth of the cemetery was excavated between 1978 and 1979.
Military Archaeology

Roman Forts

As outlined above there has been much recent work at the fort site of Bremenium (High Rochester). Our knowledge of the fort’s development and ultimate demise, however, really comes from the nineteenth century and early twentieth century excavations at the site. As Casey and Savage have pointed out the 1852 and 1855 excavations have produced the largest number of coins from any military site north of the Wall (1980, 75) and their importance will be returned to below.

The nineteenth century work in conjunction with Richmond’s 1935 excavation has produced a sequence of rampart development that still stands today. The original fort was of Agricolan date (AD78-85) and consisted of a simple ditch and rampart. This was later demolished and replaced by a larger rampart and multiple ditch system. Richmond believed that the lack of Hadrianic pottery from the interior ‘may be taken to confirm the impression conveyed by the inscription of Lollius Urbicus, that the second period of activity at High Rochester, as at Corbridge, coincided with the Antonine occupation of Scotland (1936, 180). Thus, in the Antonine period (AD 139-late 2nd century) the fort was rebuilt with a rubble wall with a clay rampart at the back of it. Richmond’s excavations found an intra-vallum road and barrack block of a similar date in the NW corner of the site (1936).

With the Severan period (late second - early 3rd century), the original defences seem to have been completely leveled and a brand new fort wall was constructed. Most of the internal buildings excavated in the nineteenth century seem to have dated from this time. The final phase of activity at the site, Richmond believed, related to the reign of Constantius Chlorus, the father of Constantine the Great (c. pre AD 306 when Constantius died at York) (1936, 182-183). Casey and Savage’s re-examination of the coin list from all of the excavations at High Rochester (1980, 75-87) has suggested that this date for the final re-building of the fort is by no means clearly proven. Indeed they would suggest that ‘the date of the latest building phase at High Rochester is
quite unknown beyond the fact that it is later than the middle of the third century (1980, 78). As to the date of the final abandonment of the fort they suggest that this might have occurred in the period AD 294 – 317 and more specifically around AD 314 (1980, 79).

**Temporary/Marching Camps, Semi-Permanent Camps and Permanent Fortlets.** Information derived from excavations on these sites is extremely limited, and most of our current knowledge comes from detailed landscape and aerial survey. Several anomalies have been identified in terms of the morphology of the sites under study. At Bagraw for example, the earthworks consist of two distinct elements set end to end. This has been interpreted as indicating the possibility ‘that the S part of the earthworks played a subsidiary role, forming an annexe to a contemporary or slightly earlier camp to the N, the semi-permanent status of which may be indicated by its quasi-axial roadway’ (Welfare and Swan, 1995, 72-74, Fig. 59).

At Bellshiel, recent excavations have been carried out by ASUD as part of the ‘Options for Change’ programme linked to the development of the AS90 gun on the Otterburn range. They have demonstrated the ephemeral nature of the camp’s bank and give some indication of a slight rock-cut ditch at the SW corner. The camps interior is covered with rig and furrow ploughing and also with Medieval/post-Medieval field boundaries. Several bell pits are also visible in the interior and the up-cast from one of these was sectioned during the recent excavations. No dating evidence relating to the Roman features was recorded in the course of this work (Welfare and Swan, 76, Fig. 61).

The camps at Birdhope, in the valley of the Sills Burn, are also anomalous in that the three of them overlie each other. They are also only 350m WNW of the Fort at High Rochester. Camp 1, potentially the earliest of the three, appears to be overlain by Roman mausolea (which may be an extension of the Petty Knowes cemetery) as well as later coal workings (Welfare and Swan, 1995, 78, Fig. 62). Camp 2, which is the best preserved, has four gates, each protected by a traverse and Camp 3, the SW corner of which is only just visible on the ground, seems to lie beneath it.

The problems caused by super-imposition are brought into sharp focus at Chew Green. Here four certain military structures are visible (Welfare and Swan, 1995, 87,
Fig. 70; 89, Fig. 71) at a height of some 442 m OD to the west of the line of Dere Street as it pushes northwards over Brownhart Law into Scotland. The numbering system devised by Richmond and Keeney in the course of their 1936 excavations on the site have been retained in what follows (Richmond and Keeney, 1937). A detailed discussion of the implications of the excavations and subsequent work can be found in Welfare and Swan’s study of ‘Roman Camps in England’ (1995, 85 – 90).

Two marching camps (I and III) were identified as potentially the earliest features at Chew Green, Camp I possibly cut by the defences of Camp III. Richmond and Keeney sectioned the defences of Camp I just to the SE of the SW gate. Here they demonstrated that the mound of the bank was derived from a ditch some 2.5m wide and 1.1m deep. The main rampart was some 3.0m wide and laid out on a foundation of turf. It had a low, forward, retaining kerb and a rear capping, both in turf and this retained the core of the rampart, which was made of rock brash (Welfare and Swan, 1995, 86; Richmond and Keeney, 1937, 133 – 134, Fig 1). They also examined the SW gate itself, producing evidence for an internal, turf-built, clavicula, and they placed a section at the NE junction of Camps I and III, demonstrating that Camp III was the secondary feature. On this eastern side of the site the earthworks of both marching camps are overlain by medieval enclosures.

The defences of Camp III were also sectioned by Richmond and Keeney, just to the SE of the NE junction between the two camps. Here the ditch was v-shaped and some 2.3m wide and c. 0.9m deep. As with the earlier work on Camp I, the rampart was of rock brash retained by turf-built kerbs (Richmond and Keeney, 1937, 135 – 137; Welfare and Swan, 1995, 88). Camp III seems to have faced SE and its main gate seems to open almost direct onto the fort IV. Both Camp III and Fort IV are later than Camp I.

The so-called Fort (IV) was excavated to reveal that the SW and NW gates had originally been defended by internal claviculae, but that these had been replaced by external traverses. Welfare and Swan (1995, 88) suggest that this implies that the fort was re-occupied. It also has at least two roads within it and a range of rectangular pits that were interpreted as shelters for officer’s accommodation (Richmond and Keeney, 1937, 138-139). It is thought that Fort IV post-dates Camp I and pre-dates Fortlet V.
The latter site is square in plan and possesses a complex triple system of banks and ditches which is not continuous around its whole circuit. It has a single gate on its NE side and seems to have two annexes to the SE. Excavations within the fortlet revealed ‘a single well-defined occupation layer, containing burnt wood and covered in places with wattle and daub; much broken rubble also lay about (Richmond and Keeney, 1937, 142). Richmond and Keeney suggest that the internal buildings may have been of half-timber construction, set on rubble sills (1937, 142). Fragments of second century samian pottery were found in association with burnt timbers, as were pieces of a coarse black platter, a fragment of cooking pot with lattice decoration, and further samian fragments, all of which, it was thought, indicated a single period of occupation in the second century, during the Antonine period (Richmond and Keeney, 1937, 143). The triple ditched fortlet also seemed to overly an earlier structure, referred to by Richmond and Keeney as the ‘earlier fortlet’ (1937, 145). This was evidenced by a rock cut V-shaped ditch, filled with much peat.

Welfare and Swan (1995, 88 – 90) discuss the chronology and sequencing of the sites at Chew Green in detail. They also highlight the importance of the location in the history of the Borders region from the Medieval period onwards (1995, 88 – 90). The earliest feature on the site, Camp I may be of Agricolan date, but hard dating evidence is lacking. The Fortlet V may relate to the Antonine push northwards. Undoubtedly the complex was an important one throughout the Roman period, controlling as it does the route and line of Dere Street.

The only other temporary/marching camp in the Park area that has seen excavation work in recent years is the site at Sills Burn South. Here a drainage channel, which passes through the western end of the camp’s northern rampart, was re-cut in 1993. The resulting section was recorded by Clive Waddington of Newcastle University (Waddington, 1985, 39 – 43). On its eastern face the north end of the section showed that the outer camp ditch had a U shaped profile and that it was cut into natural boulder clay to a depth of 1.1m. The full width was not revealed but it is estimated at 4 – 4.5m. The southern end of the section revealed the possible remains of a prehistoric burial cairn with an enclosing ring ditch. On the west face the section showed the base of the rampart and a possible marking out ditch (Waddington, 1985, 39 – 43).
Roman Roads

As highlighted above, our knowledge of Roman roads in the National Park comes mainly from survey, much of which was carried out in the nineteenth and early part of the twentieth century. Excavation on the line of the two roads has done much to elucidate their structure and composition.

Probably the most recent and most important contribution to our knowledge of the Roman road systems came in the 1990s with the University of Newcastle’s research around High Rochester (Crow, 1993, 1995) and the joint UNAP/LUAU project on Dere Street and the High Rochester/Vale of Whittingham spur road (1996).

Crow’s 1992 excavations at High Rochester, which cut across the line of field drains gave a good indication of the nature of the road’s construction. It was revealed to be some 5.40m wide and demarcated on its eastern edge by a kerb of regular stones that was robbed out on the western side. The road surface consisted of a foundation of angular sandstone blocks set in coarse sand. Overlying this was a layer of smaller metalling which was best preserved on the western side of the road. At some point after its construction the road was re-surfaced with a layer of cobbles that narrowed it down to a width of c. 2.50m (Crow, 1993, 9). The 1994 excavations to the west of the fort also revealed information relating to the road’s structure. In Trench A, Dere Street survived as a compact layer of cobbles and flag stones some 6.4m wide. An upper surface of cobbles overlay part of the main road surface. No kerbs were recorded but a possible drain was observed and excavated (Crow, 1995, 5).

The NUAP/LUAU research:

comfirmed the line of Dere street within the evaluation corridor at two locations not previously demonstrated: to the north of Redesdale Camp (at NY82503 99412), where metalling of the Roman road and an attendant ditch to the west were seen in Trenches 1A and B; and to the north of Middle Golden Pot (between NT 810 066 and NT 808 069) where geophysical survey produced intermittent readings of a linear high resistance surface (areas B1 and B2), subsequently
identified by excavation of trench 7 (NT 81039 065180 as road metalling. Slightly less secure is the interpretation of the shallow ditch seen in trench 6 (NT81196 06364) as the eastern drainage ditch of Dere street. Elsewhere along the corridor results were less conclusive’


Further work was carried out by NUAP on the line of Dere Street around Featherwood in 1997. The excavation at NT 818 046 took place in advance of trackway infrastructure development by MOD. The road surface was some 5.5 – 6 m wide and the eastern edge of the surface was well defined by a straight edge of cobbles. The western edge of the surface was difficult to define and the western third of it was very fragmentary. Two ditches were also discovered running in the same alignment as the road surface (NUAP, 1997, 11, Figs 5, 6 and 7).

Hunter Blair’s 1936 excavation on the line of the High Rochester /Whittingham branch road from Dere Street to the Devil’s Causeway, just to the west of Holystone, revealed that the road was made up of:

.. a single layer of large rough cobbles, laid upon clean sand and 22ft 3inches wide. Larger stones were arranged as kerbing at each side, while a rib of heavy stones, laid on edge, ran down the center and projected six or eight inches above the existing surface of the roadway.

(Hunter Blair in Richmond and Askew, 1936, 51 – 53)

The NUAP/LUAU project involved two trenches across the branch road in the area around Stewartshiel farm (1996, Fig. 24). Trench 1 was designed to ‘locate the road and establish its status and character, immediately to the west of the modern Yatesfield/Stewartshiel road’ (1996, 34). The road was located under 0.2m of topsoil and was constructed:

of a single layer of irregularly laid, slabby sandstone blocks, placed directly onto the subsoil with no make-up layer beneath. The road was demarcated on its northern edge by a fairly regular kerb. This feature was almost entirely lost on the southern edge of the road.

(NUAP/LUAU, 1996, 34; Fig 25).
Trench 2 (NUAP/LUAU, 1996, 34; Fig. 25) ‘was designed to locate the road and establish its status and character immediately to the north of the access road to the airstrip and west of the Dudlees/Davyshiel road’. The northern edge of the road was located in this trench and it seemed to be of the same character as the stretch revealed in Trench 1 (1996, 34).

‘Native’/Civilian Archaeology

Settlement Sites

Rectilinear Settlements

George Jobey’s first discussion of this form of settlement site in 1960 was highly instructive, pointing up as it did the wealth of largely unrecognized archaeological sites that could be fitted into this category. Prior to his 1960 paper Jobey had excavated sites at Bridge House, Wark in 1957, Riding Wood, Bellingham in 1958 and West Longlee in 1960 and he also reviewed the data from earlier work at West Gunnar Peak, Ollerchesters, Carry House and Countess Park. What this showed was a recurrent morphology in terms of the nature of the enclosed areas and the internal arrangements of stone built circular huts within them (Jobey, 1960, Figs 3-8).

In terms of the dating of these settlements, Jobey re-assessed the available artifacts from the excavated sites. Some of these such as the sword from Carry House and the fragment of figured samian ware from West Gunnar Peak may have been of first century date. In the main, though, he believed that all of the available Roman coarse pottery pointed to a second century date for settlement occupation. As he said,

… the material shows that an Antonine occupation is certain, and it seems reasonable at this stage to retain the idea of a foundation shortly after AD 138, stimulated by the advance of the military frontier into Scotland, and perhaps administered from the newly sited fort at Risingham. In such a setting these settlements could reflect the contemporary development of farms further to the south albeit probably with less economic intensity.

(1960, 25)

No finds of third century date have been recorded in any of the excavations.
In terms of the economic base of these sites Jobey was convinced that the yard areas indicated an interest in stock rearing. By the same token indirect evidence for grain production and processing came from the recovery of rotary, bun shaped, querns at Riding Wood, West Longlee and Bridge House (1960, 26; 32).

In the years following this seminal paper, Jobey published the results of several excavations carried out in advance of the construction of the Kielder Reservoir (Tower Knowe, Jobey, 1973; Belling Law, Jobey, 1977; Kennell Hall Knowe, Jobey, 1978; Gowanburn River Camp, Jobey and Jobey, 1988). As highlighted above, all four showed evidence for an earlier timber phase of construction beneath the stone features.

At Tower Knowe:

Two main structural phases were present, the first represented by a palisaded enclosure containing two replacement phases of timber-built houses, the second by a stone walled enclosure on the same plan but containing three stone-built houses.

(Jobey, 1973, 55)

Jobey assigned both phases to a Roman context and suggested that the change over from timber construction to the classic stone built rectilinear settlement took place in the mid second century with none of the pottery from this phase suggesting activity beyond the second century (1973, 76-77).

Belling Law produced a complex sequence of settlement activities. It is worth quoting Jobey’s summary in detail here:

In a structural sense the first well-defined occupation consisted of a timber-built rectangular-shaped enclosure of two phases, initially with a perimeter of individual post-hole construction which was later replaced by a continuous support trench for a solid stockade (Fig. 13, phases I and II). A single timber-built house, replaced on at least four occasions, and an associated cobbled area occupied the interior. Almost certainly not before the early second century A.D. this timber built homestead was succeeded by two stone-built round houses, now lying within an enlarged rectangular-shaped enclosure, consisting of an inner wall, ditch and counter-scarp bank. Stone pathways ran from
the east facing entrance across the frontal yard to the doorways of the two houses and the overall plan was very similar to that of most known Romano-British settlements of the area (Fig. 13, Phase III).

(Jobey, 1977, 32)

Radio-carbon dates were available for contexts from Belling Law. A date of 160+/-80 uncal. BC (HAR-1394) was obtained from burnt oak and alder from the wall of House 1 – arguably the earliest structure on the site, while a date of 280+/-70 uncal. AD (HAR-1393) came from one of a series of postholes overlain by a later rectangular stone-built structure in the NW corner of the site (Jobey, 1977, 13, 15).

The site of Kennel Hall Knowe produced ‘four, superimposed, rectangular-shaped enclosures had been established on the site, the first three being entirely timber built and the fourth consisting of the visible ditched and embanked enclosure...’(Jobey, 1978, 6). The first phase of enclosure was stratigraphically earlier than a group of superimposed timber-built houses in Area B of the excavation that yielded a radio-carbon date of 100+/-90 uncal. BC (HAR-1943) (Jobey, 1978, 6). The abandonment of the Phase III enclosure - the final phase of timber construction probably took place not long after 270+/- 80 uncal. AD (HAR-1938) (Jobey, 1978, 9).

In Area B of the excavation, House 3, which may relate to the Phase 3 enclosure, produced a date of 30+/- 110 uncal. AD (HAR-1941) from charcoal sealed at the bottom of the construction trench (Jobey, 1978, 11). ‘The occupation of the Phase IV enclosure on Kennel Hall Knowe, containing at least three putative stone-built houses and attendant paved causeways, can most probably be dated to the second century AD...’(Jobey, 1978, 26).

The economy of this and earlier phases of the site obviously involved an element of arable agriculture, as attested by the presence of broken rotary querns.

Direct evidence for animal husbandry is confined to the dietary remains from a pit, associated with the phase II or Phase III enclosure. These consisted of the bones of cattle, sheep, or goat, pig and possibly fowl. Stock rearing may also be inferred, however, from the presence of the relatively large and hollowed frontal yard which may have been in use from Phase II.

(Jobey, 1978, 26).
The last of Jobey’s Kielder ‘quartet’ was the Gowanburn River Camp, excavated in 1978 (Jobey and Jobey, 1988) and located only 600ms NW of Kennel Hall Knowe. This site had suffered much as a result of later agricultural activity and stone robbing (Jobey and Jobey, 1988, 13). Again an earlier palisaded phase of activity was recorded beneath the ditched enclosure.

Three timber built houses were recorded, the third of which may well have been associated with the occupation of the ditched enclosure. Half of the top stone of a bun-shaped rotary quern, fragments from a white glass bangle and a melon bead were recovered from the floor of House 3, and Jobey dated these to the first or second centuries AD (Jobey and Jobey, 1988, 16).

Two paved areas also survived in Area A of the excavation and it was thought that these related to the occupation of the ditched enclosure. These areas were certainly open in the Roman period as fragments of four different bun-shaped rotary querns were recorded, incorporated into the paving. In addition a fragment of a Romano-British mould and a Roman ring intaglio were also recovered from this paving.

Overall:

Two main structural phases were present on the Gowanburn settlement, in which round timber – built houses were enclosed first by a free standing palisade or stockade and later by a bank and ditch enclosure, both perimeters being rectilinear in form. The manner in which the second enclosure respected the location of the first, combined with the apparent dismantling and deliberate infilling of at least part of the support trench for the palisade, would suggest continuous or near continuous occupation, most probably with a direct replacement of the first perimeter by the second.

(Jobey and Jobey, 1988, 20).

Jobey’s campaign of excavations in the area of what is now the Kielder Reservoir has done much to advance our knowledge of rectilinear settlements – but much more needs to be done to set the evolution of this settlement form onto a firmer footing.
This point is further highlighted when we review the results of Beryl Charlton and John Day’s excavation at the rectilinear site of Woolaw (NY 815 985) in Redesdale in 1977 (Charlton and Day, 1978). This is one of the best preserved examples of Jobey’s Class A sites (see above), consisting of two yards with their own entrances, a stone built perimeter wall, and four huts. The huts are slightly anomalous in that they form a barrier right across both yards.

Three areas of the site were excavated and three phases of activity were identified. The primary phase was represented by features sealed by house 2, namely a series of post holes and a drainage ditch under the stone faced house wall, post holes under paving in the house doorway and a stone filled slot and a pit beneath the paving of the building. There was no recovered dating evidence for these features but Charlton and Day believed them to be contemporary with each other. The perimeter in Phase 1 of the settlement seems to have been a bank and ditch system, on the line of the later wall (1978, 71).

There then seems to have been a period when turf accumulated over this bank, before its edges were cut away to receive the inner and outer facing stones of the perimeter wall. The ditch was also re-cut in this phase and up-cast thrown on top of the bank. A final stone capping was added. It was believed that the construction of the two centrally situated round houses, along with the two sunken yards, with their dividing wall, took place at the same time as the refurbishment of the perimeter. The final phase of activity was represented by the two smaller stone–built houses. Their construction necessitated a slight re-alignment of the perimeter wall. (Charlton and Day, 1977, 72).

House 2 provided all of the recovered finds. These included several burnt sherds of native pottery of ‘Romano-British date’, a fragment of an opaque white glass bangle – ‘one of the most recurrent finds associated with native settlements of the Romano-British period’, and two fragments from the base of a rotary quern again of ‘Romano-British’ date (Charlton and Day, 1978, 69). None of this material can be dated more closely than this and no samples were taken for radio-carbon dating.

These settlement types clearly have an origin that is pre-Roman, as evidenced by the timber phases documented above, but why should most of the dateable Roman finds relate to the second century and possibly the period of a military advance? Was
occupation and possibly increased agricultural production encouraged and rewarded in an effort to supply the Antonine forces? Why do we get a change over from timber building to stone? Is it simply a matter of availability of raw materials? Had all the localized supplies of building timber been exhausted? Did the stone building phases emanate from some form of direct or indirect ‘Roman’ influence? Could some of these settlements represent evidence for the placement of Romanised families within the military zone by the Roman authorities?

**Scooped Settlements**

The only excavation on a scooped settlement in Northumberland is that carried out by Colin Burgess at Hetha Burn in the College Valley (Burgess, 1970, 1–26, 1984, 167–171). Recent work by ASUD at Fawdon Dene in the Breamish Valley, carried out as part of the NNPA/Durham University ‘Breamish Valley Archaeology Project’ in the period 2000–2002 may be of relevance when the final report is published.

Burgess is in no doubt that scooped settlements are Romano-British in date and that the Hetha Burn site was re-used on a large scale in the Medieval period (1984, 167). His excavation also showed the weaknesses of the morphological distinction between scooped settlements and so-called ‘Cheviot stone-built settlements’ and he also demonstrated that the huts inside the settlements were probably stone founded rather than timber (1984, 169).

A timber hut was recorded beneath the Romano-British structures, but it did not seem to relate to any palisaded enclosure and Burgess suggested that it might have been the remains of an early unenclosed settlement, possibly of Bronze Age date, and comparable with the ring groove house at Houseledge (1984, 169). After this initial timber phase at least four other periods of activity were observed on the site. Period 2 saw the development of a rectilinear walled farmstead with two huts. ‘The steep gradient of the hillside eventually strained the stability of the enclosure wall. Especially along the bottom of the site so that along much of it course it was doubled in thickness, from one metre to two, creating, in effect, a *murus duplex*’ (Burgess, 1984, 170). In the course of this wall strengthening the original entrance was blocked and a horned entrance was built on the north east side of the site (Phase 3). Subsequently (Phase 4) the site was enlarged to what Burgess has termed ‘hamlet’ size.
The wall along its uphill side was levelled to make way for a terrace with at least three scoops. Further scoops were fashioned in the hillside above, and all these new developments enclosed within a new perimeter wall, extending uphill from the corners of the existing one.

(Burgess, 1984, 170)

He argued that either as part of this expansion or possibly before it, additional houses were built in the original yard area.

The larger of the two stone built houses there was demolished and its platform was built out so that two semi-detached buildings could stand where one had stood before. Furthermore at least one new building was erected in the narrow yard at the bottom of the site.

(Burgess, 1984, 170)

All of the finds were firmly of Romano-British type, including much hand-built ‘native’ pottery in a range of fabrics, rubbers, hammer-stones, whetstones, melon beads, a fragment of a glass bangle, part of a jet ornament and fragmentary penannular brooches. No Roman pottery was recovered but fragments of first century Roman glass came from scoop foundations in the extended settlement. No querns were observed. Overall there was nothing to extend the occupation of Hetha Burn beyond around AD 200 and indeed, as Burgess pointed out, ‘the maximum of three superimposed phases of stone house building would be in keeping with occupation spanning the late 1st – 2nd century AD’ (1984, 171).

**Enclosed Stone-Built Settlements of ‘Cheviot’ Type**

Jobey’s bald statement about our knowledge of these sites back in 1964 still stands today. As he said then:

There has been little recorded excavation on such settlements in north Northumberland and most of this was accomplished a century ago; consequently the record of internal features within the huts is scant.

(Jobey, 1964, 46).
By the same token our knowledge of other aspects of these settlements is also lacking. We are still uncertain about the relationship of these sites with field systems (Jobey, 1964, 50 – 2) and the relationship to sites like hillforts is still equivocal (Jobey, 1964, 52 – 56).

At Greaves Ash in the 1850s and 1860s the distinguished antiquarian George Tate carried out a series of excavations that remain the only large-scale archaeological interventions on any of these sites (Tate, 1856-62). He found the walls of the so-called outer rampart to be some 10 – 12 feet wide whilst that of the inner rampart was between 5 and 7 feet in width. Excavation revealed that these walls were still standing some 3-4 courses high. Tate speculated that they might have been some 10-15 feet high when first constructed (Tate, 1856 – 62).

Tate records that a ‘few’ of the hut circles within the ramparts were cleared and he described the form and character of two of these. In one of them he records the finding of ‘a piece of opalised glass, part of an armlet’. He also notes that:

Besides the circular huts in the open area, there are others of a smaller size, and some too of a different form placed against the rampart and even built into it.…….Several of them have been cleared by the excavations; in most charred wood was found and in two of them fragments of pottery.

(Tate, 1856 – 62)

Tate also excavated four huts in what he termed the eastern fort, and a further seven in the ‘Upper Fort’ but we have no record of any finds other than a quernstone. A further three bottom stones are also recorded from the ‘town’ of Greaves Ash.

One observation that he made about the huts at Greaves Ash was certainly ahead of its time:

Most of the huts at Greaves Ash have the entrance in an easterly direction, partly it may be, to avoid the strong westerly winds; but as this easterly arrangement is general over the country, both in camps and dwellings, it may have originated in a deeper reason arising out of religious belief and sentiment connected with the worship of the sun’

(Tate, 1856-62).
This presages the current debates about the so-called ‘sun-wise path’ as a structuring principle in the spatial organization of prehistoric and Romano-British round houses by almost 150 years!

As can be gathered from the lack of work on these settlement types they are crying out for further large-scale work to be carried out on them.

**Religious/Burial Sites**

Beryl Charlton and Margaret Mitcheson’s excavation of the Romano-Celtic shrine to *Cocidius* at South Yardhope in 1980 is our sole source of information about religious sites beyond the Wall area (Charlton and Mitcheson, 1983, 143-153). The site was some 300m above OD, immediately below the summit of a long ridge on the right bank of the Rowantree Cleugh. The shrine was initially visible as a square natural chamber in the bedrock. The east side of the chamber is comprised of large boulders. The chamber itself is some 2m square and 1.5 – 2m high. On its north side there is a rock-cut ledge that originally supported one side of the roof. Immediately to the east of this feature there is a niche that has been interpreted as a place to hold a lamp or offerings. On the face of the natural rock at the north side of the entrance there is a carved figure 0.32m high and 0.2m wide within a small niche. The figure, which is unclothed except for a cap or helmet, stands with feet apart and arms outstretched. It holds a spear in its right hand and a small round shield in its left hand. The style of the figure is that of a Celtic God but the nature of the craftsmanship is thought to indicate a Roman artist.

The excavations showed that the chamber had been humanly modified. Tool marks were visible on the bedrock along the chamber’s west wall where a low bench was thus created. There was also evidence of an attempt to dress the south doorjamb of the chamber. A posthole was uncovered cutting the bedrock adjacent to the doorway. A threshold had also been created, by the laying down of a single layer of small stones, and a small hearth was recovered in the south-east corner of the chamber. It was thought that this was associated with a crude attempt to create a chimney or flue. The chamber was also re-used in modern times (Charlton and Mitcheson, 1983, 143-153).

The excavations on the Roman cemetery at Petty Knowes, close to the fort at High Rochester, were carried out in the period 1978 – 1979. The aim was to examine a one-
fifth sample of the cemetery area and in the course of the work some 16 burials were excavated. Within the main excavation area, burials conformed to three basic patterns:

i) An earthen mound, surrounded by a shallow ditch and a low enclosing bank

ii) An earthen mound only

iii) No apparent surface indications

(Charlton and Mitcheson, 1984, 5)

All of the recorded burials were cremations and the rite itself seems to have taken place on the site of the final burial place (Charlton and Mitcheson, 1984, 20-21). The cremated remains were placed in a variety of receptacles, for example a Black Burnished Ware 1 vessel of second-fourth century date, a ‘wooden coffin’, and a stone cist (1984, 6) Other cremations were simply placed within pits. Related finds included pottery dateable from the second to the fourth century AD, three coins of Vespasian, Hadrian and Antoninus Pius and a range of nails and hob nails (Charlton and Mitcheson, 1984, 6 and 19). There is some debate over whether all of the observed burials were of military personnel (1984, 18-19). Similar barrow types are rare in association with other northern forts and Charlton and Mitcheson can only point to 9 possible mounds at Great Chesters and two south of Halton Chesters. The site’s overall importance is best summed up by the concluding sentences of the excavation report:

Petty Knowes is an extensive burial ground, the exact boundaries of which are uncertain since they are not marked by any physical feature detectable on the ground surface. The pottery and the coins support evidence for the period of occupation at High Rochester, whilst excavation has also given an insight into burial rites practiced during the early second or late third century by auxiliary units stationed in the northern frontier region. The effectiveness of the cremations has made it impossible to glean much useful information about the age, sex, cause of death or physical characteristics of the dead. Nevertheless the excavation has thrown some light on the unjustly neglected topic of cemeteries outside Roman forts.

(Charlton and Mitcheson, 1984, 22)
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EARLY MEDIEVAL ARCHAEOLOGY
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HISTORICAL BACKGROUND TO EARLY NORTHUMBERLAND (C AD 410-AD 1066)

The ‘early Medieval’ period here constitutes the six and a half centuries after the end of Roman rule, which include the post-Roman Dark Age, the Anglian period, and period of the Viking incursions from the later eighth century, culminating in the onset of the full Medieval period following the Battle of Hastings and the Norman Conquest of 1066. Most of the history of this period relates to changes in the nature of the ruling elite, and although there were major shifts in settlement pattern, most people probably continued to live lives not greatly differing from those of their Iron Age predecessors. The majority was probably engaged in agricultural work on a day to day basis to provide the surplus necessary to support aristocratic leaders and warriors.

In what follows a brief historical overview of the kingdom Northumbria (and more specifically Bernicia), the rise of the Christian Church, and the ‘Viking’ period, is set out. We are fortunate to have relevant historical sources such as the Anglo-Saxon Chronicle and the work of the Venerable Bede who lived and worked at Jarrow and completed his History of the English Church and People in 731. In addition, epic literature such as Beowulf and the Gododdin poem provide a flavour of heroic society in 6th and 7th century Northumbria. Place names can also be useful in suggesting when villages were first founded. All of these sources (often difficult to interpret) provide a rough historical framework within which to try and place our known archaeological sites.

What was previously the territory of the Votadini may have become divided into the kingdom of the Gododdin to the north of the Tweed, perhaps centred on Traprain Law or Edinburgh, while the kingdom of Brynaich occupied the area between Tyne and Tweed, including Bamburgh and Yeavering and most if not all of what is now the National Park. To the south of Brynaich, in lands previously occupied by the Brigantes, the Anglian kingdom of Deira was apparently already in existence by the late 5th century, while to the west lay the British kingdoms of Rheged (covering Cumbria and Solway) and Strathclyde (SW Scotland).

Although the evidence is tenuous, it is usually assumed that some Anglian leaders and their warriors were invited into north east England as mercenaries by British rulers in the decades following the collapse of Roman rule. The ancestors of some may already have seen military service in Britain as serving Roman soldiers on the garrison of
An Archaeological Research Framework for Northumberland National Park

Hadrian’s Wall. Recently David Rollason has outlined three possible models for the origins and development of Bernicia (Rollason, 2003). Before long, however, these Anglian leaders were taking control of the old British kingdoms. In or around the year AD547, Ida assumed power over Brynaich and effectively became the founder of the Anglian kingdom of Bernicia. Ida may have come from overseas, or, perhaps more plausibly, from Deira to the south. It is difficult to understand how he could have so rapidly achieved such power through military force alone, and although there was inevitably a degree of conflict it is probable that he attracted considerable backing from the local British warrior aristocracy, presumably by convincing them of the power and wealth that would flow their way should they opt to back him.

By c. AD600, Bernicia, under King Aethelfrith, had merged with Deira to the south to form the powerful kingdom of Northumbria, a kingdom which, during the seventh century, stretched from the Humber to Edinburgh in the east, and from the Mersey to the Solway in the west. In addition, areas to north and south were subject to Aethelfrith’s ‘overkingship’, although still nominally under the control of their own kings. The conditions of relative stability during the later seventh and eighth centuries, coupled with the wealth and power of the church at this time, gave rise to the so-called Northumbrian Golden Age. This Golden Age witnessed a flowering of the arts and of religious learning, during which such masterpieces as the Lindisfarne Gospels were produced. However, this wealth was based firmly within the church, and in particular within the monasteries such as Jarrow and Lindisfarne, and although some of the artistic finery of the time presumably filtered down to local churches it is doubtful whether many residents of what is now the Northumberland National Park were particularly aware that they were living in a Golden Age.

Following Ida’s assumption of power in the mid 6th century, Bernicia remained essentially pagan through until the time of King Edwin. Edwin was a Deiran who took control of Bernicia after the death of Aethelfrith in 616. He was apparently torn between the relative merits of the Celtic and Roman churches. Whether he realized that the Roman Church may have offered the greater political benefits or whether he was more interested in building broader inter-kingdom alliances, he married a Roman Christian princess from Kent and allowed himself to be baptised by Paulinus in York in AD 627. Bede tells us that Paulinus subsequently visited Bernicia and baptised many local people in the River Glen at Yeavering. These local people would
presumably have included most of the local aristocracy, who would have been keen to follow their king for their own political advantage. The extent to which Christian beliefs actually took hold throughout the society of the time, however, remains a matter for conjecture.

Following Edwin’s death in battle in AD 633, Paulinus fled south and power in Northumbria eventually fell into the hands of Oswald, of the previously exiled Bernician royal house. Oswald had been in exile in Scotland, and had joined the Celtic Church, which he now brought to Northumbria. Bishop Aidan arrived from Iona at Oswald’s invitation, set up a monastery on Lindisfarne (Holy Island), and the kingdom of Northumbria was soon converted to the ways of the Celtic Church. Eventually, in AD664 at the Synod of Whitby, King Oswy ended the conflict between the Celtic and Roman churches by deciding that Northumbria would follow the Roman Church. Following this decision, Northumbria looked increasingly to the south for all sorts of economic and cultural links, and the Celtic Church lost influence in Northumbria as the Roman Church became increasingly wealthy. By the late 8th century the Lindisfarne monastery had become one of the richest landowning institutions in Northumberland, principally through the grants of land by successive Bernician and Northumbrian kings.

Norse Vikings raided Lindisfarne in 793, and soon followed this initial strike with numerous raids on other religious sites. The initial raids were apparently for the acquisition of booty (the treasures of the Golden Age) rather than the occupation and settlement of new territory. There was some Norse settlement in the Scottish Northern Isles and in Ireland, but there is little suggestion of this in Northumberland and certainly no evidence from the National Park. In the mid 9th century the Danes invaded Britain, apparently more interested in acquiring and settling new lands than simply in plunder. This episode, on the back of the earlier raids, seriously reduced the wealth and power of the Church and effectively destroyed Northumbrian monasticism which did not fully recovered until after the Norman Conquest. York, and with it much of the kingdom of Northumberland, fell to the Danes in 867. In AD875 Halfdan campaigned in Bernicia and further north, apparently with the aim of taking the whole of Northumbria as his own. However, it seems that Bernicia was never actually occupied by large numbers of Danes, and the Danelaw, which covered most of eastern England by the late 9th century, incorporated Deira but not Bernicia.
These were turbulent times, however, and many epic battles were fought between English and Scandinavian armies throughout northern England during the early 10th century. Having survived the Danish invasions, Bernicia was next invaded by a Norse army, drawn from the already existing Scandinavian settlements of Ireland and western Britain. This army, under Ragnald, defeated what was left of the Bernician aristocracy, combined with others fighting on behalf of the Community of St Cuthbert, at the Battle of Corbridge in 914. Ragnald assumed control of all Bernician territory, but, as with previous Scandinavian conquests, and despite the vast impact of the Vikings on other parts of Britain, there is little evidence in the area of the National Park for Scandinavian settlement.

The kingdom of Wessex under Alfred the Great and his successors was gradually expanding at this time to take over Mercia (in the midlands) and all the lands of the Danelaw in eastern England. At the great battle of Brunanburh (at an unknown location somewhere in Northumbria) in AD 937, King Athelstan of Wessex defeated a combined army of Scots, Britons and Scandinavians, then proclaimed himself ‘King of all Britain’. Northumbria was now reduced in status from a kingdom to an earldom, and although the earls of Northumberland were still very powerful they were now subject to kings based further south. Before long, all land to the north of the Tweed was ceded to the new kingdom of Scotland which had expanded southwards to incorporate Lothian and Strathclyde. Thus the great ancient kingdom of Northumbria had become divided amongst the new kingdoms of England and Scotland.

Some Key Dates in ‘Northumbrian’ Early History
(This list is compiled from David Nash Ford’s web site ‘Early British Kingdoms’: www.earlybritishkingdoms.com/adversaries/kingdoms/597.htm)

- **410** - Emperor Honorius of Rome tells Britain to attend to its own affairs.
- **547** - The King of Bryneich is expelled from his fortress of Bamburgh by King Ida of Bernicia. Bernician Kingdom established.
- **c. 570-75** - The Northern British Alliance is forged between the kingdoms of North Rheged, Strathclyde, Bryneich and Elmet. They fight the Northumbrians at the Battles of Gwen Ystrad and the Cells of Berwyn
- **575** - Prince Owein of North Rheged kills King Theodoric of Bernicia at the Battle of Leeming Lane.
• 588 - King Edwin of Deira is ousted from his Kingdom by the Bernicians and seeks refuge at the court of King Iago of Gwynedd.

• 590 - The Siege of Lindisfame. The Northern British Alliance (North Rheged, Strathclyde, Bryneich and Elmet) lays siege to King Hussa of Bernicia and almost exterminates the Northumbrians from Northern Britain.

• 598 - Kings Mynyddog Mwynfawr of Din-Eidyn and Cynan of Gododdin ride south to fight Saxon Bernicia against enormous odds at the Battle of Catterick. The Bernicians are victorious.

• 604 - King Aethelfrith of Bernicia invades Deira and kills its king, Aethelric. Prince Edwin, son of the late King Aelle of Deira (and possibly nephew of King Aethelric) flees to the Court of King Iago of Gwynedd. Aethelfrith marries King Aelle's daughter, Acha, and takes the kingdom.

• 605 - Birth of Prince (later King) Oswald of Bernicia

• 616 - King Edwin of Deira, with the help of King Raedwald of East Anglia, conquers Northumbria at the Battle of the River Idle. King Aethelfrith of Bernicia and Deira is killed in the fighting and his children are forced to flee north. His heir, Prince Eanfrith, seeks refuge with his mother's family, probably in Gododdin, and then moves further north into Pictland; Princes Oswald, Oswiu and others escape to Court of King Eochaid Buide of Dalriada where they are converted to Christianity by the monks of Iona.

• 625 - King Edwin of Northumbria marries Princess Ethelburga of Kent. As a Christian, she brings her personal chaplain, Paulinus, north with her. Paulinus has already been consecrated Bishop of York. With the help of Pope Boniface, the new Queen encourages her husband to convert to Christianity.

• 627 - Paulinus converts King Edwin of Deira back to his lapsed Christianity at the Royal Court of Yeavering.

• c.630 - King Penda of Mercia besieges Exeter (possibly held by King Clemen of Dumnonia). King Cadwallon of Gwynedd lands nearby, from his Deiran imposed exile in Brittany. He negotiates an alliance with King Penda of Mercia and a united British and Saxon force moves north to re-take Gwynedd. The Deirans are defeated at the Battle of the Long Mountain and Cadwallon chases them back to Northumbria. The British ransack Northumbria and bring the kingdom to its knees.

• 633 - King Edwin and his Northumbrian army meet the British, under King Cadwallon of Gwynedd, in the Battle of Hatfield Chase. King Edwin is killed in the fighting and Cadwallon is victorious. Edwin's cousin, Osric, succeeds to the throne of Deira and Prince Eanfrith of Bernicia returns from Pictland to claim his rightful crown. Both are pagans. St. Paulinus, Bishop of York, flees south and is made Bishop of Rochester. Cadwallon is later besieged at York by King Osric. The former is again victorious.
• **634** - Despite suing for peace, King Cadwallon of Gwynedd slays both King Eanfrith of Bernicia and Osric of Deira rather than negotiate with them. Eanfrith's half-brother, Oswald succeeds, as son of Aethelfrith, to a united Northumbria. He is given a force of men (including monks from Iona) by King Domnall Brecc of Dalriada and marches south to claim his inheritance. He clashes with King Cadwallon of Gwynedd at the Battle of Heavenfield. Despite having superior numbers, Cadwallon is killed, and King Oswald victorious. The Deiran Estate Centre at Yeavering may have seen some destruction at this time. Oswald re-introduces Christianity to Northumbria, Oswald calls on Iona to send an evangelical Bishop. Birth of St. Cuthbert in Tweedale, and St. Wilfred in Northumbria.

• **635** - St. Aidan, Bishop of Scattery Island, arrives to evangelise Northumbria and founds the Bishopric and Priory of Lindisfarne.

• **638** - King Oswald and his Northumbrian army besieges and conquers Edinburgh.

• **642** - King Penda of Mercia commands a united British and Mercian force against King Oswald of Northumbria. Oswald is killed at the Battle of Oswestry and buried at Bardney Abbey. He is later regarded as a saint. He is succeeded by his half-brother, Oswiu, in Bernicia, but he is found to be unacceptable to the Deirans.

• **648** - St. Wilfred enters Lindisfarne Priory.

• **651** - King Oswiu of Bernicia has King Oswine of Deira murdered at Gilling, after the later backs down from armed conflict. He is succeeded by Aethelwald who initially accept his uncle's overlordship. Death of St. Aidan, Bishop of Lindisfarne. He is succeeded by St. Finan. Cuthbert enters the monastery at Melrose and comes under the influence of Boisil.

• **652** - King Penda's Mercian army invades Bernicia and besieges King Oswiu at Bamburgh.

• c.653 - King Aethelwald of Deira rejects his uncle's overlordship and turns to King Penda of Mercia instead. Penda mounts another attack of Bernicia.

• **655** - King Penda of Mercia and a united Greater Mercian and British army, march on the Bernicians. Oswiu of Bernicia, with an army only a third the size, retreats to Stirling, the mostly northerly city in his kingdom. From here, Oswiu sends envoys to offer Penda money in return for holding off his armies. Penda appears to have taken the cash and distributed it amongst his British allies. However, having been taken from the oppressed Northern British in the first place, this may be viewed as a restitution of rightful property. Penda and his allies invade Bernicia anyway, and the two armies meet at the Battle of Winwaed. Kings Cadafael Cadomedd of Gwynedd and Aethelwald of Deira, however, withdraw before the battle begins. This contributes to Penda's defeat and he and his ally, Aethelhere of East Anglia, are both killed in the fighting. Aethelhere's brother, Aethelwold, succeeds to the East Anglian throne. King Oswiu's son, Egbert is released from Mercian hostageship. The Bernicians overrun Mercia, but allow Penda's son, Peada, to continue his rule in Middle Anglia, probably due to his Christian faith.
• **664** - The Synod of Whitby is hosted by St. Hilda. It concludes that the Northern British should comply with the doctrines of Rome, rather than follow the Irish Celtic practices of Iona.

• **c.664** - King Oswiu of Northumbria removes his son, King Ealhfrith, from his throne in Deira. The Bernician throne controls a re-united Northumbria.

• **670** - Death of King Oswiu of Northumbria. He is buried at Whitby Abbey and succeeded by his son, Ecgfrith, who appoints his brother Aelfwine as sub-King of Deira. Both are accepted by the Deirans as maternal grandsons of the late King Edwin of Deira.

• **674** - St. Etheldreda, former Queen of Northumbria, gives large areas of land to St. Wilfred, Bishop of York, to found Hexham Abbey. He builds three stone churches there, including one with a crypt.

• **c.674** - King Wulfhere of Mercia leads an army against King Ecgfrith of Northumbria, but is defeated in battle and forced to submit to Northumbrian overlordship.

• **679** - The armies of King Aethelred I of Mercia and King Ecgfrith of Northumbria clash at the Battle of the Trent.

• **680** - The Venerable Bede enters the monastic school at Wearmouth.

• **685** - St. Cuthbert visits Carlisle. Bishop Tunberht of Hexham is deposed. Cuthbert is elected Bishop of Hexham, but agrees to switch jobs with Bishop Eata of Lindisfarne instead. The Picts, under King Bruide ţpe Bili, revolt against their Northumbrian overlords. Cuthbert advises King Ecgfrith of Northumbria not to invade Pictland. Undeterred, Ecgfrith marches his army north to engage the enemy at the Battle of Nechtansmere. The Picts, possibly with Scottish and Strathclyde Briton help, thoroughly defeat the Saxon guard. The latter permanently withdraw from Pictish and Scottish lands north of the Forth and also from much of the British territory north of the Tweed. Death of the childless King Ecgfrith of Northumbria. Supporters of the House of Aethelric secure the succession of his half-brother, Aeldfrith, possibly with Irish and Scottish help. Aeldfrith is brought south from Iona, where he is studying.

• **687** - Bishop Cuthbert of Lindisfarne resigns his office and retires to his hermitage on Inner Farne where he dies. He is buried in Lindisfarne Priory and later revered as a saint following the exhumation of his uncorrupted body in 698.

• **704** - Death of King Aeldfrith of Northumbria. The throne is seized by Eadwulf, of unknown descent. The challenger was seen off, however, and Aeldfrith’s son Osred (8 years old) succeeds to the throne. After this time there are periods of political uncertainty and instability when the ruling house was replaced by men not of its number.

• **731** - The Venerable Bede completes his history of the Church in England.

• **735** - Death of the Venerable Bede.
• **793** - Vikings attack Britain in a surprise raid on the monastic community at Lindisfarne Priory.

• **829** - King Eanred of Northumbria and King Ecgbert of Wessex clash at the Battle of the River Dore. Supposed submission of Northumbria to Wessex overlordship.

• **866** - 'The Great Heathen Army' of the Vikings rides north to Northumbria and mounts a surprise attack on the City of York which it captures.

• **867** - The rival monarchs of Northumbria, Aelle II and Osbeorht, join forces to expel the Vikings, but are thoroughly defeated and both are killed at the Battle of York by Princes Ivarr the Boneless and Haldizan Wide-Embrace of Sjaelland and Uppsala (Scandinavia). Deira passes into Viking hands and what is left of the Northumbrian Royal Court flees north into Bernicia. Ecgberht I is established as a puppet King of Northumbria.

• **872** - Death of King Ecgberht I of Northumbria. The Vikings install Ricsige in his place.

• c. **877** - Eadulf of Bamburgh establishes himself as King of Bernicia. Cut-off from the rest of Anglo-Saxon England, he is only recognised outside his kingdom as High-Reeve or Ealdorman of Bamburgh. He may or may not have been related to previous Kings of Northumbria. Eadulf allies himself with King Alfred the Great of Wessex.

• **913** - Death of High-Reeve Eadulf of Bamburgh. He is succeeded by his son, Ealdred I, who is almost immediately driven out by King Ragnall I Ivarrson of Norse York. Ealdred flees to the Court of King Constantine II of Alba.

• **914** - High-Reeve Ealfrith I of Bamburgh persuades King Constantine II of Alba to invade Norse controlled Bernicia in an attempt to restore his position. The Vikings defeat the Scots at the First Battle of Corbridge.

• **918** - High-Reeve Ealfrith I of Bamburgh again persuades King Constantine II of Alba to help him reclaim his position in Bernicia. They mount a second invasion of his now Norse controlled lands. The Vikings defeat the Scots again at the Second Battle of Corbridge, but take heavy casualties themselves. Ealfrith probably manages to retake most of Northern Bernicia.

• **920** - High-Reeve Ealfrith I of Bamburgh and his brother, Uhtred, submit to the overlordship of King Edward the Elder of England.

• **924** - Death of King Edward the Elder of England at Farnon-upon-Dee. He is succeeded by his son, Athelstan, who becomes King of Wessex and effective ruler of most of England.

• **926** - Athelstan annexes Northumbria, and forces the kings of Wales, Strathclyde, the Picts, and the Scots to submit to him.

• **937** - Battle of Brunanburh: Athelstan defeats alliance of Scots, Strathclyde Britons and Vikings, and takes the title of "King of all Britain"
• 954 - Death of King Eric Bloodaxe of Norse York. King Eadred of Wessex becomes King of All England. High-Reeve Oswulf of Bamburgh is appointed Ealdorman of Northumbria.

• 957 - Mercians and Northumbrians rebel against King Edwy.

• 966 - Death of Ealdorman Osulf of Northumbria. He is succeeded by his son, Waltheof

• 993 - King Aethelred the Unready appoints Aelfhelm as Ealdorman of Northumbria in place of the aging Waltheof I.

• 1006 - Ealdorman Aelfhelm of Northumbria falls foul of King Aethelred the Unready who has him murdered. Malcolm II of Scotland invades Northumbria – defeated at Durham.

• 1007 - Aethelred buys two years' peace from the Danes for 36,000 pounds of silver. Uhtred, son of Ealdorman Waltheof I of Northumbria, is appointed to his father's old position.

• 1017 - King Cnut the Great divides England into four earldoms.

• 1018 - Malcolm II invades Northumberland again – wins battle at Carham on Tweed.

• 1031 - Cnut advances north to the Tay and receives the submission of Malcolm II

• 1035 - Death of King Cnut.

• 1040 - Duncan I of Scotland invades Northumberland – defeated

• 1065 - Northumbria rebels against Tostig, who is exiled.
OUTLINE HISTORY OF PREVIOUS ARCHAEOLOGICAL RESEARCH IN NORTHUMBERLAND AND NORTHUMBERLAND NATIONAL PARK


For the purposes of this discussion information is dealt with under the headings:

- Settlements
- Place Name Studies
- Burial Data
- Monastic settlement and the Archaeology of Christianity

Settlements

In the northern sector of what is now the National Park the departure of the Roman army from Hadrian’s Wall may well have been of little immediate consequence, and although some native settlements may have been abandoned during the 3rd century it is probable that the people known to the Romans as the Votadini continued life much as before, occupying roundhouses in small undefended hamlets throughout the uplands and on lower ground.

There has been little research directed primarily at developing an understanding of Early Medieval settlement in Northumberland generally and most of our information comes from fortuitous discoveries usually relating to projects designed to examine other aspects of the region’s archaeology.

Given what we know of activities in Wales and Scotland, it is probable that small local warbands may have reoccupied some of the old hillforts and set up local territories with wealth based on cattle and perhaps slave trading. Several hillforts in Scotland and Wales are known to have been occupied at this time and the fort at Humbleton above Wooler is a prime contender for such reuse although this can never be proven without excavation. The recovery of an iron knife of apparent early
Medieval date in antiquarian excavations at Brough Law in the Breamish Valley suggests that this fort may also have been re-occupied in the Post-Roman period. Radiocarbon dating suggests that the hillfort on Wetherhill (Topping, forthcoming and 2003) may have been occupied in some form into the 6th century AD, although the nature of activity on the site requires clarification through further excavation of the fort itself.

Similar developments apparently occurred at Roman forts, where local warbands grew up as the supply of Roman coinage dried up and remnants of the Roman army offered protection to the local population in exchange for food and other resources. Such a process is certainly suggested by the discovery of substantial Dark Age halls within the ruins of Birdoswald fort on Hadrian’s Wall.

As early as 1948 A.H.A. Hogg’s excavations at Ingram Hill inside the Park, which were designed to throw light on the prehistoric aspects of the site’s archaeology, had highlighted the potential for later settlement at the site (Hogg, 1956). This took the form of rectangular structures and is discussed in detail below. By the same token George Jobey’s excavation on the Romano-British farmstead at Huckhoe (NY 073 827), in the Wansbeck Valley (Jobey, 1959) suggest that rectangular buildings were occupied here in the 5th century and possibly into the 6th century.

At Huckhoe, the site began life as a timber palisaded settlement, the palisades being later replaced by stonewalling. What concerns us here is the evidence for late Roman and possibly fifth and sixth century pottery finds on the site, in positions that suggest that Huckhoe was occupied in these periods.

The cross wall between huts 1 and 2 produced ‘some fragments of coarse pottery and two rims datable to the late second or early third century’ along with two pieces of Andernach lava quernstone (Jobey, 1959, 245). Jobey goes on to say:

A limit was set to the possible lifespan of these buildings, though not to the occupation of the site as a whole, by the discovery of four sherds of post-Roman date in the interstices of the rubble overlying the cross wall, in such a position as to suggest that the wall had already tumbled when the sherds were deposited. Mr. C. Thomas has proposed a date in the late fifth or early sixth centuries for these sherds. It is conceivable that the hut group might have lasted into the post Roman period; as a
type of traditional home the circular stone hut had a long life in the highland zone

(1959, 245-246).

Similar pottery was recovered in Area 5 of the site in association with two sub-rectangular buildings which overlay earlier circular structures and which were themselves robbed in the thirteenth century AD (Jobey, 1959, 247 – 250). The circular hut in area 5 had been cleared and the land leveled some time after a jar of probable early fourth century date had found its way onto that part of the site. The two sub-rectangular buildings that replaced it had a joint central wall and each possessed one apsidal end (1959, 248). There were two entrances, one in the north wall of the western most structure and the other located in the joint central wall 'allowing access to the east building from the west' (1959, 248).

Dating of these structures was provided by pottery finds from the leveling of the ground at the south end of the eastern building. This produced fragments of late fourth century coarse pottery and a single rim of Post-Roman ceramic in the same fabric as that recovered from Area 2. ‘These lay where they had been trampled into the top of the earth filling and can be taken as an indication of the late Roman and Post-Roman occupation of the buildings’ (Jobey, 1959, 248). Another possible post-fourth century rectangular structure was recorded in Area 3 (1959, 248).

Charles Thomas’s report on the Post-Roman pottery draws parallels with material from Dunadd in Argyllshire, now in the National Museum of Scotland. One sherd may fall into the category known as ‘E Ware’ which is dominated by small jars and low bowls. This type occurs widely across the western parts of Britain (Thomas, 1959, 258 – 261).

Further evidence of settlement in the sixth century comes from the site of Thirlings, located in the Milfield Basin just outside the Park boundary. The site was discovered through cropmarks, photographed by Dr. J.K. St. Joseph of Cambridge University and Professor N. McCord of Newcastle University. It was excavated between 1973 and 1981 by Roger Miket and Colm O’Brien (O’Brien and Miket, 1991, 57 – 91).

The following extract from the Thirlings entry on the Bede’s World web site, produced by Colm O’Brien, provides a good summary of the excavation:
Excavations at Thirlings (extracted from ‘Bede’s World’ web site)

The site had been a focus of activity on two occasions during the Neolithic era, from which episodes pits containing pottery fragments were identified. In the early Medieval period, there was a group of rectangular buildings of timber construction; 12 were identified in the excavations. No boundary fence was identified for the group as a whole, but two buildings (designated "A" and "P" in the excavation record) which were positioned towards the centre of the grouping stood within their own fenced compounds; no other building was similarly positioned within a compound. This suggests that these two buildings had some primacy of function or status within the set. ………..

Of the 12 buildings, three were smaller than the others with floor areas in the range 21 to 27 square metres; the others nine ranged in floor area from 45 square metres to 96 square metres. Building A is 74 square metres. These are smaller than the large halls of the Yeavering palace, but they are towards the larger end of the range of buildings so far discovered on other sites of this period in England.

There was little direct evidence, apart from the building structures themselves, for the activities and lifestyle of their inhabitants; probably they lived as a farming group at some time during the 5th - 6th centuries AD, on the evidence of radiocarbon dates…………

Interpretation

Interpretation of the structure and the appearance of the buildings depends first of all on the direct archaeological evidence, and then on the inferences which can be drawn from that evidence. The evidence is limited to the foundation levels of the buildings, with no flooring and no superstructure surviving. Consequently different interpretations are possible of the nature of panel in-fills in the walls and the roof structures, and features such as window openings are a matter of speculation. However, the remains at foundation level do provide reliable evidence of the principal upright timbers in the walls, in the interior of the buildings and outside.

No timber survived in the ground: it is too acidic to allow preservation of organic materials over that length of time. Evidence of the positions and the sizes of timbers was of three types. First, dark staining at the base of the foundation trenches and post holes which is caused by organic decay of the ends of the timbers. This was
sometimes accompanied by slight depressions where the weight of the timber had
pressed down on to the gravel base. Second, places within the foundation trenches
which had been excavated deeper to hold larger posts. Third, material which
collapsed into voids left in the foundation trenches after timbers had been removed
(the building under consideration here had been demolished after its period of use).
Not all uprights were detected in all buildings, but enough evidence survived in these
forms to demonstrate that the walls were formed as post-and-panel structures, to show
the positions of doors, to show the size of timbers in use, and to show when larger
timbers had been used and set more deeply.

The buildings at Thirlings conform in their basic constructional technique and
architectural details to a type which was widespread in England in the Early Medieval
period, and has been identified in places as far apart as Northumberland and
Hampshire (James, Marshall, and Millett, 1984, 182-215.). They are built to
variations of post-and-panel design. This is a structural system which uses load-
bearing uprights of timber at intervals along the wall lines and in-filling panels
between the timbers. The uprights are held firm by being set into the ground, either in
foundation trenches or in individually dug post holes. This technique of earth-fast
support is an older tradition than the timber framing of Medieval building, in which
the uprights are morticed into sill beams, and in which structural rigidity is ensured
by the resolution of forces across a box-like structure.

Six of the set of buildings at Thirlings have their main wall timbers set in construction
trenches, while others use individually dug post holes. It is difficult to assess the
significance of this variation in foundation design which has no bearing on the
structural integrity and would not have been apparent when the buildings were in use.
Post settings within the buildings appear to mark partitions at the ends, but these
timbers may also have acted as an internal structural system supporting the roof
members. There is also evidence in some of the buildings for external supports on the
long sides. It is not clear how these timbers were positioned, but the evidence from
some comparable buildings at other sites suggests that they were angled in towards
the wall lines. This means that they acted as bracing or buttressing and not to support
lean-to sheds along the walls.
There is good evidence for a degree of standardisation in the specifications for timbers and for precision in the workmanship. Some of the principal uprights are squared off, others are circular, and both diameters and side lengths of about 300mm (1 foot) are frequently used. Three buildings have a distinctive wall-type which uses timbers in pairs to clasp horizontal planking. The pairs are formed from squared planks with dimensions 130 by 260mm (about 5 inches by 10 inches), placed in pairs with an 100mm metre (4 inch) gap in between.

Radio carbon dates from the remains of construction timbers calibrate out to 539 – 599 AD and O’Brien has suggested that the site was founded in the mid – late sixth century. It appears to have continued in use through until the 7th century by which time the Anglian kingdom of Bernicia was well established. Whether its founders were early Anglian mercenaries or settlers, or native British folk whose ancestors had occupied the Romano-British settlements in the surrounding hills, remains unresolved, but as time went by there must have been a merging of such divisions between ethnic groups. Certainly, the occupants of Thirlings seem to have existed here without the need for any kind of defensive ramparts around their village, and there is no evidence for the site having been attacked at any time.

In terms of the overall interpretation of the site, O’Brien (2002) has suggested that it represents ‘a set of substantial timber buildings grouped around what might be the holding of a local landowner’. In the original excavation report it was suggested that the site fits into a regional settlement hierarchy, as a centre for production, servicing sites such as Yeavering at the apex of the hierarchy, where state revenues were consumed in the form of food render (O’Brien and Miket, 1991, 89 -90) To this end building C with its large construction trenches and annex was interpreted as a communal storage facility.

Recently however, in the light of research by Blair (1995) into the origins of certain types of Anglo-Saxon shrines shown to have annexes, O’Brien has reinterpreted this structure as a possible ritual site. It may also have had a secular function and O’Brien is at pains to point out how, in the period in question, secular aspects of life were integrated with the sacred (O’Brien, 2000, 47 – 49).
Air photography has also played an important role in the discovery of a range of archaeological sites of broadly ‘Anglo-Saxon’ date in Northumberland, all just outside the National Park boundary. In 1948, J.K. St. Joseph took the first photographs of what is now generally accepted to be the Anglian palace or villa regia documented by Bede at Maelmin. Maelmin had been equated with the place name Milfield since the time of Camden (Knowles and St. Joseph, 1952). Brian Hope Taylor was the first archaeologist to transcribe these photographs during his mammoth research project at the other royal site of Yeavering (see below). In the 40 years and more since the first discovery, repeated air photo sorties have isolated further features in the area of Maelmin and Gates has produced a detailed transcription of all of these in a short but important contribution published in 1988. The transcription shows the central suite of buttressed timber halls that drew comparison with the structures excavated by Hope-Taylor (see below), an outlying fort or palisaded enclosure and a massive double palisaded enclosure with a clear entrance (Gates and O’Brien, 1988, 3; Fig. 1).

These features are well known, but Gates and O’Brien’s analysis also pointed out the existence of a range of hitherto un-noted features, namely some 60 dark ‘spots or blobs’ (1988, 3) 40 of which seem to have rounded corners and a distinctively sub-rectangular outline. These were interpreted as Grubenhauser, or sunken huts, of a form always seen as being on the lowest rung of any ladder of settlement hierarchy. Their identification on this set of photographs was important, as previously, with the exception of two possible examples noted by Hope-Taylor at Yeavering, such structures were supposedly confined to the area south of the Tees (Cramp, 1983, 276).

Other similar features had been noted on air photographs from the multi-period occupation site of Sprouston in Roxburghshire (St. Joseph, 1982) and Gates and O’Brien examined other air photographs at Newcastle University which led to their finding similar markings at New Bewick and also at Thirlings ‘where they occur at some slight remove from the excavated timber buildings’ (1988, 4-5).

The New Bewick crop marks occupy an area of glacial sands and gravels some 30m above the present level of the River Till and here:
a linear boundary feature can be seen roughly forming an L shape, and the line of one of its arms is continued southwards as a pit alignment which then swings west. Another narrow linear mark crosses to the north. Two enclosures are apparent, one lying across the boundary features, and the small rectangular marks which are the principal subject of this study, at least 8 and perhaps more to be identified as Grubenhauser lie scattered over an area of some 2ha.

(Gates and O’Brien, 1988, 5).

An area of one large and two small pit-like features was selected for excavation and the larger structure proved to be a Grubenhaus. In terms of its dimensions it was some 0.5m deep, and sub-rectangular in plan, 4.7m long and 3.9m wide. Post holes were recorded in the pit at each end of the long axis. Charcoal and a sample of fired and unfired clay loom-weights were recovered from the lower levels of the feature. Four pieces of pottery were also recovered (1988, 5-6).

Whether these structures were built by Anglian incomers, is impossible to say. It is perfectly possible that local people adopted this form of structure and we certainly cannot say for certain that every Grubenhaus represents an immigrant Anglian family. The New Bewick finds may represent the newly founded farmsteads or hamlets of the time which for a while presumably co-existed alongside the more traditional Romano-British homesteads, the remains of which, still litter the Cheviot Hills. Overall then this short paper by Gates and O’Brien represents an important contribution to our knowledge of early Medieval settlement in Northumberland.

Perhaps the most important early Medieval site so far discovered and excavated in Northumberland however, was the site of Yeavering. Much has been written since Hope-Taylor’s detailed excavations about this site, which has come to be identified with the Anglian royal palace of Ad Gefrin recorded by Bede.

Ad Gefrin was first noted as a series of cropmarks on an air photograph taken by J.K. St. Joseph in 1949. Excavation began there in 1953 and ended in 1962 under the direction of the late Brian Hope-Taylor (Hope-Taylor, 1977). This work revealed a complex multi-period site dating from the Mesolithic to the Anglo-Saxon period. According to Hope-Taylor’s report the developmental sequence of recorded features was as follows;
• Neolithic/Bronze Age round barrow,
• Bronze Age cremation burials and ‘stone circle’,
• ‘Celtic’ field system and settlement,
• Late Iron Age to Anglo-Saxon Enclosure,
• Early post-Roman temple with burials,
• Anglo-Saxon palace and township.

This sequence has subsequently been revisited (Frodsham and O’Brien, forthcoming) and the so-called field system has been demonstrated to be a series of ice wedge casts (Gates, pers. comm.).

Potentially, the earliest early Medieval structure on the site was a timber ‘fort’ consisting of an outer palisade, with an inner double palisade and fighting platform, the so-called Great Enclosure, probably dating to the second half of the 6th century but with possible Iron Age origins. The supposed ‘royal seat’ developed outside the fort, beginning early in the 7th century, probably in the reign of Aethelfrith. Excavated features included a massive timber hall and a probable pagan temple that was later Christianised. A large timber ‘grandstand’ for open air assemblies is identified as the ‘moot’ or meeting place. In a later phase the Great Hall was replaced with a set of two buildings that is equated with the reign of Edwin. This phase of activity was brought to an end in a fire which Hope-Taylor thought to be the deliberate work Cadwallon during his ravaging of Northumbria after Edwin’s defeat and death in AD632. The site was re-built and a possible Christian church, with associated cemetery, was constructed over the Great Enclosure which had gone out of use in this phase. A further destruction by fire was equated by Hope-Taylor with the marauding activities of Penda of Mercia in AD651 (see Timeline above), and the site was finally abandoned, around AD 685 according to Bede, in favour of a new site at Maelmín.

Our archaeological knowledge of other ‘royal’ sites in Northumberland is limited. As early as AD 547 we have a reference to the importance of the site of Bamburgh, still occupied by a castle today and in AD 590 King Hussa of Bernicia was besieged on Lindisfarne. Of these two sites, Bamburgh has seen the most recent archaeological work.
On-going activities by the ‘Bamburgh Research Project’, an archaeological research project, set up in 1996 to investigate the archaeology of the Bamburgh area, has re-examined some of the locations excavated by Brian Hope-Taylor in the 1960s and 1970s. He worked at Bamburgh for two seasons in the period 1960-62 and he also carried out further work in 1969 and 1974. This latter activity produced several Anglo-Saxon coins, but as far as it is known, the work was not written up. In August 2001 members of the project team discovered a collection of bones and other artifacts, unearthed by the Hope-Taylor excavation, when a disused storeroom was opened and found to be just as Hope-Taylor had left it some 27 years ago.

Also in the summer of 2001 a trench was opened in the Armstrong Museum area of the west Ward of Bamburgh Castle to establish the nature and extent of Hope Taylor’s earlier work there. This showed that he had gone down to a depth of over 2m in places and that he had examined some complex stratigraphy, documenting human activity from modern times back to the early Anglian period. Unexcavated material, still remains beneath the Anglian layers and this must represent even earlier archaeology. The finds from this backfilled area were incredibly rich, and included a worked bone stylus (writing implement), early Medieval glass, and an antler toggle, as well as a large amount of pottery and bone.

Work continued here in 2002 and the project is on-going. It has also examined the well in the castle keep which may have Anglo-Saxon origins. Further information can be obtained about this on-going work from the Project website at http://www.bamburghcastle.com/bc-archaeology.htm. Evidence for the early Medieval cemetery site at the Bowl Hole in the dunes below the castle is discussed below.

Lindisfarne on the other hand has, thus far, produced no such evidence for sixth century settlement. The site of King Hussa’s fortress may well lie beneath the modern day castle on Biblawe. Lindisfarne has, however, produced evidence for that very rare phenomenon in northern England, a ninth century rural settlement, located at Greenshiel on the north side of the island (O’Sullivan and Young, 1991, 1992, 1995). The site was first identified in the nineteenth century as a result of the expansion of industry on Lindisfarne. Workmen building a waggonway from the limekilns in the dunes came upon some recently exposed and ruinous stone buildings ‘near to that part
of Holy Island where the links and the sandhills called the Snook, are united to the enclosed and cultivated part of the island.’ They proceeded to quarry the buildings for stone for the trackway. During this work two Anglo-Saxon coins were recovered. Both of these were ninth century Northumbrian stycas.

John Selby who was then the major landlord on the island published a short note on the discovery in a local antiquarian journal. He commented on the possible connections between the coins and the buildings, but his observations were never seriously noted by others and the site was forgotten. Its location, however, has remained as an open area with minimum dune cover at the present time. The site was rediscovered by Deirdre O’Sullivan and Robert Young in 1980 during preparatory field work for a large-scale archaeological project on the island, and it consists of at least five narrow buildings, connected to each other to create a cross shaped plan. The settlement was clearly sited to maximize the area of available land, being placed between the beach and the clay cliff that would have formed the seaward limit of cultivable land.

Obviously a priority was to establish the chronology of the site and to this end preliminary excavation was undertaken on the easternmost structure in 1984. The trench was located on the basis of the results of a magnetometer survey designed to find a possible hearth within the building. It was hoped that this would produce material for radio carbon dating. As it happened, the trial excavation produced a Saxon spearhead of late ninth or early tenth century date.

Excavations were carried out at Green Shiel every year from 1985 until 1996. All five buildings were excavated along with an associated yard area and much data was gathered on the structural techniques employed in the building of the site. Floor areas, partition walls, doorways and a range of further internal features such as areas of paved flooring led to the suggestion that the site was a farmstead with at least one identifiable byre (Building C).

The walls of all of the structures make use of some fairly massive stones but they are otherwise fairly crudely constructed. The outer faces of the external walls are built of roughly shaped, rectangular blocks, separated by a rubble infill. There was no trace of mortar or clay bonding in any of the excavated walls, but it is possible that gaps in the stones may have been packed with turves or other vegetal filling which has since
disappeared. There was no attempt to build in a regular manner; as the excavation plans suggest, the stonework was irregularly coursed, of variable width and by no means always laid in a straight line. The outer walls were generally broad (up to 2m in breadth) which may have offered some structural compensation for the rather haphazard construction techniques. Such broad wall construction may indicate that the stone elements were simply the broad bases of turf walls.

Building B provided the best evidence of how the structures were roofed. A line of three postholes was discovered running down the centre of the building, and indicating that it had been provided with a pitched roof supported by a line of central posts. There was another substantial, central post-hole immediately to the east of the partition wall, inside Building A, and another, rather more enigmatically, near the north-east entrance, inside the north wall. There were no indications of post-holes in Building C; the posts here may have been supported by padstones rather than placed in pits. A number of odd paving stones were found along the centre of the building which could have served this purpose. It seems probable that all of the roofs were supported by central posts, rather than an aisled plan.

The excavation was a research project rather than a rescue dig and all of the sand removed was carefully sieved. In spite of this policy, relatively few objects were found. Pottery, usually the commonest archaeological artefact, is entirely missing. It was extensively used in eastern and southern England at this time, but much of Northumberland seems to have managed with little or none of it from the end of the Roman period until the Norman Conquest. In its absence domestic containers of wood or other organic materials would have been used, but these have left no trace in the sandy soil. Food refuse in the form of animal, bird and fish bone is reasonably abundant, as are the remains of limpets and winkles, which may have been used for bait.

If the two coins discovered in the last century are taken into account, a total of nineteen coin finds have been made. One of these is a silver penny of Aethelred of Wessex (AD 866-871), the immediate predecessor of Alfred the Great, all of the others are examples of the small copper coins known as stycas, which were issued in the name of various Northumbrian kings and archbishops of York in the course of the ninth century. The coins were found at a number of different places in and around
Buildings A, C and D, and are interesting not simply as dating evidence, but also as an indicator of monetary exchange.

A number of the other finds discovered are on display in Lindisfarne Museum. The spearhead, found in the first season, is probably the most interesting object. This has a shallow midrib and a split socket, with a double roll moulding at the base of the blade and is an Anglo-Saxon rather than a Viking weapon. Two hone stones were virtually the only artefacts from the floor of Building B. A large iron key indicates the need for security at the site; a small strip of bronze may have part of an ornamental strip applied to a wooden or leather object. A single amber bead from the floor of Building C is the only personal ornament. Two small knife blades, typical of the period, were found by Building D.

Animal bone is well-preserved from the site, but two fragments of bone comb are the only preserved bone artifacts recorded. Some industrial activity is evidenced by the presence of a small amount of iron smithing slag, in and around building C, and lead droplets and a circular pat of lead which were recovered from the second phase of activity at Building A.

Several complete cattle carcasses have been found in the interior of the houses. These include two animals which were buried together in a pit at the east end of Building A, and another in a pit in the western part of the same building. Another complete skeleton was found immediately inside the south-west doorway: this seems to have been dumped on the surface rather than buried. No carcasses were found in building B, but there were two in Building C the probable byre, one adult animal in a pit in the southernmost compartment and another calf by the entrance to this compartment, which again appeared to have been simply dumped. It is not unknown for farmers to bury dead cattle where they die, but it seems most improbable that carcasses were simply left in situ when the buildings were still in use. The cattle probably date from a period after the abandonment of the settlement, though probably not very long after, as they all seem to underlie any rubble collapse, which suggests that the buildings were still standing. There is a considerable amount of butchered cattle bone from the site, more certainly related to its occupation; the age and sex of the animals indicates that the cattle economy was based principally on dairying, though recently it has been suggested that the site may have played an important role in the production of calf skins for the manufacture of vellum (O'Sullivan pers. comm.).
Among the general bone refuse from different parts of the site are the remains of some marine mammals - seals and a whale - which may have been casually stranded on the nearby shore. The bones of deer and a range of fish provide evidence of hunting and fishing. The bird bone includes a fragment of the now extinct Great Auk: it was last spotted on the Northumbrian coast towards the end of the eighteenth century.

The settlement at Green Shiel has many unusual features, not least its survival into modern times. It throws light on one of the darkest periods of Northumbrian history. All of the dating evidence suggests that it was built in the middle of the ninth century, and probably abandoned by the end of that century, although it is less easy to be sure about this. It is possible that the settlement was abandoned at the time of the last recorded Viking raid or shortly afterwards.

Green Shiel's connection with the Anglo-Saxon monastery on Lindisfarne is unclear. There is nothing to suggest that the inhabitants followed a monastic way of life, and it seems best to view it as an ordinary, secular settlement. The finds evidence indicates that it was occupied in the middle and later part of the ninth century, before the island was finally abandoned by the monastic community, but it must be remembered that, the monks left Lindisfarne and went to Norham for an unknown length of time in the mid-ninth century. The beginnings of the site may lie in this period of abandonment. The very existence of an extra-monastic secular settlement on the island itself seems odd: it could be interpreted as indirect evidence for the increasing secularisation of the Cuthbert community in the ninth century. The settlement was probably inhabited for some decades; it cannot be absolutely demonstrated that this occupation continued after AD875, but it seems very probable that it did; the island itself was certainly not totally abandoned.

Little is also known about the political ordering of, and social relations within, the early Medieval landscape of Northumberland as a whole. It is generally thought that land at this time was largely divided up into 'shires' or 'multiple estates', each of which was centred on a high status settlement, possibly the seat of a local lord. Given our lack of archaeological data, little can be said for sure about the nature of these shires in the county at large and especially within the vicinity of the National Park.
In 1977 Prof. Chrostopher Morris published a seminal survey of pre and post Viking patterns of landholding in Northumbria. By the late seventh/eighth centuries it is clear that the major monasteries were large scale landowners in the region and that they could hold land at some distance from the monastery itself c.f. lands held by the Lindisfarne Community (Morris, 1977, 90-92) which extended well into Scotland and down into Yorkshire. Little however is known about areas in the region that were not in monastic hands. Morris suggested that much of the north would have been divided up into land blocks that may have harked back to an earlier British estate system (Joliffe, 1926; Glanville Jones, 1961, 1976). These may have been based upon a central *mansio* surrounded by a number of *vills* which all equally owed service to it. Such estates it is argued became ‘shires’ in the north.

Recent work by Colm O’Brien (2002), using a combination of Medieval records and early Medieval archaeology, has led him to suggest that much of the northern half of the National Park was covered by two ‘lost’ shires (which he terms ‘Gefrinshire’ (based on Yeavering) and ‘Bromic’ (at one time a Lindisfarne estate which included the Breamish Valley and possibly also the settlements known in Medieval times as ‘the ten towns of Coquetdale’). O’Brien makes the intriguing suggestion that his shire of ‘Bromic’ may have been centred on Ingram, in the shadow of the hillfort on Brough Law. Although no early Medieval finds have yet been made at Ingram, this is certainly possible, although another contender could be Greave’s Ash, higher up the valley at Linhope.

Morris goes on to assess the impact of Viking activity on this clerical/secular pattern of early Medieval landholding, pointing out that no land-settlement is associated with the first phase of Viking activity in the region. The first documented Viking land division occurred in 876 when Healfdane ‘shared out the lands of the Northumbrians’ (Morris, 1977, 96). This would seem to imply an orderly process not associated with any violence at all.

**Place Name Studies**

The study of place names may well give us an insight into the development and evolution of the early settlement pattern in Northumberland. As early as 1920 Mawer produced his seminal discussion of place names in Durham and Northumberland (Mawer, 1920) and in 1960 Ekwall’s *Concise Oxford Dictionary of English Place*
Names also dealt in detail with the region. In 1970 the late Godfrey Watson produced his eminently readable *Northumberland Place Names: Goodwife Hot and Others* (Watson, 1970, reprinted 1986 and 1995). This latter publication built on earlier work and was the end-product of an intricate and intimate knowledge of the county. Five years later, Stan Beckensall produced a popular guide entitled *Northumberland Place-Names* (Beckensall, 1975 reprinted 1992). In the last five years A. C. Breeze has gone some way to revitalize an academic interest in place name work in Northumberland (1998, 1999, 2001).

**Burial Evidence**

In her review of Anglo Saxon settlement in the north (1983) Cramp was clear about the nature of the pattern of Anglo-Saxon burials in the region;

…there are no large cremation cemeteries north of the Yorkshire Wolds and west of the Great North Road and no mixed cremation and inhumation cemeteries north of Saltburn on Sea. However, by the mid-sixth century there is evidence from Catterick to Milfield for small inhumation cemeteries of persons who were buried according to the Anglo-Saxon rite.

(1983, 266)

Twenty years on this pattern still seems broadly correct. As with settlements, research on cemeteries and burials generally for this period has been very much a hit and miss affair, with most finds being made by chance or in the course of the excavation of sites of ostensibly other periods.

Cramp also pointed out that a significant number of Anglo-Saxon period burials were associated with the sites of Roman forts e.g. the burial of a sixth century female ‘in a central position in the fort at Corbridge’, which she believed indicated that the *vicus* was still surviving at this time. Similarly work by Barbara Harbottle has recorded a spread of middle-Saxon burials over the headquarters building at Newcastle (Cramp, 1983, 268).

Cramp herself is dismissive of the quality of any of the burial data from the Bernician part of the kingdom of Northumbria for use in social reconstruction work. This is
largely because many of the burials are individual chance finds and lack any well defined archaeological context (Cramp, 1983, 269 – 271).

This fact can be clearly illustrated with reference to the Barrasford and Capheaton burials in Northumberland. The former is that of a male with a richly decorated shield and sword that may date to the seventh century; the latter was inserted into a Bronze Age burial mound, and produced the enigmatic remains of a bronze hanging bowl, again of likely seventh century date. Possible seventh century interments have also been recorded from near Great Tossor and Hepple (Upper Coquetdale) in areas very rich in Bronze Age burials, but little else is known about their contents.

In 1990 however, Scull and Harding produced the definitive report on the early Medieval cemeteries associated with the henge sites of Milfield North and South in the Milfield Basin, just outside the National Park (1990, 1 – 29). Excavations on both of these prehistoric monuments had taken place in 1975, 1977 and 1978. At Milfield North, 5 later graves were found in association with the henge, while at the South site some 45 potentially later graves were identified, of which 21 were excavated. This association is hardly likely to be fortuitous and must argue for the fact that the henges were still a visible prominent and important part of the physical and cultural/ritual landscape in the early Medieval period.

The report contains a full catalogue of the finds made at both cemeteries; these included copper alloy and iron annular brooches, copper alloy pins and a buckle, at least one so-called ‘girdle pendant’ and a range of iron knives and blade fragments. Iron tags, possibly from shoes were recovered at Milfield South while part of an iron chatelaine came out of a ditch section at Milfield North. The latter find is thought to mark the site of a grave that was disturbed by later ploughing. Due to mineral replacement on some of the iron and copper alloy finds a series of textile fragments was preserved. These were all wool, in a variety of weaves.

Two tentative phases of burial were identified in the Milfield south group of graves (1990, 22) and the cemetery itself may date to the late seventh/early eighth centuries AD. This is in contrast to the potentially earlier sixth/seventh century dating of the Milfield North cemetery.
There is much interesting discussion about the role of re-used earlier monuments in legitimating the power base of incoming, ‘new’, elites (pace Bradley, 1987). But conclusions are tentative and the final report says;

There is nothing about the burials at Milfield North to suggest an elite community, and here the henge as a focus for burials suggests an attempt to establish or reinforce claims to land by a new farming community. Whether the same might be true of Milfield South must remain an open question in view of its probable later date and likely association with the royal vill (Yeavering) and the emphasis here, in contrast to Milfield North, is on the henge interior as a defined area for burial.

(Scull and Harding, 1990, 25).

The discovery of these two cemeteries in the Till Valley does demonstrate the presence of Anglian groups in the region at an early date though and it raises the issue of whether more such cemeteries await discovery and what the relationship of the cemeteries to settlements like New Bewick and Thirlings might be.

One further inhumation cemetery, recently discovered in Northumberland, is that at the Bowl Hole on the foreshore to the east of the castle at Bamburgh. This is a site that is still being actively explored as part of the Bamburgh Research Project, and more details are available on the project web site. The cemetery was first excavated in 1998 and then again in 1999, 2000 and 2002. Work still continues at the site.

A total of 16 skeletons was excavated in 2002. There was great variety in the way the bodies had been buried. Some lay on their backs, others on their fronts, while some lay ‘crouched’ in the graves, in a foetal position. All of the adults were tall, implying a better than average diet, and the males all showed evidence of being heavily muscled during life. This evidence, together with results from previous work, suggests that the Bowl Hole was the burying ground for retainers – soldiers and ladies in waiting – for the Anglo-Saxon Northumbrian royal house residing at the castle site.

A few of the burials had grave goods – small personal items such as iron knives, buckles or pins for clothing. One woman was buried with a piece of flint and steel, for fire lighting, while another was buried with a bone comb of seventh century date.
The Bowl Hole cemetery seems to have been in use in the 7th and 8th centuries AD, around the time of the conversion of Northumbria to Christianity by saints Oswald and Aidan. As the Bamburgh Project web site discussion of Bowl Hole says:

Although we naturally think of a pagan being buried with grave goods, and a Christian being buried with none, this was a time of great change with many new ideas and teachings. So, some of those buried with grave goods may well have been Christian, while others buried without could have been pagan. It is not until a few generations after, when Christianity was well established and Northumbria was sending priests to convert other parts of England and the continent that burying people with grave goods finally stopped. The Bowl Hole excavations give us a unique glimpse into this fascinating and important transitional time.

**Monastic Settlement and the related archaeology of Christianity**

The detailed history of the Christian conversion of the north of England has been well rehearsed and need not detain us here (see Higham, 1993 for a useful summary). In 625 Edwin of Northumbria married a Christian Kentish princess and came back northwards with Paulinus, an adherent to the ‘Roman’ church who preached and baptized throughout the region. Edwin’s death at the battle of Hatfield in AD633 showed up the weakness of the foundations of this early Christian conversion and the region reverted to paganism until Oswald succeeded to the throne in AD634. Oswald had been in exile in Scotland and was himself converted to ‘Celtic’ Christianity. This was the brand that he reintroduced into the north when in AD635 he invited Aidan to come from Iona and found his monastery on Lindisfarne. Lindisfarne, in turn, became a daughter house of Iona and in time the mother house for the church in Bernicia. Oswald’s successors maintained the ‘Celtic’ church in Northumberland.

Oswy gave grants of land for the founding of at least six monasteries in Bernicia. Five of these are likely to have been Melrose, Abercorn, Coldingham, Norham and Gilling near Richmond in what is now Yorkshire. Actual churches relating to this period are rare, with the probable example at Yeavering being the only excavated example.
The 660s saw a further shift in the politics of the Christian ‘conversion’. Supporters of the Roman church were becoming more influential in Northumbria and Oswy’s queen Eanfled took their part. This brought the young monk Wilfred onto the scene and he was to play an important role in the development of the Northumbrian Church after the Synod of Whitby in 664 which was designed to heal the Roman/Celtic split in the church and which left the Roman church dominant.

As Higham has said (1993, 135) the Synod caused further breaches, with abbot Colman leader of the Scottish/Celtic faction resigning the see of Lindisfarne. The Roman action was strengthened and Wilfred was appointed to the bishopric of a revived see of York. ‘His status as the best qualified member of the triumphant Roman Church brought Wilfred a plethora of estates, both in Northumbria and Mercia, while his troubled career was later to find him converting pagans of Sussex and Frisia’ (Higham, 1993, 135). Royal patronage gave him Hexhamshire and he built the most remarkable monastic church in Hexham, of which now only the Merovingian inspired crypt still survives. After a turbulent career he was driven into exile in AD678 and he died in AD709.

The archaeology of Wilfred’s church at Hexham has been well studied. In 1961 Harold and Joan Taylor produced their magisterial review of all of the then known information about the seventh century church, building on the, as then, unpublished work of C.C. Hodges (Taylor and Taylor, 1961, 103 – 134). They discussed Hodges work again in their *Anglo-Saxon Architecture* published in 1965. This was followed by Taylor’s publication of some rare fragments of Anglo Saxon figural sculpture discovered in 1907 when the present nave of the Abbey was constructed (Taylor, 1966, 49 – 60). 1974 saw the publication of Gilbert’s study of the early church at Hexham (Gilbert, 1974) and an analysis of early sculpture at Hexham by Prof. Cramp (Cramp, 1974). In 1978 Richard Bailey and Deirdre O’Sullivan carried out excavations over the surviving crypt of the early church before paving was re-laid in this part of the present structure. This was the first modern excavation inside one of the most important buildings in Medieval Europe. Much information was gained relating to the structural sequences relating to the crypt’s construction and this in turn shed light on a range of questions relating to Wilfred’s church (Bailey and O’Sullivan, 1979). Also in 1979 Eric Cambridge produced a detailed review of C.C. Hodges discussion of the structural sequences of the nave of the Abbey (Cambridge, 1979).
Five years later in 1984 Cramp edited the first volume in the series of monographs dealing with *Anglo-Saxon Stone Sculpture in England*. This dealt with Durham and Northumberland and detailed much of the material from Hexham and elsewhere in the county (see below). Bailey revisited the crypt at Hexham in two publications (1991; 1993) and most recently in 1995 a review of a series of excavations, carried out between 1984 and 1993, was published (Cambridge, *et al.* 1993, 51 -138). This last publication is a very important one as it sheds much light on the development of the monastic complex and later churches at Hexham.

As highlighted earlier, the seventh and eighth centuries gave rise to the so-called Northumbrian ‘Golden Age’. This ‘Golden Age’ witnessed a flowering of the arts and of religious learning, during which such masterpieces as the Lindisfarne Gospels were produced, and the important monastic sites of Jarrow, Monkwearmouth and Lindisfarne flourished. The impact of monastic culture on the region at the time of the ‘Golden Age’ has been discussed in detail in a range of excellent publications and it need not concern us in the present context. (For more detail see Bonner *et al.*, 1989; Farrell, (ed.) 1978; Fletcher, 1980; Kitzinger and McIntyre, 1950; Cramp, 1988; Hunter-Blair, 1976; Higham, 1993; Kendrick *et al.* (eds.), 1956 – 1960; Verey *et al.* (eds.), 1980; Henderson, 1987; Alexander, 1978; Nordenfalk, 1977; Backhouse, 1981; Battiscombe (ed.) 1956; Cramp, 1994; Webster and Brown (eds.) 1997; Webster and Backhouse, 1991).

One of the most prominent archaeological manifestations of artistic flourishing in Northumberland, certainly from the eighth century onwards, is the occurrence of early Medieval sculptured stone work, usually in the form of decorated crosses and grave markers. These have been extensively studied since antiquarian times and the examples in Northumberland received their first serious academic treatment in 1927 when R.G. Collingwood produced his *Northumbrian Crosses of the Pre-Norman Age*. This remained the main source of information about these objects until the research project headed by Rosemary Cramp at Durham University produced the first volume of the *Corpus of Anglo-Saxon Stone Sculpture in England* in 1984. This dealt exhaustively with Northumberland and Durham and has set the tone for the rest of the Corpus series.
Cramp highlights the close relationship between stone crosses and monastic centers in the pre-Viking period (1984, 3, fig. 2) and she has identified a variety of ‘schools’ of sculpture relating to these e.g. Hexham; Monkwearmouth/Jarrow. She has attempted a stylistic and chronological analysis for each piece of sculptured stone that survives and volume 1 deals with material spanning the eighth – eleventh centuries AD.
ASSESSMENT OF THE CURRENT STATE OF KNOWLEDGE RELATING TO THE EARLY MEDIEVAL ARCHAEOLOGY OF THE NORTHUMBERLAND NATIONAL PARK.

It must be stated from the outset that our knowledge of the early Medieval period in the area of the National Park is decidedly limited.

Settlements

As was noted above there is the possibility, given what we know about the re-use of hillforts in places like Scotland and Wales, that such sites within the Park may have been similarly re-occupied. Humbleton Hill would be a prime candidate and as we have already noted the finding of a possible early Medieval iron knife in antiquarian excavations at Brough Law in the Breamish Valley also might suggest that this fort had a post-Roman re-occupation. Emerging radio-carbon dates also allow the suggestion that Wether Hill (Topping, forthcoming, 2003) may have been occupied in some form into the 6th century AD.

O’Brien has suggested (2002) that the Beamish Valley was Lindisfarne land. This might provide a context for one of the most unusual ancient settlements in the valley. The late prehistoric enclosure of Ingram Hill (which, surprisingly, given its name, is the most low lying of the many enclosed settlements in the valley) is unique amongst all the native sites in the Cheviots in having been the focus of three separate excavation projects in 1939, 1948 and 1970 (Hogg, 1942, 1956; Jobey, 1971). It began life in the Iron Age as a palisaded settlement and was later given a substantial defensive bank. Later still, and at an unknown date, but after the enclosure had undergone cultivation and then grass had begun to grow on top of the cultivated soil (Hogg, 1956, 156), a number of small rectangular buildings were inserted into the bank and at least one was constructed in the interior. These have in the past been interpreted as Medieval shielings, but it seems strange to have shielings so close to the village. Hogg excavated two of the buildings, but these produced no dateable finds and only limited information about their construction.

Hogg noted that the majority of the rectangular buildings ‘had two rooms, one large, nearly rectangular, but with the long walls bowed slightly outwards; the other small, with slighter walls and a separate external entrance’ (1956, 158). He was unable to find any British parallels for these structures and drew attention to houses of similar
An Archaeological Research Framework for Northumberland National Park

plan from Stavanger in Norway (1956, 158, fig 6, 159). These were dated from the sixth to eighth centuries AD. These may have no relevance at all to the site at Ingram, but it is interesting to note his comment that:

These houses are found in that part of Norway which lies nearest to the coast of Northumberland, and there is nothing inherently improbable in the idea that a small group of Norse invaders should have attempted to settle at Ingram, without permanent success.

(1956, 159)

Perhaps, given O’Brien’s speculation, the site in its latest phase is best explained as a monastic cell, occupied by monks who may have spent part of the year preaching at settlements in the surrounding hills. Just possibly, the so-called ‘Holy Well’ in the adjacent field may offer some support to this suggestion. Further progress in our understanding of the site is unlikely without a fourth campaign of excavations, whereby the remains could be subjected to modern scientific techniques.

**Place Name Studies**

No detailed programme of work has been carried out on place names in the area of the Northumberland National Park though a small scale analysis was made in relation to the survey of Simonside carried out by Lancaster University in 1998-99 (Lancaster University, 2000).

**Burial Data**

Greenwell, writing in 1877, notes that a barrow at Great Tosson had been accidentally opened up by quarrymen in 1858. This produced traces of the only ‘Anglian’ burial so far recorded from inside what is now the NNP. The barrow contained four cists, each with inhumation burials and associated food vessels. One of the cists also seems to have produced a small bronze buckle and an iron spearhead, (now lost), (Greenwell, 1877, 431-2). These pieces were probably from an ‘Anglian’ burial that had been inserted into the already existing mound. Greenwell notes other such burials from the Hepple area to the east of Tosson and just outside the National Park. In the British Museum there is an iron bridle bit and a pair of shears said to have come from the same burial (Rahtz et al. eds., 1980, 294, no. 14).
Monastic Settlement and the related archaeology of Christianity

No monastic settlements are known from within the Northumberland National Park (though see discussion of Ingram Hill above).

Several examples of sculptured stone crosses and related features are known, however, and these have been discussed in detail by Cramp (1984). The area around Falstone is particularly important in this respect. Three pieces of a cross shaft, dating to the last half of the ninth century, have been recorded at various locations around the village. The largest piece was found in the churchyard of St. Peter’s church in May 1885. The shaft is decorated with bush scrolls and berry bunches and Cramp believes that it could take its inspiration from a cross like that found at Nunnykirks. She also highlights a possible parallel with the decoration found on some tenth century metalwork e.g. the Windsor sword pommel (Cramp, 1984, 172). The cross is now in the museum of the Society of Antiquaries of Newcastle upon Tyne (Acc. No. 1978. 24).

A further interesting discovery in the Falstone area comes from Hawkhope. In 1822 an incomplete house shaped memorial was given to the Society of Antiquaries of Newcastle upon Tyne. It had been found six years before by the Rev. J. Wood, Presbyterian Minister of Falstone, some 3feet below the ground surface in a bank that divided a field being cleared for cultivation. Hawkhope may have been the site of a Medieval chapel (see Armstrong’s 1769 Map of Northumberland).

The piece is in a worn state and is currently held by the Society of Antiquaries (Acc. No. 1814. 23). The left hand panel carries an inscription in Old English in Insular Majuscule script. The right hand panel carries the same inscription in runic characters. Cramp translates it as follows; ‘In memory of Hroethberht, a monument of the uncle: pray for (sc ‘his’) soul’.

W.G. Collingwood in his Northumbrian Crosses of the Pre-Norman Age (1927, 165) believed the piece to be a diminutive hog-back, but Jim Lang in his detailed survey of these monuments (1967) did not accept it as such. Cramp believes that its small size, ‘invites comparisons with the small shrines on top of Irish crosses or the house-shaped metal shrines known in British and Continental contexts from the seventh and eighth centuries’. She thinks that it is a skeuomorph of a metal or bone reliquary or shrine and that it may have stood on a pediment or been built into the wall of a church. She dates the find to the mid eighth – mid ninth century AD (1984, 173).
Other sculpture has been found in the area around the Park:

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<td>Birtley, St Giles Church NY877 780</td>
<td>i) Cross shaft, uncertain date. ii) Memorial stone or grave marker, with inscription, c. C8th AD</td>
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<td>Carham NT 796 344</td>
<td>i) Fragment of cross shaft c. C10th AD ii) Fragment of cross shaft c. C10th –C11th AD iii) Fragment of cross shaft or head c. Late C10th – C11th AD</td>
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<td>Hexham Abbey</td>
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<td>Rothbury, All Saints Church, NU 057017 St Oswald –in –Lee (Heavenfield), NZ 936 694</td>
<td>Carved stone slab in two pieces. First half C 9th AD i) Part of plain cross shaft in two pieces. Date Uncertain ii) Cross base. Re-used Roman altar. ?C7th AD</td>
<td>Cramp, 1984, 217 - 221 Cramp, 1984, 222</td>
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<td>Simonburn, St Mungo’s Church NY 872735</td>
<td>i) Cross shaft. Last quarter C8th – first quarter C9th AD ii) Centre of cross head. Last quarter C8th – first quarter C9th AD. iii) Part of chamfered baluster impost or frieze. First half C8th AD. iv) Part of chamfered baluster impost. First half C8th AD v) Part of cross slab. C. first half C8th AD.</td>
<td>Cramp, 1984, 223 – 224.</td>
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<tr>
<td>Warden, St Michaels Church, NY 914 665</td>
<td>i) Grave slab cut from Roma altar. c. first half C11th AD ii) Re-used Roman column – converted to grave marker. c. C8th – C11th AD</td>
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<td>Wooler, St Mary’s Church, NT 993 280</td>
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HISTORICAL BACKGROUND TO MEDIEVAL NORTHUMBERLAND (c. 1066 AD – 1603 AD) Paul Frodsham

The Medieval period begins with the success of William the Conqueror at the Battle of Hastings in 1066, and for the purposes of this account it covers the period through until the Union of the Crowns in 1603. Much more historical detail is available than for earlier periods, with a variety of legal and other documents available to add flesh to the bones provided by the archaeological record. As a result, this historical background deals directly with events in the area of the National Park and attempts to set these events into the broader context of Northumberland as a whole.

It is divided into four sections; the first covers the imposition and consolidation of Norman control after the Conquest, including the setting up of new Baronies and the Liberties of Redesdale and Tynedale; the second considers the subsequent relative peace and prosperity of the thirteenth century; the third covers the period from 1296, when Edward I declared himself King of Scotland, leading to some three centuries of intermittent Anglo-Scottish conflict that only came to an end following the Union of the Crowns in 1603. The impact of this conflict on the people who had previously lived relatively peacefully in what is now the National Park was horrendous, and was linked directly to the development of the violent way of life of the Border Reivers. The fourth and final section outlines the key role played by the Church through the entire Medieval period.

After 1066: Baronies and Liberties.

Following William’s conquest of England and his ‘harrying of the North’ to suppress all lingering opposition amongst the northern English aristocracy, the Crown took control of Northumberland. William realised that he would be unable to control the north without an Earl of Northumberland who would enjoy the support of the northern people while remaining loyal to him. He eventually settled upon Robert de Mowbray, who at least had the decency not to revolt until after William’s death in 1087. Under William, a rigid feudal system was set in place which relied upon a pyramidal social structure. The king, who owned all the land, granted most of it to barons in exchange for guaranteed military service. The barons sub-let land to lesser lords or knights, again in exchange for military support, and these in turn could sub-let to yeomen or
‘free’ peasants. Some areas were apparently left under the control of existing English
thegns who were considered sufficiently loyal to the new regime.

Under the feudal system, all able bodied men bore the obligation of taking up arms in
support of their lord or the king. The average peasant farmer in his upland
Northumberland village was perhaps less likely to take part in military conflict than
would be the case in later Medieval times, but the guarantee of loyal military service
was always necessary in Northumberland, as there was a more or less constant threat
of conflict with Scotland during the century and a half after the Conquest (McCord
and Thompson 1998; Lomas 1992, 32-41). No major battles occurred, as they would
later, in the immediate vicinity of the National Park, but national armies passed across
the Border on several occasions.

In 1139, faced with problems elsewhere, King Stephen was forced to buy peace on the
Border by awarding the earldom of Northumberland to Henry, heir to King David of
Scotland. This award was made in the Treaty of Durham, under the terms of which
the Scots also took possession of Cumbria. England reclaimed both northern counties
in 1157, although the Scots retained the Liberty of Tynedale (see below). In the
Treaty of Falaise (1174) the Scots became subordinate to the English crown, a
situation which did not meet with universal approval north of the Border. During the
English civil war in 1215, a Scottish army occupied Northumberland, but this was
soon driven back north by King John. Eventually in 1219, peace terms were agreed
which would last for virtually the rest of the century. In 1237 under the terms of the
Treaty of York, Scotland renounced all claim to the English northern counties. It is
worth noting that right through until this point it was by no means certain whether
Northumberland would end up in England or in Scotland, but from this time on,
despite centuries of conflict and periods of considerable Scottish influence in the
region, it would remain essentially English territory.

Effective Norman control over the Northumberland uplands was not actually
established until the reign of Henry I in the early twelfth century, by which time much
of the land had been granted to loyal Norman barons. These barons built substantial
castles, originally in timber but soon in stone, from which to oversee their new lands.
Twenty-one land-holding barons are recorded in Northumberland in the mid twelfth
century. The Muschamps, who were awarded the Barony of Wooler which included
much of the northern fringe of the Cheviots, including the townships of Hethpool,
Yeavering, Akeld and Humbleton. The Barony of Roos (based at Wark-on-Tweed) included many townships in and around the Cheviots by the early thirteenth century, such as Kirknewton, Westnewton, Pawston, Shotton and Ilderton.

The Cheviot and hills to the north were known as the ‘Forest of Cheviot’, and belonged, in the twelfth century, to the Muschamps of the Barony of Wooler. The Forest of Cheviot would have been used for aristocratic hunting expeditions, and also for summer grazing. Surviving records prove that there was some woodland, and this must have been an important resource for nearby villages. Medieval hunting forests also existed in Coquetdale, North Tynedale, Redesdale and in the wastes north of Hadrian’s Wall.

The Manor of Rothbury was retained by the Crown after the Conquest, and was eventually granted, along with the Forest of Rothbury, to Robert FitzRoger, Baron of Warkworth, in 1205. It became Percy land in 1332. The Barony of Hepple, originally granted to the ‘de Hepple’ family, included much fertile land to the west of Rothbury (including, eventually, Tosson, which had been part of the Greystoke Barony centred in Cumberland) and was much more important in Medieval times than today’s pleasant little village of Hepple might suggest.

South of Coquetdale, all of the land now within the National Park fell within the Liberties of Redesdale and Tynedale from the mid twelfth century. These liberties were nominally independent but were still subject to English Law and their existence was subject to the will of the English monarch.

The origins of the Liberty of Redesdale are obscure, but it was granted to the Umphravilles probably towards the middle of the twelfth century. It consisted of some 60,000 hectares, including the parishes of Elsdon, Corsenside, Holystone, and part of Alwinton. The Umphravilles built a splendid motte and bailey castle at Elsdon as the headquarters of the Liberty. This did not remain as the headquarters of the Liberty for long, however, as it was replaced in about 1157 by a new motte and bailey at the more strategic location of Harbottle, built, apparently, on the direct orders of Henry II. Another administrative centre for the liberty was maintained in the form of a tower at Otterburn, but it seems that most effort went into the construction and maintenance of Harbottle, a fact which probably reflects the greater agricultural potential of this valley in comparison to the wild landscape of Redesdale. Another reason why
Harbottle may have been favoured as the focal point of the Liberty might have been the as yet poorly understood status of the ‘Ten Towns of Coquetdale’. These settlements (which extended as far north as the Breamish, including Ingram, Biddlestone, Alwinton and Clennel) formed part of the Barony of Alnwick, held by the de Vesci family, but for some unknown reason were apparently held by the Umphravilles from the reign of Henry I. If they were actually considered by the Umphravilles as part of their landholding, then Harbottle makes more sense as a centrally located administrative centre. It is recorded in 1604 that the inhabitants of the Ten Towns ‘have ancientlie don and nowe do their service to Harbottle’, but it is not clear whether this was a truly ancient arrangement or whether it was a situation arising out of the presence of the Warden of the Middle March (see below) at Harbottle in the sixteenth century.

That part of the Park to the south of The Liberty of Redesdale was within the Liberty of Tynedale, which covered more than 80,000 hectares. This liberty (also known as the Regality of Tynedale) was created by Henry II in 1157 and awarded to William (brother and heir to Malcolm IV of Scotland) to compensate him for the loss of the earldom of Northumberland which had, by agreement, been held by Scottish earls for the previous two decades. With a brief exception (1174-1189, following William’s failed attempt to win back the earldom by force) Tynedale was now to remain under the control of Scottish Kings (though subject to English law) until the outbreak of hostilities between the two nations in the late thirteenth century.

The Liberty was governed from the Scottish royal castle at the local ‘capital’ of Wark-on-Tyne (just outside the Park) which had a prison, bakehouse, brewery, forge, fulling mill, corn mill and a deer park (Charlton, 1987, 30). Control of the extensive royal hunting forest of North Tynedale was retained by the English Crown, although it was much used by the Scottish nobility.

Sites within the Liberty of Tynedale, and within the National Park, which date from this period, include the ‘castles’ at Dally and Tarset. Dally was built by David de Lindsay, from Lothian, and was controversial as its construction apparently commenced in 1237 without the prior approval of Henry III. After some negotiation, the ‘castle’ was apparently completed, but to a modified design, as a ‘hall house’. Dally was robbed of much stone when the adjacent farmhouse and mill were built in the late eighteenth century, but the ruins (now conserved by the National Park
Authority) display very high quality masonry. It must have been an impressive site when first built. Permission to construct Tarset Castle was granted in 1267 to John Comyn. His ancestors arrived in England with William the Conqueror, and his family was destined to play a major role in late thirteenth and early fourteenth century Scottish politics. It is not easy, when looking at the unimpressive ruins of Tarset Castle today, to appreciate how important this site once was.

The Northumberland baronis underwent complex and often fascinating histories throughout the Medieval period, often changing hands, being subdivided or merged, but such details cannot concern us here. Detailed histories of the Medieval baronis are provided in the relevant volumes of ‘A History of Northumberland’, while Lomas (1996) provides a useful summary.

Peace for the peasants: thirteenth century village life

Prior to 1219, the constant threat of conflict would have been nothing new to the residents of Northumberland villages, and the power games played out between assorted French speaking kings and nobles, whether ‘English’ or ‘Scottish’, must have seemed of little relevance to villagers who had been used to more or less continuous conflict going on around them for centuries. The fact that their taxes were now payable to a Norman baron rather than an Anglian thegn would have been of little consequence to most. Now, however, other than a brief period of Border conflict associated with the Magna Carta (1215) in which most Northumberland baronis were opposed to King John, the Border was to remain relatively peaceful through until 1296. The peaceful conditions of the thirteenth century were to see many changes for the better.

It is unfortunate that the Domesday Book did not extend to Northumberland, as, in comparison with other English counties, there are relatively few surviving records relating to Northumberland prior to the twelfth century. Of the seventeen or so settlements of village status which survive today in the Park, most were in existence by this time. There were also other Medieval villages which have not survived, the ruins of which can be seen as grass covered earthworks in today’s landscape.

In Hadrian’s Wall country, permanently occupied settlements were generally few and far between, even during the thirteenth century. Visible earthworks suggest that there was a hamlet of some kind associated with Bradley Hall (where Edward I is known to
have stayed while en route to Carlisle in 1306), but the exact nature of this settlement is uncertain. About three hundred years later, a bastle was constructed on the site, but this does not necessarily imply continuity of settlement over the preceding three centuries.

When viewed from the air, most historic villages are clearly surrounded by ‘rig and furrow’ field systems. These are the remains of Medieval cultivation, fossilised when the fields were abandoned and the land returned to pasture. Some such field systems are very complex, and include agricultural terraces on hillsides as well as conventional rigs on more gentle slopes. The development of such systems may have occurred over a very long time, and some terraces were probably in use in prehistoric times. However, most of the rig and furrow visible in the Park landscape today was probably under cultivation during the thirteenth century.

The recovery of hundreds of sherds of twelfth and thirteenth century pottery from the recent excavation of rig and furrow adjacent to Ingram church suggests that domestic refuse was being thrown onto the fields as fertiliser at this time. The virtual absence of later pottery from these fields suggests that they probably reverted to pasture soon after the outbreak of hostilities in 1296 (Frodsham and Waddington, 2004).

F W Dendy, (quoted in Dixon, 1895, 241) in a paper entitled ‘The Ancient Farms of Northumberland’, describes the layout of fields around Medieval villages:

Beyond and around the village was the arable land, divided into great fields or flats, usually three in number. In that case they were worked on a three field rotation of crops, one being appropriated for autumn sown corn (i.e. wheat or rye), one for spring sown corn (i.e. barley or oats), or for peas and beans, and one was left fallow. These fields were again sub-divided into furlongs or squares or shots, placed very often at right angles to each other, with headlands or headriggs between them, on which the plough turned, and by which access was gained to these smaller areas. Each furlong was divided into acre or half-acre strips, separated from each other by balks of unploughed turf, and these acre or half acre strips were usually known as…rigs. The strips were distributed in equal proportions amongst the cultivators in such a manner that each man’s holding was made up of a number of acre or
half acre strips lying apart from each other…so that no man, while the system remained intact, held two contiguous strips. Each individual holder was bound to cultivate his strips in accordance with the rotation of crops observed by his neighbours, and had rights of pasture over the whole field for his cattle after the crops were gathered.

While systems such as this were in operation around villages on the fringes of the park such as Glanton, the terrain dictated that the layout of fields could not be so regular around upland villages. Nevertheless, the basic system was similar, with arable land managed in individual strips within communal fields. These strips became asymmetric ridges on slight slopes, and linear terraces were constructed on steeper ground. Many settlements in North Tynedale and Redesdale only had small arable areas, as the local soils and climate dictated that the emphasis here was on stock rearing, as it still is today. In addition to the arable fields, meadows were managed to provide hay for winter fodder, and cattle, sheep, poultry and pigs provided a variety of important products for consumption and sale at local weekly markets and annual fairs.

Markets and fairs were strictly controlled and required a royal licence: regular markets were held on the fringes of the Park at the towns of Alnwick, Morpeth, Wooler, Rothbury, Hexham, Haltwhistle, Wark and Bellingham. Within the Park, in the Liberty of Redesdale, weekly markets and annual fairs were held at Harbottle and Elsdon. Harbottle’s market day was Tuesday, and its fair was held on 8th September. In accordance with its market charter dated 1281, Elsdon had a weekly market on Thursdays, and a three day fair in August each year. This fair survived as a popular traditional event until the late nineteenth century.

Beyond the fields around each village were areas of common pasture, woodland, and waste. Hunting forests were located in many remote areas. There were also formalised hunting parks, and the substantial stone wall around Robert Fitzroger’s late thirteenth century deer park at Rothbury can still be seen on the northern flanks of the Simonside Hills near Lordenshaws. It is recorded that the creation of this park caused outrage amongst local farmers who had previously enjoyed some access to the land for cattle grazing.

While the Medieval population was concentrated in the villages and hamlets, the hills, which still contained the remains of so many late prehistoric hillforts and settlements,
as well as the occasional Roman fort, were occupied seasonally. This system, known as transhumance, probably represents a faint echo of the seasonal cycles of movement followed by Mesolithic and Neolithic people some 5000 or more years earlier. In August, the residents of the shielings returned with their stock to the comfort and security of the valleys to cut the hay and harvested the oats and bigg (a low grade of barley) planted the previous spring: this would provide food for man and beast over the coming winter. Wheat was considered unreliable in the poor soils and short growing seasons of Redesdale and North Tynedale, and was rarely grown. Some crops may also have been grown at the summer shieling grounds and brought back downhill with the cattle, along with supplies of peat for use as winter fuel. The cattle were over-wintered in the fields, thus ensuring the fertility of the land for the following spring sowing season, after which, in April or May, they would again be driven out to the shieling grounds.

In 1599, the great Elizabethan antiquary, William Camden, described this way of life, which had remained essentially unaltered for centuries:

> Here every way round about in the wasts as they tearme them, you may see as it were the ancient Nomades, a martiall kind of men, who from the moneth of Aprill unto August, lye out scattering and summering (as they tearme it) with their cattell in little cottages here and there which they call Sheales and Shealings.

Shielings sometimes occur in isolation and sometimes in groups of half a dozen or more, and all are notoriously difficult to date with any degree of accuracy (Ramm et al., 1970). Most were built of turf on crude stone footings, and were presumably rebuilt each spring. They were often built using stone robbed from prehistoric sites, and are thus frequently found built against prehistoric boundary walls or adjacent to Iron Age hillforts. Evidence for the use of shieling grounds is recorded in many place names, for example High Shield, Sewingshields and Shield-on-the-Wall (in Wall country), Aldensheles and Linshiels (Coquetdale), Davyshiel (Redesdale), and Shipley Shields and Gibshiel (North Tynedale). The suffix ‘hope’ (meaning a ‘blind valley’) is also usually indicative of seasonal grazing lands. Well known examples in Redesdale include Birdhope, Cottonshope and Spithope.
There are documentary references to shielings in the Forest of Lowes, north of the central sector of Hadrian’s Wall, dating back to 1171 (Woodside and Crow 1999, 57). Also in this general area, a row of three shielings built of Roman stone against the tumbled remains of the Wall at Mons Fabricus, east of Castle Nick, has been excavated. A fourteenth to early sixteenth century date was suggested for these, although earlier examples may exist nearby. At the Bogle Hole a dozen shielings have been recorded in association with a large stock enclosure built in a natural hollow against the south face of the Wall. One of these was excavated in 1998 and a single radiocarbon date suggests occupation in the sixteenth century, although the origins of the enclosure may be rather earlier. A similar sized enclosure, the King’s Wicket at Busy Gap, near Housesteads, has recently been investigated by English Heritage, but no dates are yet available. When the Sewingshields milecastle was excavated, three substantial Medieval buildings were discovered. These seem rather grander than shielings, and the thirteenth century date obtained for them suggests that this may have been a permanently occupied hamlet: the site seems to have been abandoned by the early fifteenth century. Such sites may, of course, have been permanently occupied at some stages of their history (most probably during the peaceful conditions of the thirteenth century), and could have reverted to use as shielings at other times. Several small villages or hamlets, some on the sites of earlier seasonally occupied shieling grounds, were occupied in North Tynedale by the late thirteenth century. These included Charlton, Tarset, Thorneyburn, Donkleywood (on the site of a twelfth century royal hunting lodge), Chirdon and Tarsethope.

Thus, the late thirteenth century landscape of the Northumberland uplands was one of thriving villages with churches and fields, and shieling grounds scattered amongst the hills. The Lay Subsidy Roll of 1296 (Fraser, 1968) gives details of all tax payers in most Northumberland villages, and paints a generally pleasant picture of peaceful agricultural communities. The thirteenth century was perhaps the longest period of sustained peace in these hills since the middle Bronze Age, when people lived in small undefended villages of roundhouses and farmed extensive areas of the Cheviots. Unfortunately, things were about to take a rather dramatic and long lasting turn for the worse.
Battles, Ballads and Border Reivers: 300 years of war and conflict, 1296-1603.

England versus Scotland
In 1296, after a century of relative peace, during which close links including much common landholding developed across the Border, Edward I assumed the Kingship of Scotland. Northumberland again found itself in a war zone. Scottish resistance to English sovereignty was strong, and many Northumberland nobles were understandably torn in their loyalties.

Shortly after the Battle of Stirling Bridge (1297) the victorious Scots, under William Wallace, ravaged Northumberland from a temporary base in the wilds of Rothbury Forest (Dixon, 1903, 476). After his defeat at Bannockburn (1314), Edward still continued to claim sovereignty over Scotland, leading to many Scottish raids into Northern England by Robert the Bruce and others. Many contemporary accounts record the devastation of such raids: the barony of Tarset, for example, was ‘worth nothing’ because it ‘lay ‘waste and destroyed by the Scots’ in 1315. This was the beginning of what has been termed the ‘300 Years War’, during which the residents of villages on both sides of the Border lived in constant fear of raids and reprisals.

Ingram, for example, was one of several villages that petitioned for relief from taxation in 1344 because ‘their crops and other goods were burned and otherwise destroyed and their animals plundered by the Scots….in their invasion of the realm in 1341’. Between 1356 and 1360 the township asked for respite on another four occasions. A document of 1387 speaks of ‘destruction and burning’ by the Scots at Ingram. In 1436, the village was again ‘wasted by the Scots’. Further Scottish raids are recorded in 1532, 1587 (twice) and 1588. Many more raids of a more minor nature must have escaped the attention of the historians and are not recorded.

This renewed period of conflict from 1296 saw the construction of many new defensible towers. A survey undertaken for Henry V in 1415, lists well over a hundred ‘castles and fortalices’ in Northumberland. Of these, Harbottle is the only true castle in the area of the National Park, but other structures are recorded at Thirlwall, Sewingshields, Otterburn, Elsdon, Hepple, Biddlestone, Alnham, Ilderton and Hethpool.
Thirlwall Castle (Rushworth and Carlton, 2004) appears to date from the mid fourteenth century, and represents a ‘hybrid’ between the earlier hall houses and the new towers of the fourteenth to sixteenth centuries. Some of these later towers were used as vicars’ residences, including those at Elsdon, Alnham and Corbridge which are still occupied today. Another once stood adjacent to the church at Ingram. This was in an appalling condition in the mid eighteenth century and was probably dismantled to provide building stone for the current rectory. Such towers would have provided a defensible home for the local priest, while also offering a safe haven for villagers, and possibly also for stock, while raids were in progress. Other towers were built and occupied by private owners, such as that at Tosson which belonged to the Ogle family. Also owned by the Ogles was the poorly understood tower at Sewingshields, in the shadow of Hadrian’s Wall. This was first recorded in 1415, but was abandoned by 1541. Virtually nothing survives of it today, although the earthworks of adjacent fishponds can still be seen.

From 1296, the threat of war was ever present, and several bloody battles were fought between English and Scottish armies. National conflict was mirrored by local feuding between the Percy dynasty, based at Alnwick, and the Douglases from north of the Border. Today, Medieval struggles between Percy and Douglas are immortalised in numerous Border Ballads (Marsden, 1990) as well as in the plays of William Shakespeare. Alexander Rose, whose book about the Percys is appropriately entitled Kings in the North, observes that ‘In Percy country, there was Percy law backed by a Percy army paid for by Percy money’ (Rose, 2002, 1).

Percy presence is recorded in England as early as 1067, and, largely as a reward for military service in Scotland in the 1290s, the Percys received substantial grants of land in Northumberland. They acquired Alnwick Castle in 1309, and expanded their landholdings through several carefully arranged marriages, including the takeover of the Umfraville baronies in the late fourteenth century. By 1400, the Percy family possessed five baronies and seventy-one manors in Northumberland, as well as much land elsewhere in England (Lomas, 1992, 67). The Percys were, by virtue of their great wealth, able to maintain a substantial private army, consisting of professional fighting men and, when required, large numbers of part-time soldiers raised from their extensive estates through the feudal system.
During the fourteenth and fifteenth centuries, the Percys were amongst the most powerful families in England and played a major role in Border affairs. In 1377, Henry, 4th Lord Percy of Alnwick, was made Earl of Northumberland, after which Percys would retain the earldom for nearly three centuries. Percy power and influence waned after the Rising of the Northern Earls (1569), and the Earldom eventually passed by marriage to the Duke of Somerset after the death of the eleventh Percy earl in 1670.

Since 1750, Percys have resided at Alnwick Castle as Dukes of Northumberland. Today, the Northumberland Estates, managed from the castle, cover large areas of the county and substantial tracts of the National Park. These include the Breamish Valley and Lordenshaws, where the National Park Authority works closely with Estate staff to ensure appropriate management of very important archaeological landscapes.

In English national armies from the time of Edward I, in contrast to the old feudal system, part-time soldiers were paid cash for the time they spent at war. Armies often consisted of large numbers of mercenaries, as well as knights, full-time professional soldiers, and part-time soldiers who would leave their everyday jobs, mostly in the fields, to join their lord for the duration of a particular battle.

During the fourteenth century, developments in military technique saw an increasing reliance on foot soldiers and some peasant farmers became proficient with use of various weapons, of which the longbow was to prove particularly effective. While the English armies that fought in the major Anglo-Scottish battles were built around professional and semi-professional soldiers from all over the country, and often included mercenaries from further afield, local communities provided the manpower for the small scale raids and skirmishes that were more characteristic of the three centuries from 1296. Many skirmishes must have escaped the notice of the historian, but five locally fought battles are worthy of particular comment.

The Battle of Otterburn (Redesdale Society, 1988) was fought by moonlight in August 1388.
'It fell about the Lammas tide,
When the muir-men win their hay,
The doughty Douglas bound him to ride
Into England, to drive a prey...
...And he has burn’d the dales of Tyne,
And part of Bamrough shire;
And three good towers on Redeswire fells,
He left them all on fire.'

The Scots, under James, Earl of Douglas, at the conclusion of a raid that extended over much of Northumberland as far as Newcastle, defeated a substantial English army led by Sir Henry Percy (Shakespeare’s ‘Hotspur’) who was taken captive. However, the Scottish victory came at a price, as Douglas was killed amidst the fighting.

‘This deed was done at Otterburn,
About the breaking of the day;
Earl Douglas was buried at the bracken bush,
And the Percy led captive away.’

The dead were buried in Elsdon churchyard, where in excess of a thousand of them were ‘discovered’ during restoration work on the church in 1877. They were soon reburied in pits in the churchyard. In the grand scheme of things the Battle of Otterburn was not a particularly important conflict, but owes its immortality largely to the Ballads. The suggested site of the Battle is marked today by ‘Percy’s Cross’, a monument erected in the late eighteenth century which itself replaced an earlier ‘Battle Stone’.

The Battle of Homildon Hill (Humbleton Hill) took place in September 1402 at the north-eastern corner of the Cheviots, during a supposed truce between England and Scotland. A Scottish army under the Earl of Douglas had laid waste much of Northumberland as far as Newcastle and was returning north when intercepted at Humbleton Hill, a little north of Wooler, by the aforementioned Sir Henry Percy. The Scots were destroyed by the English longbows and many prisoners including the Earl of Douglas were taken. Astonishingly, a dispute between Percy and King Henry IV over the ransoming of three prisoners seems to have led directly to the uniting of
Percy and Douglas against the English Crown. This says a great deal about the nature of the aristocratic society of the time, and about the uneasy relationship between Northumberland and London. The battle is referred to in Act 1 Scene 1 of Shakespeare’s Henry IV part I:

‘On Holy-rood day, the gallant Hotspur there,
Young Harry Percy, and brave Archibald,
That ever valiant and approved Scot,
At Holmedon met, where they did spend
A sad and Bloody hour.’

The site of the battle, from which many bones and artefacts have been recovered over the years, lies on land overlooked by the ramparts of the ancient hillfort of Humbleton, and it is tempting to suggest that the Scots may have performed rather better had they sought to take up a defensive position behind the old prehistoric ramparts. Even here, though, they may have been no match for the English longbows.

Not far from Humbleton, the ‘Battle of Geteryne’ (Yeavering) was fought in 1415. In this:

Sir Robert Umfraville….and the Earl of Westmoreland, Lord of the Marches, with a small force of 140 spearmen and 300 bowmen, defeated a party of 4000 Scots, killing 60, taking 160 prisoners, and chasing the rest for twelve miles over the Borders.

(Tomlinson, 1888, 504).

Such figures may be exaggerated, but the strategic location of Glendale, and the undoubted importance of Yeavering in earlier times, suggest that many other skirmishes, of which no records survive, must have taken place here. The battle of 1415 is traditionally thought to be commemorated by the ‘Battle Stone’ at Yeavering, though this stone is probably of late Neolithic date: it had already been standing for some three and a half millennia before the battle took place. This provides a very interesting example of how the meaning and significance of a monument can change through time. One may wonder who first labelled it ‘the Battle Stone’, and what it may have been known as in earlier times?
The Battle of Hedgeley Moor was fought on 28th April 1464, on the line of the present day A697 some six miles south of Wooler. This was not fought between English and Scottish armies, but was part of a civil war known today as the Wars of the Roses. It was not an insubstantial skirmish, but owes most of its fame to the death of Sir Ralph Percy, who was fighting for an army of possibly as many as 4,000 Lancastrian troops against a victorious Yorkist force of similar size under Lord Montague. Today, the site of the battle is commemorated by the impressive ‘Percy’s Cross’. Two nearby large boulders, lying some ten meters apart, are known collectively as ‘Percy’s Leap’. These are traditionally said to represent Sir Ralph’s final step which he managed to complete (rather impressively, it has to be said) while mortally wounded. The County Council has provided a lay-by and interpretive panel for the benefit of visitors, but most of the battle site lies on private farmland.

The Battle of Flodden, the last great Border battle and perhaps the bloodiest battle ever to take place on English soil, was fought between an invading Scottish army under the direct control of James IV of Scotland and an English army under Thomas Howard, Earl of Surrey, on 9th September 1513 (Barr, 2001). Under the terms of the recently renewed ‘Auld Alliance’ between Scotland and France, James IV had found himself compelled to invade northern England while Henry VIII was away campaigning in France. The Scottish army had some success in taking a few English Border strongholds, but such success was to be short-lived.

The Scottish and English armies, each numbering in excess of 20,000 men, met at Branxton Hill, 5km beyond the National Park’s northern boundary. The battle was decisively won by the English in little more than a couple of hours of carnage, during which perhaps half of the Scottish men were killed. James himself was killed, along with his son and an astonishing number of Scottish bishops, earls, lords and knights. In short, the Scottish nation was routed at Flodden, and although there were further conflicts during the sixteenth century, the Scottish were never in a strong enough position to exact any meaningful revenge.

Royal control over the borderlands during these troubled times was achieved through the system of Marcher Law, whereby northern parts of Cumbria and Northumberland became Marches, effectively military zones governed by Wardens. A similar system operated on the Scottish side of the border. The Wardens of the Marches were charged with maintaining order during peacetime and, during times of conflict, with
the defence of the border, the line of which had been largely fixed by the Treaty of York in 1237. The Wardens could call on the services of their private bodyguards, Crown troops stationed at a few strategic locations, and local men who in theory had to support the Warden on request. In the interests of national security, the Wardens were expected to work closely with holders of the franchises of the Liberties of Tynedale and Redesdale (both liberties were returned to the Crown, in the late fifteenth and mid sixteenth centuries respectively, and were then given away, without the special status of liberties, by James I in 1604).

Originally there were two English Marches: East and West, controlled from Berwick and Carlisle respectively. A Middle March, eventually to be governed from Harbottle Castle, was created in response to worsening conditions in 1381. This Middle March covered all of the National Park, except for that portion of the Cheviots to the north and east of the Hanging Stone, which lay within the East March. Each Warden had a number of assistants, principal amongst which for the Warden of the Middle March were the Keepers of Tynedale and Redesdale.

Although the system often broke down in practice, the theory was that regular days of truce known as ‘March Days’ would be held on the Border at which English and Scottish wardens would co-operate in the attempt to settle border disputes to the mutual benefit of both. Although often occurring in very remote locations, such as at Kemylspethe Walls, within the old ramparts of Roman camps at Chew Green, such gatherings could take on the atmosphere of a carnival as people came from far and wide to attend. Perhaps not surprisingly, they were not devoid of violence. Indeed, what is sometimes referred to as the ‘last battle’ prior to the Union of the Crowns (in reality it was little more than a skirmish) occurred at such a meeting. This was held at The Redeswire (Carter Bar) on 7th July 1575, between the Warden of the English Middle March, the infamous Sir John Forster, and the Scottish Keeper of Liddesdale, John Carmichael (who was deputising for the Warden of the Scottish Middle March).

‘The seventh of July, the suith to say,
At the Reidswire the tryst was set;
Our wardens they affixed the day,
And, as promised, so they met.’
Discussion apparently turned to argument and thence to violence resulting in several deaths. The Scots were victorious and took several prisoners before returning them in order to avoid heavy retaliation. This incident it is commemorated in the Ballad ‘The Raid of the Reidswire’, which, being a Scottish ballad, leaves little doubt as to which side bore the responsibility for the outbreak of violence:

‘Who did invent that day of play,
We need not fear to find him soon;
For Sir John Forster, I dare well say,
Made us this noisome afternoon.

Not that I speak preceislie out,
That he supposed it would be perril;
But pride, and breaking out of feuid,
Garr’d Tindaill lads begin the quarrel.’

While this may have become known as the ‘last battle’, future March Meetings were not without incident. In 1585 Sir Francis Russell was shot dead during a ‘truce’ meeting between the Wardens of the Middle Marches near Windy Gyle, high on the Border Ridge. The adjacent prehistoric burial cairn is now known as Russell’s Cairn.

A horrible and uncultivated land.

As previously noted, the Park’s Medieval villages were blighted by Scottish raids after 1296. The early fourteenth century also witnessed a declining climate, with cooler summers and more severe winters, which must have put pressure on the more marginal villages, especially when it is recalled that just two or three successive bad harvests could all but destroy such a village.

Brian Fagan (2000, xv) has recently observed that ‘environmental determinism may be intellectually bankrupt, but climate change is the ignored player on the historical stage.’ Fagan paints a grim picture of deteriorating climate and related famine throughout much of western Europe from the early fourteenth century, at the beginning of what has become known as the ‘Little Ice Age’. This lasted from about 1300 through until the mid nineteenth century, and contained many fluctuations in climate. Its greatest impact, however, must have been at its outset, especially as communities had become accustomed to the warm, settled weather and bountiful harvests of the thirteenth century.
To an extent, the early fourteenth century may have mirrored the late Bronze Age, with a period of cold, wet weather and growing concern with warfare following a period of peaceful agricultural expansion. To date, however, we have no clear archaeological evidence for the abandonment of Medieval villages at this time. It would seem that communities turned increasingly to pastoralism in order to survive, rather than abandoning long established settlements and territories.

The deteriorating climate and onset of cross-Border hostilities were not the only blows suffered during the first half of the fourteenth century. The ‘Black Death’ arrived in Northumberland in 1349 with catastrophic consequences: it is estimated that the population may have fallen by 30-50% as a direct result of the Black Death and other plagues in the years between 1350 and 1500. However, the impact on isolated upland villages is currently impossible to calculate and it may well be that relatively isolated communities may not have suffered as badly as more populous regions elsewhere. That said, it is reasonable to assume that some areas of the Park must have been badly affected by the combination of war, deteriorating climate and the Black Death. If such miserable conditions did not actually destroy villages, they must at least have resulted in the shrinking of some along with the abandonment of some long established shieling grounds. The desperate conditions of the later fourteenth and early fifteenth centuries are reflected in the observations of the future Pope, Aeneas, who visited Northumberland in 1435 and pronounced it ‘uninhabitable, horrible and uncultivated’.

However, all was not continuous doom and gloom. The tendency to group all abandoned villages together as ‘deserted Medieval villages’ (or DMVs) masks a great deal of variation between such sites. Every deserted village is unique, and while some may have been abandoned in Medieval times others continued into the post-Medieval period. The best understood DMV in the region of the Park is West Whelpington, about 5 miles east of the Park boundary in the upper reaches of the Wansbeck valley. Large scale excavations between 1958 and 1976 have given us a unique insight into the life of an upland Northumberland village. Although the date of its foundation has not been established, West Whelpington was a flourishing village of stone-walled, thatched longhouses by the late twelfth century. Like many other Northumberland villages it was devastated by the Scots after their victory at Bannockburn in 1314, but eventually recovered. In the late fourteenth or early fifteenth century the village was
rebuilt as a planned settlement of at least 28 terraced longhouses and eight cottages around a village green. This village was further re-modeled in the late sixteenth or early seventeenth century when a bastle house was added. The site was finally abandoned in about 1720 as a consequence of the re-organisation of the landscape associated with enclosure. Much more detail is included in the fascinating excavation reports (Evans and Jarrett, 1987; Evans et al., 1988).

At Alnhamsheles, a now abandoned site high in the Breamish Valley, on the Rowhope Burn beyond the present day Alnhammoor farmhouse, excavations in the 1980s uncovered evidence of occupation dating from the fourteenth and fifteenth centuries (Dixon, 1984). Perhaps not surprisingly, though, the settlement was seriously damaged by fire on at least two occasions. Documentary evidence suggests that occupation here may well extend back to the thirteenth century, if not even earlier, and the name ‘Alnhamsheles’ suggests that the settlement began life as a group of seasonally occupied shielings.

Further down the Breamish Valley, but still high up in the hills, the DMV of Hartside consists of more than a dozen rectangular buildings with attached yards, and an extensive rig and furrow field system extending southwards towards the Breamish. Armstrong’s map of 1769 shows the village of Hartside in approximately this location, but Fryer’s map of 1820 shows ‘Hartside’ as a single building where the present farmhouse stands, with a ‘Herds House’ appearing to occupy the site of the DMV. The same site is occupied by ‘White Well House’ on Greenwood’s map of 1828. We must assume, therefore, that settlement of some kind extended into the nineteenth century here, even though there is little to suggest this on the ground today.

On still lower ground, just 4km south of Wooler, the village known today as Middleton Old Town is presumably the Medieval North Middleton, for which documentary evidence stretches back to 1296. A recently abandoned shepherd’s cottage bears witness to the fact that people were still living here well into the twentieth century, but the extent to which this occupation may have been continuous from Medieval times will only be resolved by careful fieldwork.

In Upper Coquetdale, pottery recovered from the deserted village of Linbriggs, beautifully sited adjacent to the Coquet, has proved that the site was occupied in the sixteenth century, although the dates of its foundation and abandonment remain
unresolved. Further down Coquetdale, Chirmundesden, one of the ‘ten towns of Coquetdale’, is recorded in the mid thirteenth century but was succeeded by a single farm, Peels, in the seventeenth century. It may be that Chirmundesden declined as nearby Harbottle expanded following the Union of the Crowns, but nothing is known for certain about its abandonment.

Despite the wealth of sites available for study, the vast majority of deserted and shrunken Medieval settlement sites in the Park remain uninvestigated and undated. It seems, however, that the post-Medieval period, and especially the century 1660-1760, saw a peak in the rate of desertions, linked to the decline in old established landowning families and the imposition of new agricultural regimes by new landowners seeking to maximise income. A concerted campaign of fieldwork and documentary research will be necessary before we can fully assess the effects of war, plague and the Little Ice Age on upland settlement patterns between 1296 and 1603.

**Border Reivers and Bastle Houses**

While little direct conflict between the nation states of England and Scotland took place in Northumberland after Flodden, the region that is now the National Park was to find itself ravaged by a different form of violence during the sixteenth century. This would ensure that local villagers would continue to live under the constant threat of small scale incursions or larger scale raids, during which entire villages could be destroyed, their populations killed or kidnapped, and crops and other supplies burned or stolen. Letters from the Earl of Northumberland to King Henry VIII, dated 1532, record the ravages of the Scots, who had on 10th October that year burnt Alnham ‘with all the corne, hay, and householde stuff in the said towne, and also a woman’. A month or so later, 3,000 or more Scots ‘did run down ye watter of Bremysch and ther take upe 4 townes called Inggram, Reveley, Brandon, and Fawdon’. It was not just the villages that were being raided: in 1542 it was noted that marauding Scots were regularly entering the Forest of Cheviot to steal timber ‘which ys to them a great proffyte for the mayntenance of their houses and buyldinges’.

Needless to say, the traffic was not all one way. David Dippie Dixon, after noting dozens of Scottish raids into Coquetdale in the 1580s and 1590s, involving the theft of thousands of beasts (mostly cattle, horses, and sheep) together with much damage to property, notes one particularly devastating raid in the opposite direction. This
occurred in 1544, when an army of English borderers ‘ruthlessly devastated the whole length of the Scottish borders,’ and ‘destroyed 192 towns, towers, barmekins, parish churches and bastle houses, killed 403 Scots, took 816 prisoners, carried off 10,386 cattle, 12,492 sheep, 1296 horses, 200 goats, 850 bolls of corn, besides an enormous quantity of insight gear’ (Dixon, 1903, 165). 1,145 separate raids have been catalogued along the length of the Border between 1510 and 1603, at an average rate of a dozen a year, and the actual total of such raids may have some three times greater than this (Dixon, 1976, 80).

Increasing degrees of poverty, especially in the unproductive agricultural lands of the central and southern parts of the Park, were virtually ensured by the continuing poor climate and cross Border raiding. The situation was not helped by the ancient law of ‘gravelkind’. This dictated that a man’s land was divided between all his surviving sons on his death, thus ensuring that all sons were retained for military service when required. At times of low population density, such as in the decades following the Black Death, this was a sensible system. However, in later times, as the population grew, it led inevitably to smaller and increasingly uneconomic landholdings.

Instability of leadership and law enforcement in the old Liberties of Tynedale and Redesdale further contributed to the miserable conditions under which increasing degrees of control were assumed by local clans known as ‘kinships’ (variously referred to as ‘surnames’, ‘graynes’ or ‘families’). By the early sixteenth century these included the Reeds, Hedleys and Dunns of Redesdale, and the Charltons, Dodds, Robsons and Milburns of Tynedale. North of the Border, the Armstrongs, Elliotts and Nixons, amongst others, played an identical role. There must have been some ‘decent folk’ amongst the communities of North Tynedale and Redesdale, but history tells us little about them. Sir Robert Bowes, writing of the kinships in 1550, noted that ‘There be some amongst them that have never stollen themselves, which they call true men; and yet such will have rascalles to steale either on horsebacke or foot, whom they doe resset and will receive parte of the stollen goodes.’ The kinships were extremely loyal to their headmen or ‘lairds’, some of whom became very powerful on the local scene: a few even took up official office, for example as Keepers of Tynedale or Redesdale.

The relationship between national conflict and local feuding is complex. For many of the border folk, local ties meant more than national loyalties. Indeed, it was noted during the sixteenth century that the lawless border folk were ‘Scottishe when they
will, and English at their pleasure’. Although theoretically punishable as ‘March Treason’, cross border marriages were commonplace, creating blood ties between kinships on either side of the Border. By no means all the violence was focussed on cross-border raids, and relations between the Northumberland kinships and English authorities were far from stable. On occasions English and Scottish kinships would join forces, such as in the 1525 assault on Tarset Castle, after which the castle fell into ruin (Charlton, 1987, 44). The communities of Coquetdale, Redesdale and North Tynedale were not infrequently in conflict with each other. At Tosson and many other places in the 1550s a watch had to be maintained not only against Scottish raids but also ‘against the men of Tynedale and Redesdale, who were as little to be trusted as the wary Scot from over the Border’ (Dixon, 1903, 331). Treachery and betrayal even occurred between kinships within the same valley: the well known ballad ‘The Death of Parcy Reed’ tells of an alliance between the Halls of Redesdale and the Scottish Crosiers to betray and murder Percival Reed, the laird of Troughend, at some point in the later sixteenth century:

‘A farewell to my followers a’,
And my neighbours gude at need;
Bid them think how the treacherous Ha’s
Betrayed the life o’ Parcy Reed.’

It was the constant feuding and changing allegiances between certain of these kinships, rather than national conflict between Edinburgh and London, that provided the focus for most of the violence that afflicted upland Northumberland during the sixteenth century.

The kinships included people from all walks of life, from nobility to farm hands, and even the Wardens often had blood ties with some of them. Sometimes, families would enjoy the backing of the authorities when a target was on the other side of the border, and they would be called upon to participate in further bloody Anglo-Scottish battles, notably those of Henry VIII in the 1540s. Local people were also charged with the maintenance of 24 hour watches on the main routes across the border, and this ‘early warning system’ was linked to a number of beacons in high places (e.g. on Simonside) that would be lit to ‘give warning to all the hole country of the invasions of the Scottes in England’ (Dixon, 1895, 16).
It was recommended in 1552 that all ‘tillage, meadows or grassings’ should be ‘enclosed with ditches, five quarters in depth and to be double set with quickwood and hedged above three quarters high’ in an attempt to provide obstacles to the marauding Scots (Butlin, 1967, 154). However, little seems to have been done to this end. Although some late sixteenth century enclosures are recorded within Rothbury forest, where it was noted in 1586 that a ‘considerable number of intakes and enclosures had been made from this waste land, and converted to arable, meadow, and pasture’ (*ibid* 159), such enclosures were clearly nothing to do with inconveniencing the Scots. It would be another two centuries before the fields around the Park’s villages and hamlets began to be enclosed to any substantial degree, by which time the threat of Scottish raiding had long since passed.

International tension between London and Edinburgh eased during the later sixteenth century, with Elizabeth I on the English throne, but life on the Border remained anything but peaceful. In 1559, Elizabeth appointed Sir John Forster, a lowland Northumbrian supposedly without any vested interests, to the position of Warden of the Middle Marches. She believed that such an outsider would be best placed to exercise control over the kinships while also defending the Border against the incursions of the Scots. Forster was not a popular man amongst the established kinships, but he somehow survived as Warden for 36 years. Despite his reputation for dealing most severely with offenders, his overall lack of success is reflected in the numerous contemporary records telling tales of regular burning and pillaging by bands of cattle rustlers.

In midsummer 1579, the infamous ‘Kinfmton Willie’ led 400 Scottish raiders into North Tynedale, taking 140 head of cattle, 60 horses and 500 sheep, setting fire to 60 houses and killing ten men. In the 1580s the village of Rochester was described as ‘permanently ruined’ by Scottish raiders who, during the course of three terrible raids, had taken 180 head of cattle, 60 sheep and goats, and household gear worth £60. Elsdon, in September 1584, was raided by 500 Liddledale men who burnt down the village, murdered 14 men, took 400 prisoners (to hold for ransom), 400 head of cattle, 400 horses and £500 worth of household goods. The figures are almost certainly exaggerated, but the general picture is clear.
Most major raids were cross-border affairs, using the numerous ancient route-ways across the hills to and from the higher reaches of North Tynedale, Redesdale and Coquetdale. Whereas only one major road (the A68) crosses the Cheviots today, more than forty cross-Border drove routes and pathways were recorded in 1597 in the Middle March alone (Logan Mack, 1926, 242-246). There were, therefore, many options open to those planning cross-Border raids. However, as noted above, the crossing of the Border was not always a necessity for raiding parties. It was noted in 1570 that more damage was done to the villages around Alnwick by Tynedale men than by the Scots.

North Tynedale and Redesdale were becoming increasingly detached from the rest of Northumberland, with local loyalties increasingly towards the local surnames which could offer some degree of protection, rather than to distant and ineffective regional or national authorities. In the early sixteenth century, 1500 men had been available ‘with horse and harness’ to be called upon by the Warden as and when necessary (Charlton, 1987, 43), but a survey in 1584 failed to find even a single man throughout the whole of Redesdale and North Tynedale who was adequately equipped for Border service, even though many were presumably engaged in regular retaliatory raids across the Border.

The fact that a major Scottish invasion was now considered unlikely meant that the Crown was not unduly concerned about problems on the Border, and financial support to the Wardens was drastically reduced in the face of competing priorities elsewhere.

Any local individuals who did manage to accrue any wealth were soon blackmailed into paying protection money to the local headmen. Such protection rackets were endemic in the later sixteenth century, with the consequences of failure to pay only too obvious for all to see. The degree of poverty here in the late sixteenth century is reflected in the fact that only one regular market, at Bellingham, was held in the whole of Redesdale and North Tynedale. The men of these valleys were held in contempt by Tynesiders, and many Newcastle based businesses refused to take on apprentices from either valley until well into the seventeenth century. The famous antiquary, William Camden, visited Hadrian’s Wall in 1599, but was prevented from reaching the central sector ‘for fear of the rank robbers thereabouts’. Camden would no doubt be fascinated to discover that his ‘rank robbers’ are now considered as an
important element of the archaeology of this region, alongside the remains of the
Roman Wall that they so frustratingly prevented him from inspecting.

Life on the sixteenth century Anglo-Scottish Border is now lent a particular mystique
as the era of the Border Reivers. This mystique arises largely from the Border Ballads,
many of which had been passed down by word of mouth through generations of
border folk before being collated, to some extent embellished, and finally written
down and published, most notably by Sir Walter Scott, in the early nineteenth century.

These ballads give an often haunting insight into what can appear as the romantic
lives and times of the Reivers, but there can be no doubt that real life on the sixteenth
century Border was far from romantic. Indeed, the very power of the Ballads is rooted
in the wild and violent nature of the society which gave rise to them. Men certainly
had to be brave to prosper, or even on occasions simply to survive, and there is some
truth in the belief that the only options available at the time were to steal or to starve.

The Reivers knew when they set out on a raid that they were riding in the shadow of
the gallows, and many were caught and hanged, beheaded or drowned by the
authorities. Against the many stories of bravery and heroism, however, there are just
as many horrendous tales of unwarranted murder and pillage, and it certainly appears
unlikely that many of the Reivers would be considered today as particularly pleasant
characters. In the words of G. M. Trevelyan (1926, 24):

    Like the Homeric Greeks, they were cruel, coarse savages, slaying
    each other as the beasts of the forest; and yet they were also poets who
    could express in the grand style the inexorable fate of the individual
    man and woman, and infinite pity for all the cruel things which they
    none the less perpetually inflicted upon one another.

In spite of the chaos that may appear to have existed on the Border during the
sixteenth century, there were actually special laws that attempted to regulate the
activities of the Reivers. In theory, if not always in practice, when a man had his
property stolen he had three options. He could complain to his Warden in the (often
forlorn) hope of receiving compensation in due course; he could plan a future reprisal
raid, perhaps along with colleagues, to recover his property along with considerable
interest; or he could set off in immediate pursuit (known as ‘hot trod’) to recover his
property by force. The Trod was a legal pursuit, and was permitted across the Border
as long as it commenced within six days of the initial offence. Trods could be accompanied by official officers of the Warden, and frequently ended in violence – offenders could be lynched on the spot if caught during a Trod.

A major survey of Border fortifications in 1541 records a profusion of castles and towers throughout most of Northumberland, including Harbottle Castle and several towers in Coquetdale. However, few stone buildings are recorded in the reiving heartlands of Redesdale or North Tynedale. Although some headmen on both sides of the Border resided in old towers surviving from earlier centuries, contemporary sources suggest that most appear to have lived in timber houses which were largely covered with earth and turf so as to be very hard to set alight. No such structures have been recognised by archaeology, so their exact form and their distribution remain something of a mystery.

The so-called ‘Old Palace’ at Yeavering (actually a late sixteenth century structure, now much altered and sadly ruined, which is of no relevance to the Anglian palace discussed earlier) was recorded in the late nineteenth century as having had ‘squared oak posts which pass perpendicularly through the middle of the walls, giving stability to them, and supporting the roof’ (Tomlinson, 1888, 504). Its’ 5ft thick walls of random, un-mortared volcanic blocks suggest that this was originally a defensible dwelling of some substance, a view supported by its apparent inclusion on Christopher Dacre’s 1584 map of ‘castles and fortifications’.

The antiquity of this structure is further confirmed by the recovery of seventeenth century pottery from its interior during Brian Hope-Taylor’s excavations at Yeavering in the 1950s. Although much altered over subsequent centuries and located away from the reiving heartlands, this building may just be our only surviving example of a timber framed defensible dwelling of the Reiver era: it demands further investigation. It is also interesting as another example (following that of the ‘Battle Stone’, discussed above) of an ancient site taking on a new name: Brian Hope-Taylor (1977, 14) suggests that it was named the ‘Old Palace’:

….as the lingering result of a belated and fanciful christening, probably performed by a local eighteenth or nineteenth century parson who new his Bede. Doubtless the name was attached to this particular structure because it was the only building in the area whose origin was unknown to history and beyond memory.
It may be that some of the many structures recorded simply as ‘shielings’ throughout Tynedale and Redesdale might prove to have been permanently occupied settlements during this period, but a programme of careful excavation at a sample of sites will be needed to prove this one way or the other. It is recorded that the Reivers’ houses could be rebuilt within a day or two if they were burnt down: perhaps they were not dissimilar to the ‘blackhouses’ of north and west Scotland, some of the more isolated examples of which were still occupied into the twentieth century. One sixteenth century source referred to a Scottish headman’s house as ‘a cottage not to be compared with any dog kennel in England’: a description which doubtless applied equally to the equivalent dwellings of the English Middle March.

Public perception links the Border Reivers with the stone bastle houses of which some two hundred survive in varying states of decay throughout Northumberland. However, these bastles appear to have been built late in the era of the Reivers, towards the end of the sixteenth century, and many may not have been constructed until after the Union of the Crowns. Most occur in loose groups, scattered several hundred yards apart but intervisible, suggesting a close relationship between neighbouring households. Occasionally they occur in close clusters of two or three, although the extraordinary ‘bastle village’ of Evistones, which contains half a dozen probable bastles, appears to be unique.

Some archaeologists see the bastles as a response to less savage times, perhaps as the power of the reiving kinships was on the wain, but their architecture certainly reflects the view that such violent times could easily return, and that the need to protect family and beasts was still of paramount concern. The most remarkable aspects of the bastles are their relative uniformity and the fact that they seem to appear in the landscape all of a sudden with no evidence for gradual evolution over time. This suggests the simultaneous adoption of a standard ‘blue-print’ throughout the region, though no-one knows the origin of the design. It is important to note that the bastles were substantial structures that must have involved the input of experienced stonemasons. Given that people of the Border region had generally been living in timber hovels over previous centuries, these masons must have been imported from somewhere.
It is possible that the construction of the first bastles was directly influenced by the Crown. Following its repossession of Tynedale and Redesdale, and its acquisition of the extensive monastic shieling grounds after the Dissolution of the Monasteries, the Crown was in direct control of much of upland Northumberland. Yet no attempt was made to exploit rents from this land: indeed, tenants at Bewcastle, just outside the National Park, were paying lower rents in 1604 than they had been in 1296 (Dixon, 1972, 255). It is known that some new leases were granted on very favourable terms on the understanding that tenants would perform some service to the Crown, such as enclosing the land, maintaining fortifications, or constructing new fortified houses. This may provide the context for the first bastles.

The gradual change from customary tenure (based on hereditary rights) to fixed term, commercial leases may have been crucial to the widespread adoption of the bastle (I Hedley, pers. comm.). Low land values offered great potential for commercial stock rearing, and there was money to be made by absent landowners who were able to rid themselves of long-established customary tenants in favour of reliable returns from new leaseholders. Many bastles may have been built by absentee landowners for such new leasehold tenants, especially after the Union of the Crowns in 1603 when military service in defence of the Border was no longer an issue.

There is certainly enormous potential to learn more about bastles and their occupants through a combination of documentary research and careful fieldwork. Each bastle will have its own unique tale to tell, but until some sites are subjected to scientific excavation and analysis we are unlikely to be able to say any more about their origin or about the nature of any structures that may have preceded them.

It is tempting to speculate that the kinship-based society of the sixteenth century Northumberland uplands may reflect a situation not greatly different from the days of the post-Roman tribal kingdoms, or even perhaps the late prehistoric hillfort-dominated landscapes. For much of the 2,500 years from the early Iron Age until the Union of the Crowns in 1603, power in what is now the National Park may have been linked to the ability to obtain and protect wealth in the form of cattle on the hoof. Cattle rustling was probably endemic during the Iron Age just as it was in the sixteenth century, and hillforts may have functioned in a similar way to bastles, as everyday homes with the ability to protect stock when required. No doubt there were Iron Age equivalents of the Border Ballads, and they may well have told similar tales,
perhaps even with local Iron Age dynasties playing equivalent roles to those of Percy and Douglas.

**The Medieval Church.**

One of the most important influences on the Medieval landscape of Northumberland was that of the monasteries, which became very wealthy through large grants of land and money from the Norman nobility. Newminster Abbey, near Morpeth, was founded in 1157 as the first daughter house of Fountains Abbey, and became a very large and important institution in its own right. It held the Lordship of Kidland, including nearly 7,000 hectares of quality grazing land high in Upper Coquetdale, granted to it by the Umphravilles. The records kept by the Abbey give us an insight into the Medieval landscape of Kidland, with tenants occupying shielings in the high hills over the summer and returning to lower land with their sheep for the winter months. Melrose Abbey and Brinkburn Priory (for Augustinian canons, founded by the Coquet, 7km south-east of Rothbury) also held land in the Park, but not on anything like the scale of Newminster. The Augustinian house of Kirkham Abbey, Yorkshire, owned Kirkcudbright and much adjacent land, granted to it by Walter Espec in the early twelfth century.

A Benedictine nunnery was founded at Holystone in the early twelfth century, the location of which must have been related to the presence here of the previously discussed Holy Well. The ancient settlement of Holystone has clearly been of local importance for a very long time and would certainly repay archaeological investigation. The nunnery had 27 nuns in 1313, but suffered from Scottish raids and the Black Death during the fourteenth century and records show that only 8 nuns were still in residence by 1432. Indeed, the religious houses, although they retained considerable political power, were in general decline from the mid fourteenth century.

The Holystone nunnery has all but disappeared from today’s landscape: the site is now partially occupied by the church of St Mary which incorporates a little of its masonry, while much of its fabric has been re-used elsewhere in the village (most notably at Mill Cottage). Other stonework was probably removed soon after the Dissolution to be reused in the Tudor re-modeling of Harbottle Castle.
Churches throughout the Park, although much altered over the years, and occasionally completely rebuilt, have, nevertheless, tended to survive on the same sites since their original foundation which, as we have seen, was often in pre-Conquest times. Several of the Park’s churches incorporate masonry dating back to the eleventh to the fourteenth centuries. Some, notably Elsdon and Alwinton, display high quality architectural features dating from the troubled times of the fourteenth century, proving that effort was still being occasionally expended on the elaboration of the churches despite the volatile political climate of the time. Reality is reflected in the defensive nature of the tower at Ingram, however, and the tunnel vaulted form of both the porch at Alnham and the south transept at Kirknewton (Grundy, 1987).

In Medieval times the whole of the National Park was covered by only a dozen parishes, each of which had, and still has, its own parish church. The origins of the Medieval parish system are uncertain, but parishes may reflect earlier pre-Conquest ‘shires’, a suggestion supported by the probable pre-Conquest origin of some churches. Given the extraordinarily large size of some of the Park’s parishes, many contained more than one township, and chapels were built in some of these townships (for example at Harbottle) to enable people to worship regularly without having to travel regularly to the parish church. However, all major festivals would have been held at the parish church, with everyone in the township expected to travel and attend.

The Dissolution of the Monasteries under Henry VIII, between 1536 and 1540, saw the lands owned by the religious houses confiscated by the Crown. Most of the priests and other religious personnel who remained in the area were either pensioned off or found places in the parish church system. After the passing of the Acts of Supremacy and Uniformity in 1559, all English people were required to belong to the new Church of England, and loyalty to this church was seen to reflect loyalty to the Crown.

In Northumberland, despite considerable persecution, some gentry families remained faithful to the traditional Roman Catholic church. The Charltons of Hesleyside, North Tynedale, were one such family. They must have had a chapel at Hesleyside, but the old house burnt down in the eighteenth century and there are no records by which to prove this one way or the other. Another local recusant family were the Selbys, who were established at Biddlestone in the southern Cheviots by the early fourteenth century. A substantial barrel-vaulted tower was built here, probably in the late fourteenth century. After 1600, Biddlestone Hall, an impressive manor house, was
constructed adjacent to the tower. This must have contained a Catholic chapel somewhere within its substantial interior, as it is known that the Selbys maintained a catholic chaplaincy here at their own expense. According to ‘The Northern Catholic Calendar’ of 1884 (quoted in Dixon, 1903, 251) Biddlestone is:

…as far as is known, the oldest mission in the Diocese (of Hexham and Newcastle) dating at least as far back as the XIII. century….There has been no ‘reformation’ here – no apostacy – no change of creed – no interruption of the perpetual sacrifice. The family has ‘kept the faith’, as well as its name and estates, through ages of persecution and penal law – in spite of allurements of court honours or state emolments. It was Catholic in the XIIIth century – it is Catholic in the XIXth.

The house was rebuilt in the late eighteenth or early nineteenth century, at which time a first floor catholic chapel was constructed above the remnants of the old tower. This new Biddlestone Hall was demolished in the 1950s, leaving the unique and splendidly isolated monument that we see at Biddlestone today: a still functioning early nineteenth century chapel of neat ashlared stone sitting incongruously upon its fourteenth century rough stone basement.

In the south west corner of the Park, the Thirlwalls remained resolutely Catholic, and Peter Ryder has suggested, from examination of the ruins, that a chapel may have existed on the third floor of Thirlwall Castle. This would presumably have been in use from the early fourteenth century, when the castle was built, through until its abandonment after the Civil War in the mid seventeenth century.

Finally in this discussion of the Medieval church, we must consider the religious views and practices of the Border Reivers. This will not take long. Collingwood (1884, 159) notes that:

Charms and superstitions of the grossest absurdity abounded in the Dales, and what religion they had was only a system very much in harmony with these tendencies, - to anything deeper they were quite indifferent.
Something of the reiving families’ attitude towards conventional religion is revealed by the frequent plunder of churches, which appear to have been raided no less often than any other class of building. Lead from the church roof at Ingram, for example, was stolen by a marauding band of Scottish Reivers in 1587. Clearly, the word ‘sacrilege’ held no terror for the Reivers.

Little respect was paid to the men of the church, with parsons and chaplains occasionally kidnapped and held to ransom, or worse. Some sixteenth century references suggest that priests in Tynedale were generally corrupt, and thus not deserving of any respect, but many areas seem to have been pretty much devoid of priests altogether. The whole of Redesdale, for example, was served solely by Elsdon parish church, with no churches or chapels higher up the valley. Bellingham church was burnt down at least twice, the legacy of which is its extraordinary ‘fireproof’ stone roof of heavy stone slabs, added in the early seventeenth century and still weatherproof today.

Some brave priests who did venture into the reiving heartlands apparently only did so armed with swords and daggers. However, as with most rules there are exceptions, the most notable one in this case being Father Gilpin, who left his parish in Houghton-le-Spring, County Durham, each December to spend Christmas preaching throughout Tynedale, Redesdale and Coquetdale where he was much respected.

If there was a church he would use it, if not, a barn or any other sufficiently large building would serve his purpose; and the people always came in crowds to hear him, some for his teaching, others no doubt for his charity

(Collingwood, 1884, 162).

In contrast to Father Gilpin, most churchmen understandably opted to steer well clear, and if the Reivers’ attitude towards the church was generally dismissive, then the same can certainly be said in reverse: the Archbishop of Glasgow’s ‘curse’ of the Reivers (which included such choice phrases as ‘I condemn them permanently to the deep pit of hell’) has now passed into Border legend. At the time it was doubtless the subject of much mirth amongst Reivers of all allegiances.
OUTLINE HISTORY OF PREVIOUS ARCHAEOLOGICAL RESEARCH IN NORTHUMBERLAND AND NORTHUMBERLAND NATIONAL PARK.

For the first time in the Medieval period there is a welter of both archaeological and documentary evidence surviving in Northumberland as a whole. If used constructively, in an integrated way, this could produce an archaeology that deals with the whole spectrum of Medieval society, not just the elites of the day. For the purposes of the present discussion in relation to the National Park, we have concentrated on work in four discrete areas. These are:

Rural settlement and agrarian activities
Castles, Manors and military sites etc.
Religion
Trade and Industry

Rural settlement and agrarian activities

Very little, published, archaeological research has taken place on Medieval rural settlement and agricultural activity throughout the whole of Northumberland. As early as 1950, W.P. Hedley had attempted to assess available knowledge on the forests of Medieval Northumberland, but this was work carried out mainly from documentary sources. (Hunter-Blair, 1950). A structural survey of the Melkridge bastle was published in 1956 but it was not until 1961 that one of the first archaeological surveys dealing with Medieval settlement appeared (Jobey, 1961).

In this paper, Jobey indentified what he termed ‘Homestead Moats’, at South Heddon Moor, The Fawns (a site with documentary evidence going back to 1303 (1961, 90), Newtown East at the foot of the Simonside Hills, and The Curricks, on Hartley Burn Common. What he termed ‘later farmsteads’ were recorded at Hazledean (possibly the Heselden of sixteenth century documentation), Villains Bog, Hartburn and Crookdean Hill S.W. at the head of the river Wansbeck.

1962 was an important year for Medieval archaeology in Northumberland as M.G. Jarrett published his first report on the excavations at the deserted village site of West Whelpington. Work commenced here in 1958 and excavation and survey was carried out until 1976. A second report was published in 1970 and the third and final report came out in two parts in 1987and 1988 (Jarrett, 1962, 1970; Evans and Jarrett, 1987;
Evans, Jarrett and Wrathmell, 1988). This still remains the only large-scale, published, DMV excavation ever carried out in Northumberland.

In the early 1960s the historical geographer Robin Butlin had begun research on the field systems of Northumberland (1964) and in 1967 he produced a detailed discussion of moves towards enclosure and land improvement in the county in the sixteenth century. Although done mainly from documentary evidence, this work has important archaeological ramifications.

In 1962 Harbottle and Cowper excavated the site of what had traditionally been seen as a Medieval chapel at Memmerkirk within the National Park. The results of this work, published in 1963, showed it to be a stone long house, built some time in the fourteenth century. This was one of the first excavations of such a site in the county (Harbottle and Cowper, 1963).

In 1961 Harbottle and McCord carried out excavation work designed to test the idea that a series of earthworks at Outchester at NU 147 334, on the west bank of the Waren burn, was the ‘missing’ Medieval village of Outchester. The village of Outchester was first documented in the twelfth century and still extant in 1577. It was deserted after 1580 when the landowner expelled all twelve tenants and turned the land over to pasture (Harbottle and McCord, 1965, 235 – 242). The published report failed to demonstrate the presence of the village but did identify clear evidence for some form of Medieval settlement activity and the authors concluded that the site may have been a moated farmhouse (Harbottle and McCord, 1965, 242).

Harbottle also excavated at the site of the Linbriggs Medieval village in the early 1960s. Her note on the work, published in 1968, reported on the excavation of one house which produced sixteenth century pottery (Harbottle, 1968). No dating evidence for the foundation or desertion of the site was produced.

1970 saw an important publication in the form of the Royal Commission’s Shielings and Bastles volume (Ramm et al., 1970). This did not confine itself simply to Northumberland but dealt with both types of structure across the border region. The volume was comprehensively reviewed by Philip Dixon in 1972 and several examples of missed or omitted sites were added to the gazetteer (Dixon, 1972). This was a seminal work and will be referred to in more detail below.
Three years later Harbottle and Newman published the results of their 1972 excavation and survey work in the North Tyne valley. This paper presents an eloquent review of the Medieval and later settlement history of North Tynedale as well as documenting the excavation of the bastle house at Stone House on the west bank of the Starsley Burn and detailed survey of the Medieval/post-Medieval steadings at Gordon’s Walls and Starsley (Harbottle and Newman, 1973). All of this work was occasioned by the construction of the Kielder Reservoir which subsequently flooded the whole area.

Other work relating to the construction of the Reservoir and involving research into Medieval settlement archaeology was again carried out by Harbottle with T.G. Newman between 1973 and 1975 (Harbottle and Newman, 1977) and by Jobey at Belling Law in 1975 (Jobey, 1977). The former publication dealt with the excavation and survey of a range of sites. Fieldwork had identified some eight Medieval or post-Medieval deserted sites on the north bank of the North Tyne valley in addition to the ones reported on in 1973 and it was decided to excavate only those for which there was limited documentary evidence e.g. Belling Mill, Sandboard Knowe and Long Walls. Historic accounts and surveys of Bellingheugh Head and Woodhouses were included also in the paper. The excavations revealed a late Medieval/post Medieval date for the farmsteads and the work contributed much to our understanding of Medieval and later settlement dynamics in this part of Tynedale.

Jobey’s work on the farmstead at Belling Law, which overlay an Iron Age/Romano-British enclosed settlement, produced pottery of mid-thirteenth to late fourteenth century date and more substantial structural evidence for a mid seventeenth – early eighteenth century farmstead (Jobey, 1977).

In 1978 Alexander and Roberts reported on their 1976 attempts to study settlement activity at the DMV site of Low Buston using the technique of soil phosphate analysis (Alexander and Roberts, 1978, 107 – 116). This technique has been used to good effect in the Scandinavian countries as a means of locating former settlement sites, now ploughed out and lying beneath present arable or pasture land. Samples were taken in three areas, from the village earthworks and from the associated rig and furrow ploughing and marked differences in phosphate level were noted between these two locations in all three areas sampled. These need to be tested by excavation but the programme of research never proceeded to this next stage of analysis.
From 1979 until 1983 Piers Dixon carried out a detailed series of excavations at the site of Alnhamshesles on the Rowhope Burn. He examined a two phase stone built long house, which produced pottery ranging from 1200 – 1500AD in date. This site will be referred to in more detail below (Dixon, 1979, 1981, 1982, 1983, 1983a, 1984, Dixon and Brown, 1980).

1975 was officially designated by the government as National Conservation Year and as a result, the Ministry of Defence appointed a conservation group on each of its estates to examine a range of archaeological and related aspects of the estates’ landscapes. The Otterburn Estate Conservation Group contacted the Field Research Group of the Society of Antiquaries of Newcastle upon Tyne and it was decided to carry out a detailed archaeological survey of the Training Area. Work began in 1975 and continued until the end of 1976 and a report was completed in 1977. In 1978 Charlton and Day published a paper dealing with prehistoric and Roman aspects of the work (Charlton and Day, 1978) and 1979 saw the publication of ‘Excavation and Survey in Upper Redesdale: Part II’ (Charlton and Day, 1979). This was devoted entirely to post Conquest field monuments and its implications are discussed in more detail below. Part III of the survey was published in 1981 (Charlton and Day, 1981) and Part IV, which dealt with mills and drying kilns of post-Medieval date was published in 1982. In 1996 Charlton produced a revised edition of the Otterburn Survey under the title of ‘Fifty Centuries of Peace and War: An Archaeological Survey of the Otterburn Training Area’. 1975 was also the year in which Stuart Wrathmell completed his PhD survey of deserted Medieval villages in south Northumberland. This work remains the standard reference source for DMV’s in this part of the county.

Further Northumberland rural surveys were incorporated into the publication entitled ‘Archaeology in the North’ which was the final report of the Northern Archaeological Survey headed up by Paul Gosling and Peter Clack (Clack and Gosling, 1976). These included Charlton and Day’s survey of Upper Redesdale and the Rev. Tom Heyes’ work in Wark Forest (Charlton and Day, 19876; Heyes, 1976). The latter was of particular importance because it identified a mass of new Medieval/post Medieval sites despite the fact that the area had been a key one for the Royal Commission’s survey work for the ‘Shielings and Bastles’ volume (Ramm et al. 1970).
In 1977 Deirdre O’Sullivan had excavated the site of the present English Heritage Museum on Lindisfarne. This was published in 1985. Seven phases of settlement activity, some with associated structures, were identified on the site. Phase 1 was of Saxon or earlier date and Late Saxon/Early Medieval material was documented in Phase 2, which may represent a period of abandonment. Phase 3 represented later Medieval activity as represented by fragments of walling and paving and a fine cobbled cess-pit. Pottery from this phase dates from the 13th – 15th century and was dominated Tweed Valley ware, Scarborough Ware and a range of Scottish and local ceramic fabrics (Bown in O’Sullivan, 1985, 51). Phase 4 was dominated by a series of pits which produced a range of early 16th century German Stonewares and Cistercian Wares. Phase 5 saw the construction of two buildings, A and B, in association with pottery ranging in date from the 15th – 17th centuries. Phases 6 and 7 were of post-Medieval date (O’Sullivan, 1985). The excavations at this site have given a detailed insight into the economy of a small scale maritime community and as such they have important regional significance.

1985 also saw Piers Dixon awarded his PhD for a survey of the deserted Medieval villages of north Northumberland. This complimented Wrathmell’s earlier survey of the southern part of the county, and again remains a seminal piece of original research, integrating as it does both documentary and archaeological information about rural settlement (Dixon, 1984).

In 1990 Peter Ryder produced a gazetteer of Bastles and Towers in The Northumberland National Park. This was the first serious attempt to produce a structural analysis of all of the known sites within the Park area (Ryder, 1990). He followed this up in the same year with detailed historical accounts of the bastles at Snabdough and Woodhouses (Ryder, 1990a and 1990b). In 1995 he produced a survey of towers and bastles for the rest of Northumberland. This work was commissioned by Northumberland County Council and consists of five volumes of description and historical and structural analysis (Ryder, 1995).

In 1991, the late P.C. Sellers and D.H. Prothero carried out a field survey at Quarry House and North Heughs farms to the east of the National Park. This revealed a plethora of sites ranging from prehistoric/Romano-British settlements to field systems dominated by broad rig ploughing with attendant long house structures (Sellers and Prothero, 1991).
Throughout the 1990s a whole series of projects were commissioned by the Northumberland National Park Authority that highlighted various aspects of the Medieval settlement record in the region. In 1994 the Archaeology section of the Tyne and Wear Museums Service carried out a landscape survey of the Mounthooly area of the College Valley in advance of tree planting. This identified a range of archaeological sites, but most importantly, in the present context, two shielings on the Braydon Burn, a further example at Long Cleugh and stone built farm buildings or paddocks (T and WMS, 1994).

In 1996-97 two seasons of field survey and excavation were published by the Lancaster Archaeological Unit on the Otterburn Training Area as part of the MOD ‘Options for Change’ programme. Work around Davyshiel revealed a complex Medieval/post-Medieval landscape dominated by field boundaries, rig and furrow ploughing and stone structures one of which may have been the remains of a previously unrecorded bastle house (LUAU, 1996, 1997). This was designated as a high quality Medieval/post Medieval landscape focusing on at least two settlement nuclei (LUAU, 1997, 37). The importance of the area was further enhanced by Tim Gates’ air photo survey of the area (Gates, 1997). This latter survey has done much to widen our knowledge and understanding of agricultural activity on the OTA in the form of the distribution of the remains of Medieval and post-Medieval ploughing and small scale farming settlement.

In 1997 RCHME carried out detailed surveys at the bastle sites of Shilla Hill and Boghead. The former was first mentioned in documentary sources in 1552, the latter in 1583 (RCHME, 1997, 1997a). Tolan-Smith also produced his report on ‘Landscape Archaeology in Tynedale’ in 1997, being the first monograph to come out of the ‘Tyne – Solway Ancient and Historic Landscapes Research Programme’. In this Myra Tolan-Smith discussed the landscape history of Horsley Wood, with a detailed focus on Medieval activity (1997, 43 – 52). She also produced a retrogressive analysis of the landscape of the two ancient townships of Horsely and Harlow Hill (1997, 69 – 78), again with much information relating to Medieval settlement and land-use. Smith and Chris Tolan-Smith also carried out a retrogressive analysis of the earthworks of the Welton DMV, the earliest surviving documentary evidence for which suggests that the settlement had been founded some time before 1189 (Smith and Tolan-Smith, 1997, 56). This approach to earthwork analysis, allowing as it does the potential for
the integration of documentary evidence into the overall story of village development might well be an approach worth trying elsewhere in the county.

In 1998 as part of a wider conservation plan for the site, The Archaeological Practice carried out small scale excavation and structural recording at the Low Cleughs Bastle. This yielded more information about the internal arrangements of the bastle house but no firm dating evidence (NUAP, 1998). In the same year the Practice also carried out survey and excavation at Bogle Hole on the line of Hadrian’s Wall (NUAP, 1998a).

The Bogle Hole excavations were carried out to assess the impact of rabbit damage on the settlement site. A topographical survey revealed the remains of some 12 small rectangular structures associated with a large enclosure. One of these was excavated and found to compare with shieling sites at Mons Fabricus and Sewingshields to the east of the Bogle Hole. These latter buildings have been dated to the 13\textsuperscript{th} – 16\textsuperscript{th} centuries (NUAP, 1998). In 1999 a radio-carbon determination on charcoal from the floor of the excavated Bogle Hole structure yielded a date of AD 1451 – 1659 (AA-33126) at the 2 sigma level and a single charred oat grain was recovered from the samples taken for environmental analysis (NUAP, 1999).

In 1998 RCHME identified further long houses of Medieval/post-Medieval date at Gowanburn in the Kielder area (RCHME, 1998) and in the same year The Archaeological Practice, then at Newcastle University, produced a ‘Documentary Assessment’ of the Bastle at Low Cleughs. This was designed to integrate all of the work carried out on the site relating to the National Park’s programme of conservation and public display for Low Cleughs. This is an exemplary piece of work which demonstrates the real strengths of good documentary research coupled with field observations (NUAP, 1998).

1999 saw the production of the final report on the ‘Hadrian’s Wall Landscape Air Photographic Survey’ carried out by Tim Gates (Gates, 1997). This was a revolutionary contribution to the overall archaeology of the Hadrian’s Wall area as it showed quite clearly that there was a welter of archaeological evidence in the Hadrian’s Wall corridor, that both pre and post dated the construction of the World heritage site. Detailed plots of all of the sites recorded were prepared by Gates and these highlight the well preserved nature of the Medieval/post-Medieval agricultural
landscape in the area of the Wall. The same year saw Amy Lax’s report on field survey relating to the Bastles of the Tarset Valley (Lax, 1999).

Further survey work on potential Medieval/post-Medieval shieling sites in the Wark Forest area was reported on in 2000 by Nolan and Wardle. The year 2000 also saw the publication of the results of Tim Gates Air photographic survey of the College Valley Estate (Gates, 2000), and Peter Topping’s topographical survey of the same area. Both made a substantial contribution to local knowledge of Medieval settlement and land use.

Further excavation work on rural settlements took place in 2001 in the Rectory Gardens at Ingram village within the National Park (Headley, forthcoming; Frodsham and Waddington, 2004).

**Castles, Manors and Military Sites.**

*(N.B. this review does not take into account work done in the major Medieval defended towns in the region e.g. Berwick, Newcastle etc.)*

Given the turbulent history of the northern region over the last one thousand years or so it should come as no surprise that these types of monuments have tended to dominate the popular perception of the later Medieval archaeology of the area. In the various volumes of the *Northumberland County History* the documentary history of most of the county’s castles is set out.

Early forays into castle studies in the region tended to be document orientated though as early as 1932 Lieut.-Col. G. Reavell published an account of discoveries made at Warkworth Castle as a result of restoration works undertaken by the then ‘Office of Works’. Four years later the excavations undertaken at Dunstanburgh Castle by R.C. Bosanquet were posthumously published by John Charlton 1936. Interestingly, these excavations had been carried out to determine more about the context of Roman finds made within the precincts of the Castle in 1930. Roman pottery and associated finds including some 8 quern stones and jet and glass personal ornaments of first and second century date were recovered as well as much Medieval pottery. The latter seemingly dated from the twelfth to the fifteenth centuries. Other copper alloy finds were also made dating from the Medieval to post-Medieval periods. (Charlton, 1936)
C.H. Hunter Blair’s 1937 account of Mitford Castle near Morpeth is typical of the approach taken throughout the nineteenth and early part of the twentieth century to castle research. He set out the known documentary history of the structure and the personnel associated with it and also gave a description of the standing remains. The castle was certainly in existence by 1138 and in the thirteenth century the only five-sided keep in England replaced the earlier structures on the site (Hunter Blair, 1937, 86). Hunter Blair finished off the account with a description of the ‘Arms of the Lords and Captains of Mitford’ and the seals of the Lords of Mitford. (1937, 90 – 94). In 1944 carried out a review of the ‘Early Castles of Northumberland’ (Hunter-Blair, 1944, 116 -168). This adopted a similar approach to his description of the Mitford site.

From 1938 to 1951 W.D. Simpson (whose initial researches were funded by the Carnegie Trust for the Universities of Scotland) contributed several accounts of castles in Northumberland to the pages of Archaeologia Aeliana. In 1938 he discussed the construction of the ‘donjon’ at Warkworth Castle and he tried to set the main features of the monument into a developmental sequence (Simpson, 1938). In 1939 he addressed the problem of the foundation of Dunstanburgh Castle (Simpson, 1939). His 1940 contribution dealt with Belsay Castle and its relationship to Scottish Tower Houses (Simpson, 1940) and in 1941 he further discussed the Warkworth ‘donjon’. In this paper he focused on its evolution and structural affinities, concluding that it was probably built in the period 1383 – 84 (1941, 100). 1949 saw ‘Further notes on Dunstanburgh Castle’ in which he discussed the chronology of the site’s construction, highlighting potential parallels with developments at Kidwelly Castle in Wales, and discussing among other things, the nature of the ‘borough and the harbour and John of Gaunt’s re-organisation of the castle in the fourteenth century (1949, 1-28). His final contribution in 1951 examined the development of Haughton Castle with its origins around 1373 (Simpson, 1951).

Air photography was used for the first time in Northumbrian castle studies in 1950 when J. K. St. Joseph published ten photographs of castles in the county (St. Joseph, 1950). This contribution did little more than illustrate the sites from a novel angle, but it did highlight the potential for more detailed air photographic work in relation to aiding our understanding of castles in the landscape.
In 1955 H.L. Honeyman published an account of work carried out at Mitford castle some seventeen years previously when a work camp had been set up to provide unemployed men with some form of constructive activity (Honeyman, 1955, 27). The excavations concentrated on the postern gate, the keep, a structure on the west side of the keep, which may have been a feature like Dally Castle (see below), the ditch between the motte and the bailey and the site of a ‘chapel’, now quarried away. A range of finds was made including some very interesting Medieval burials, but overall, as the work was not fully completed the results are somewhat tenuous.

G.R. Batho’s 1958 account of the ‘State of Alnwick Castle 1557 – 1632’, charts the architectural and structural decline of this site right at the end of our chronologically defined Medieval period. His work involved no archaeological excavation but two years later in 1960, Harbottle and Salway reported on excavations undertaken at the enigmatic thirteenth century castle site at Nafferton in the period 1958 – 1959 (Harbottle and Salway, 1960). The site was demolished in 1221 and it does not appear in any subsequent documentary sources.

The work showed clear evidence for two periods of construction on the castle site. In its first phase it was a rectangular site with an earthen bank and an unfinished ditch. Both timber and some stone seem to have been used in the construction of the defences and internal structures. The south-west corner seems to have been the focus for most of the defensive construction. A similar situation prevailed in phase II of the sites and a new tower was constructed on this part of the site. Harbottle and Salway speculated that this may have been the remains of a pele tower of 15th – 16th century date (Harbottle and Salway, 1960, 144).

A second series of excavations was carried out at Nafferton in 1960 (Harbottle, Salway and Edwards, 1961, 165 – 178). This confirmed the fifteenth/sixteenth century date of the tower and also ‘unearthed’ an early ‘lantern slide’ of this feature, showing part of it still extant. The work also showed that immediately prior to the castle’s abandonment, Philip of Ulecotes had commenced the construction of a stone wall around the site. The excavations also shed more light on the nature of the internal settlement activity (Harbottle, Salway and Edwards, 1961, 165 – 178).
In 1967 George Jobey offered some observations on the Tudor fortifications at Tynemouth in the course of his report on excavations carried out at the site of the Priory (Jobey, 1967, 96 – 99) and in the same year Harbottle published the results of her small-scale excavations at Warkworth Castle (Harbottle, 1967). These had been carried out on the southern defences of the site, immediately east of the gatehouse, and examined a section of walling and the castle moat. This work clearly showed two earlier phases of walling prior to the construction of the standing curtain.

1976 saw the publication of Margaret Ellison’s 1975 excavations at Aydon Castle. This was a small intervention in the north-west corner of the curtain wall and it showed that this area of the castle wall had been constantly leveled and re-built since its initial construction in the fourteenth century (Ellison, 1976, 133). The castle may have been captured by the Scots in either 1315 or 1346 and Ellison’s excavations showed that this corner of the site may have always been inherently unstable and that a timber building may have been in evidence here throughout the fourteenth century.


Warkworth Castle figured large in the archaeological literature of the early 1990s when M.J.B. Hislop produced a detailed discussion of the date of the ‘donjon’ at the site (1991, 79 – 93). The following year Peter Ryder published a structural/historical analysis of the Gatehouse of Morpeth Castle. This contained a clear review of main features of the known history of the site and a detailed attempt to unravel the complex history of its building, re-building and refurbishment (Ryder, 1992, 63 – 77). In 1994 Ryder carried out a similar exercise for the ‘two towers’ of Hexham (Ryder, 1994, 185 – 217). The ‘Old Gaol’, arguably the earliest purpose built prison in England, was constructed in the period 1330 – 1332, whilst the Moot Hall, probably one of the best examples of a Medieval courthouse in the north of England, may well have been constructed between 1355 and 1439 (Ryder, 1994, 187).

Dixon and Marshal’s review of the ‘Great Tower’ in the twelfth century used Norham Castle as a case study. (Dixon and Marshal, 1983, 410 – 432)

Malcolm Hislop revisited earlier research on Dunstanburgh Castle in 1995 when he discussed John of Gaunt’s building works at the site in a classic attempt to marry architectural developments with historic events (Hislop, 1995, 139 – 144).
science of dendrochronology was drawn on two years later when Sherlock investigated the roof of Aydon Castle kitchen prior to the replacement of some of its stone tiling. The kitchen itself had been built in 1305 and the present roof timbers were erected some time in the mid sixteenth century. The roof timbers and the method of roof construction were described in detail, and the results of a dendrochronological study carried out in 1991 (Hillam and Groves, 1991, 1) showed that they had been felled in the winter/early spring of 1543/1544 during a period of major alterations at the castle (Sherlock, 1995, 85).

From 1990 onwards several castle sites within the boundary of the National Park were studied in detail. In 1990 Peter Ryder produced his *Short Historical and Descriptive Account of Harbottle Castle* (1990). The site had previously been studied by Hunter Blair in a publication of 1934 which reported on the excavations carried out at the site by H. L. Honeyman in the 1930s. In the same year the RCHME produced a survey of the site (1990, unpublished). The National Park Authority moved to conserve the site in the 1990s and consolidation work was carried out on the keep. Excavation of the drawbridge pit, the gate tower and the cross wall was also undertaken by Newcastle University in 1997, 1998 and 1999 (Crow, 1998, 1999, 2000). Ground penetrating radar was also used in the preliminary survey work at the site (Northumbrian Surveys, 1998) and in 1998 Rushworth and Carlton produced their magisterial documentary survey of the castle (1998).

Thirlwall castle received a similar treatment in the 1990s in advance of full conservation of the site. Peter Ryder produced an historical account of the site in 1997 (Ryder, 1997) and The Archaeological Practice at Newcastle University carried out an archaeological evaluation in 1998 -1999. A full conservation programme led to the production of a fully integrated documentary survey in 2001 (Rushworth and Carlton, 2001).

In 1996, again, prior to conservation and consolidation work the small fortified site known as Dally castle, was subjected to detailed architectural and archaeological survey (HSLS, 1996). Peter Ryder also produced a detailed survey of the associated Dally castle mill in 1997 (Ryder, 1997).
In 2001 Harbottle and Ellison reported on their 1978 excavations at Etal Castle, a structure first recorded in 1341. Their work was designed to locate a supposed fourth tower for the castle and the northern corner of the courtyard. In the event neither feature was discovered, but the line of the curtain wall was traced, and a building which pre-dated its construction was recovered (Harbottle and Ellison, 2001, 235 – 252).

**Religion**

As Clack and Gosling pointed out in 1976, the archaeology of religious sites of the later Medieval period in the north can be grouped under the three general headings of: religious houses, secular churches and burials (1976, 54). The term religious house is used here to include monasteries, friaries, hospitals and colleges, and from the beginning of the eleventh century up until the Reformation of the mid-sixteenth century some seventy five of these foundations were recorded in Northumberland and Lomas has highlighted and discussed their overall distribution (1996, 123, Fig 16 and 133, Fig.17). All are well known from documentary sources, many have seen some archaeological activity and much is known of the plan and layout of most of them, though this level of knowledge varies as the two case examples discussed below highlight.

In 1936 R.N. Hadcock reviewed the known architectural and archaeological data relating to the Priory at Tynemouth which had been re-founded as a Benedictine house c. 1085 (Hadcock, 1936, 122 – 138). One year later Craster and Hadcock produced a further discussion of the problems raised by Hadcock’s initial contribution, dealing with architectural arguments relating to both pre- and post Dissolution structures (Craster and Hadcock, 1937, 205 – 226).

Thirty years on, George Jobey published the results of a series of excavations carried out at the site in 1963. This paper was a vital contribution to the overall understanding of the development of the Priory and the Castle and highlighted the occurrence of Iron Age and Roman native settlement on the site as well as timber buildings that immediately pre-dated the Norman phase of construction activity. Major post-conquest monastic buildings were examined, including a sacristry, priest’s house and possible byre (Jobey, 1967, 33 – 104).
Further excavations were carried out by Graham Fairclough in 1980 on the site of the monastic Barn Yard to reveal the remains of a major aisled barn of earth fast post construction. This may have been the documented Wheat Barn of the Medieval priory. Other timber buildings of Medieval date were also excavated as were post-Dissolution structures (Fairclough, 1983, 101-133).

This detailed level of knowledge is comparable to what we know about religious houses in Newcastle for example, (Harbottle, 1968, 163 – 223; Harbottle and Clack, 1976; Harbottle and Fraser, 1987), Berwick (Cambridge et al., 2001, 33 – 94) and Hexham (Cambridge et al., 1995, and full bibliography) and the Abbey site at Newminster (Harbottle and Salway, 1964), but it stands in stark contrast with our limited understanding of sites like the Priory of Augustinian Nuns at Holystone inside what is now the National Park. This site is discussed in more detail below.

The term ‘secular church’ covers a wide variety of religious monuments from parish churches to chapels and holy wells. As Clack and Gosling pointed out invariably these have been studied as individual types and nearly always in isolation (1976, 54). Church architecture has been a subject of great debate in Northumberland since the times of the earliest antiquarian gleanings and interest in it certainly reached a peak in the nineteenth and showed no signs of diminishing into the twentieth century.

A search through the volumes of the History of the Berwickshire Naturalists Field Club for the major part of the twentieth century gives some insight into the local scale of such interest within Northumberland. In vol. XX for 1906 – 1908 both Ingram and Wooler churches were the subject of architectural and historical analysis (Vaughan, 1908, 279 – 289; Hodgson, 1908, 308 – 315). Volume 30 (1938 – 1945) saw Chillingham castle and church subjected to the same treatment (Hunter Blair, 1938, 38 – 53) and volume 32 (1950 – 1952) featured Ancroft Church (Wright, 1952, 173 – 176).

More detailed archaeologically based work is recorded in Archaeologia Aeliana. In 1938 the architect Herbert Honeyman produced a detailed historical and architectural survey of Simonburn Church, presenting a detailed architectural plan that corrected earlier recording errors (1938, 137 – 148). Three years later he produced a similar analysis of St. Andrew’s church in Newcastle (1941, 117 – 171). Over twenty years later Parsons continued the tradition in his analysis of the west tower of St.
Andrew’s church at Corbridge (1962, 171 – 184) and twenty years after this the approach was still alive and well as exemplified by Briggs’ survey of St Andrew’s church at Bolam (1982, 125 – 141).

Two papers published in 1983 and 1985 however, marked a radical shift in regional approaches to church archaeology. Richard Bailey and Eric Cambridge enlisted the services of Denis Briggs for a programme of dowsing around several early churches in the region (Briggs, Bailey and Cambridge, 1983, 79 – 100; 1985, 133 – 146). Of particular relevance here is the work carried out at St. Mary’s church at Woodhorn in Wansbeck. Here, the excavations revealed the presence of an early Medieval apse at the east end of the church. This had been predicted by the dowser but was not recorded in any of the surviving documentary evidence for the church.

By the same token intriguing results came from a programme of dowsing and excavation at Ponteland. The programme of work devised by Bailey and Cambridge produced interesting results from the following churches in Northumberland at: Hexham, Heddon, Corbridge, Woodhorn, Warkworth, Mitford, Simonburn, Ponteland and Elsdon. All of these would repay further research.

1989 saw the publication of another detailed architectural survey by G.W.D. Briggs, this time of Widdrington Church (1989, 79 – 92) and in 1991, Blair discussed the dating and alignment of the early churches on Lindisfarne (1991, 47 – 54). An exemplary piece of church archaeology was published in 1999 by Heslop and Harbottle when they presented the results of a programme of works designed to conserve the famous Grey Tomb in the south chapel of Chillingham church. This work re-discovered a burial vault beneath the monument and set high standards of monument recording and conservation (1999, 121 – 134).

In 1976 Clack and Gosling had pointed up the fact that Medieval burials had been largely neglected in the region ‘except from the art historical point of view of the grave marker’ (1976, 54). This would certainly still seem to be the case in Northumberland. Outside of the excavations on the religious houses in Newcastle itself little is known of Medieval cemeteries. The work at Ponteland did reveal the remains of a pre-thirteenth century cemetery and the recent work in Hexham has demonstrated the presence, as one would expect, of substantial numbers of Medieval burials (see refs. above).
Medieval cross slab grave covers have, however, been studied in detail. Ryder has noted some 660 of these monuments, the great majority of which are associated with Medieval parish churches. In two papers published in 2000 and 2002 he described slabs from SW Northumberland and Newcastle and SE Northumberland. A third paper dealing with carvings from Alnwick, Bamburgh and Norham (c. 160 slabs) is forthcoming and this will be followed by a detailed discussion of the material along with a detailed analysis of the problems of dating and interpreting the emblems used on the slabs.

**Trade and Industry**

The study of Medieval trade and industry in the region has largely been the domain of the economic and social historian (e.g. Lomas, 1992, 1996). Documentary evidence for a range of what we would discern now as discrete industries does survive and the scale of documented resource exploitation is often impressive. Archaeological correlates for the documentary testimony are, however, difficult to find.

Lomas (1996) highlights the importance of Medieval boroughs in the development of industries other than those relating to farming. In the fourteenth century he points out that there were only some 18 settlements in Northumberland that had borough status: Alnmouth, Alnwick, Bamburgh, Corbridge, Felton, Haltwhistle, Haydon Bridge, Hexham, Mitford, Morpeth, Newbiggin, Newbrough, Newcastle, Norham, Rothbury, Warkworth, Warenmouth and Wooler. Not included was Berwick which was still part of Scotland at the time (Lomas, 1996, 88). All of these boroughs had been created from an economic motive.

A borough was a piece of infrastructure which, if successful, could yield considerable income. As Lomas says:

> Although individually small, the burgage rents were cumulatively significant. More important, however, was the income received from rents and tolls paid by those attending and trading at weekly markets and, in many cases, the annual fair. What was traded would depend upon the size and the drawing power of the borough, but mostly it would be surplus agricultural produce of, and the essentials and luxuries, required but not produced in the surrounding countryside.

(1996, 90-91)
Thus within borough settlements we might expect to find evidence of baking, brewing, weaving fulling, dyeing, tanning, shoemakers, glovers, and metalworkers. Obviously Newcastle is a case in point here.

Localised trading would have been carried out at markets and in the thirteenth century several villages which did not become boroughs had the right to hold weekly markets e.g. Bellingham, Bewick, Bolam, Chatton, Elsdon, Embleton, Kirk Whelpington, Newburn, Tynemouth, Wark on Tweed and Whalton (Lomas 1996, 92).

Non agricultural occupations were not only found in boroughs. All along the Northumbrian coast sea fishing was an important occupation, especially given the Medieval church’s proscriptions on the consumption of meat at certain times of the year. Medieval centers included Tweedmouth, Beadnell, Bulmer, Loughoughton, Embleton, Newton by the Sea, Amble and North Shields (Lomas, 1992, 197).

River fishing was equally as important and the main quarry was salmon and trout. These were caught by means of yares, wicker fish traps set to catch fish as they came up stream. Some 68 of these devices are recorded along the Tyne valley (Lomas, 1962, 196) and they were owned by the lords of the various riparian manors in particular the priories of Durham and Tynemouth and the Percy family. On the Tweed thirteen examples have been identified on the south bank of the river between Tweedmouth and Cornhill. Two are recorded on the Coquet at Warkworth and Brotherwick (Lomas, 1992, 196). Documentary evidence for the sale of river caught fish shows that although the majority was consumed by the ‘nobility’, the market for such produce was fairly broad.

Linked to the fishing industry was the manufacture of salt for the curing of fish. Salt production was also closely associated, on the Northumberland coast, with coal mining as coal was required to boil the sea water to manufacture the salt itself. From the mid twelfth century salt was produced from pans at places like Blyth, Horton, Bebside, Hartley, North Shields and Tynemouth. Salt pans were well established along the banks of the Tyne towards the end of the fifteenth century. It was also manufactured around Warkworth and Bamburgh and most of the salt pans seem to have been in the control of monasteries. Lomas makes the interesting observation that ‘available evidence suggests that salt making began earlier than mining, and therefore
it is possible that mining began to improve the efficiency of the salt pans.’ (Lomas, 1996,102).

References to coal mining pre- 1300 are extremely rare but we might infer that it was locally well established by the end of the thirteenth century when it was asserted in 1281 that the value of the borough of Newcastle had increased because of its growing role in the coal trade (Lomas, 1992, 198).

The monks of Tynemouth began mining at an early date and extended this activity into the manors of Elswick and Wylam in the fourteenth century (Lomas, 1992, 200). In the same period, the burgesses of Newcastle were given royal permission to extend their mining ventures into the common lands on the northern and western sides of the city, into what is now Town Moor, Castle Leazes and the Forth. In 1365 they were also given royal permission to export coal from the city (Blake, 1967, 1).

Thus, as Lomas points out, it seems that by the late fourteenth century mining was taking place in all of the townships bordering the north bank of the Tyne as far west as Wylam and perhaps to Fourstones and Haydon. Other early locations were, Whittonstall, Ingoe, South Dissington, Sturton Grange and Bilton near Alnwick. The most northerly location for which fourteenth century documentation survives is Holburn, where the monks of Holy Island set up a mine (1992, 200). Sufficient coal for export was certainly being produced in the region as by 1336 it was being sent to Flanders and it was traded to Holland and the Danish island of Zealand by 1343 (Blake, 1967, 14 – 15). The earliest references to fifteenth century mining in the northern part of Northumberland seem to come from 1491 and relate to the Tweedmouth area (Bainbridge, 1993, 41). We have no archaeological evidence for Medieval coal mining surviving or recorded in the county, but there is no doubt from a range of historical sources that coal mining continued to expand throughout the Medieval period.

Peat, too, was probably an important resource and we know little about the way in which it was extracted and subsequently used. It may be that peat was simply a locally available resource that was exploited opportunistically throughout the Medieval period and we might expect little archaeological evidence for its extraction to survive given the nature of the digging processes that were involved. Gates has recently identified potential turbarry sites in his survey of the College Valley within the
National Park. Some may relate to post Medieval activity but we know from documentary sources that peat was exploited here from at least the thirteenth century when records survive of a lawsuit in which the Lord of Hethpool sued three local men who it was claimed had deprived him of his right of turbary over some 200 acres of land in the township (NCH, XI, 264 – cited in Gates, 2000, 20.).

Little is known of other ‘heavy’ industries in Northumberland in the Medieval period. Lead was certainly mined from the thirteenth century in Allendale under the control of the Archbishop of York. In 1230 Archbishop Walter de Gray leased a mine in this area to five men for the rental of one stone of lead in seven produced, (Lomas, 1992, 203-204), and the industry certainly seems to have expanded in the sixteenth century, but there are no dated Medieval lead mines in the region.

By the same token iron ore exploitation must have taken place and evidence for a vibrant iron industry in the early Middle Ages is well attested from the records relating to the Bishop of Durham’s leases for mines and furnaces in Durham. The main field evidence for this Medieval iron industry in both Durham and Northumberland is the numerous mounds of slag, known locally as ‘metal hills’ or ‘cinder hills’ (Miller, 1887, 123), produced during the bloomery iron smelting process. The process basically consisted of the reduction of iron ore to metallic iron in a charcoal-fired clay and stone furnace with air introduced by bellows. Impurities liqueate out from the ore leaving a spongy mass of iron called a ‘bloom, which could be hammered into a bar of iron. The slag often shows smooth dribbles or runs on the uppermost surface (like runs of candle wax), resulting from periodic tapping of the slag.

The thirteenth century generally in Britain saw the continuation of the trade in high quality imported bar iron, particularly from Spain and the Baltic. The Borders at this time enjoyed a period of virtual peace and stability throughout the century, broken only by the invasion of Scotland by Edward I in 1296. The period also saw a steady rise in population levels. The emergence of a bloomery 'industry' at this time in the Northumberland, and perhaps in other parts of the country, may reflect a general rise in demand for relatively poor quality, cheap, iron. It has been suggested that this demand was also stimulated by the need to provide munitions for Border defence and, indeed, following Edward’s invasion of Scotland Crown officials are recorded at county fairs in Northumberland in 1298 and 1299 purchasing iron (Turner, 1912,
However, the effects of such demand locally would be fairly irregular and closely linked to periods of conflict.

The end of the manually-powered bloomery industry may have been brought about by the Black Death which reached the Borders in the mid 14th century and continued to reoccur in sporadic outbreaks until 1500. Severely disrupting economic networks causing a major labour shortage, inevitably the demand for labour led to higher labour costs. This may have been the fate of the Birtley works, which ceased about this time.

Throughout the thirteenth and fourteenth centuries, Europe experienced the spread of water-power within the iron industry which reduced the labour requirement and also led to more efficient production (Cleere and Crossley, 1995, 106). Possibly as a result of the Black Death, this technology became increasingly adopted in Britain throughout the fourteenth and fifteenth centuries, leading to a nucleation of production and the disappearance of the small, dispersed manually-powered bloomeries, except where local economic conditions were favourable, such as Furness.

Limited recent fieldwork in the Grasslees Valley within the National Park has uncovered a large number of bloomery iron smelting sites and undoubtedly many more await discovery (Hedley, 1998, 20-25). This material is discussed in more detail below, but other than this there has been little recorded archaeological research related to Medieval iron production in Northumberland.

Lime may have been burnt to produce the constituent elements of lime mortar in the late Medieval period at Beadnell Point (Williams and Williams, 1996) where the remains of one of the few known Medieval limekilns in the county has been excavated. The lime was probably not used as a fertilizer, as Bailey and Cullen in their report on agricultural practices in Northumberland suggest that liming did not appear until around 1750 (Bailey and Cullen, 1797, 114 – 117).

Throughout the Medieval period, building in stone was largely a technique restricted to high status structures and for the construction of bridges on some of the more important routes. Castle and church building must have involved considerable local expertise at the level of quarrying and dressing the stone. Plasterers and carpenters would also have been in evidence. Again, though, little archaeological evidence survives across the county for Medieval stone quarries.
A similar situation prevails in relation to the production of milling stones. We have copious documentary references to Medieval mills in Northumberland but very little evidence for Medieval millstone quarries. One site at Harbottle Crags, within the National Park, may have had its origins in the later Medieval period and this is discussed in more detail below.
ASSESSMENT OF THE CURRENT STATE OF KNOWLEDGE RELATING TO THE MEDIEVAL ARCHAEOLOGY OF THE NORTHUMBERLAND NATIONAL PARK.

As the preceding discussions have highlighted there has not been a great deal of research into the Medieval archaeology of the National Park area. This assessment follows the same structure as that set out above:

Rural settlement and Agrarian Activities
Castles, Manors and Military Sites etc.
Religion
Trade and Industry

Rural Settlement and Agrarian Activities

The 1962 excavations at the enigmatic site of Memmerkirk in Kidland produced evidence for a building measuring 48 feet long by 15 feet wide (Harbottle and Cowper, 1963, 51). Despite a great debate about whether the structure was some for of chapel or meeting house, the archaeological evidence from the excavations suggests that this was a long house and one of the first to be excavated in the upland parts of the county. Harbottle and Cowper suggest that it dates to the fourteenth century and may be related to the practice of shieling or upland summer grazing. John Philipson produced a note on other shieling type sites in the area of the Yokeburn and the Allerhope Burn.

Harbottle’s other excavations within the area of the Park, at the DMV site of Linbriggs has done little to expand our knowledge of rural land-use and agrarian activities. The long house was dated to the sixteenth century on the basis of pottery finds.

In 1973, Harbottle and Newman published their survey results from the Starsley Burn area of North Tynedale and while, technically, this work is out-with the boundary of the National Park, their contextualization of the survey results impacts upon our knowledge of activities within the Park. The work provides a review of rural settlement development in the North Tyne Valley, pointing out that in the thirteenth century that villages were few in the area, with only seven being referred to in the ITER of Wark of 1279 (Bellingham, Charlton, Tarset, Thorneburn, and
Donkleywood on the north bank of the river and Chirdon in the valley of the Chirdon Burn and ‘Tirsethoppe’ located somewhere on the Tarset Burn (this site no longer exists).

Bellingham and Tarset were manorial centers and Tarset was the only village with a fortification (licenced in 1267/68). Other smaller hamlets may also have been in existence and the report discusses place name evidence in some detail showing that settlement at Snabdaugh and Greystead was first recorded in 1326 and that Dally Castle may have been built c. 1237.

Beyond the area of settlement the 10 miles to the watershed must have been used mainly for grazing and transhumance, certainly before the outbreak of the Border wars in 1296. The report highlights much that is known about the nature and location of shieling sites. There is also much discussion of the overall impact of the Border Wars in this part of Northumberland. By 1541 the settlement pattern was severely altered. Bellingham had become the dominant settlement and many smaller settlement locations had sprung up. The early and important manorial centers of Chirdon and Tarset had declined so much in status that they were indistinguishable from the other small hamlets of the valley.

By the mid sixteenth century there were more than 70 settlements strung out on either side of the North Tyne, west of Bellingham and in the Chirdon and Tarset valleys. Harbottle and Newman’s survey is an important contribution to our knowledge of Medieval settlement in this part of the National Park.

The survey of Wark Forest, published by Heyes in 1976 added further to our knowledge of the siting, location and structure of shieling type temporary Medieval settlements within the National Park area. Heyes showed that with only four exceptions the shielings in Wark forest all lie close to the streams of rivers and neatly divide into those on the River Irthing with its tributaries, those on the Black Burn and those on the March Sike (Heyes, 1976, 248). Heyes also documented a vast number of stack stands and some evidence for lazy bedding in his study area. Again though the chronology of most of the sites recorded during his survey work is largely unknown.

Piers Dixon’s excavations at Alnhamsheles on the Rowhope Burn took place from 1979 -1983. They illustrated the quite complex nature of upland shieling-based settlement, when two phases of house construction were recorded on the site, with
associated garths and enclosures. The house had the classic byre and human living accommodation arrangement.

Dixon’s PhD. thesis (1985) also provided a detailed insight into the number and condition of deserted village settlements in the area from Coquetdale to Berwickshire and many of his sites lie within the National Park. This work dealt with both documentary evidence for settlement as well as the physical traces of such sites in the archaeological record. As such, in conjunction with Stuart Wrathmell’s earlier survey of DMV sites in the southern part of Northumberland, it remains an important contribution to our overall knowledge of the evolution, development and ultimately the abandonment of Medieval settlements within the National Park area.

Charlton and Day have contributed much to our general knowledge of agricultural practices and settlement activity on the Otterburn Range within the National Park. Their work on settlements at Cottonshope, Aldensheels, Davyshiel and Linbriggs has confirmed the practice of shieling and that the pattern of settlement and desertion was similar to that observed by Harbottle and Newman in other areas of North Tynedale as discussed above. They also observed potential shieling sites with turf foundations at Saugh Rigg, Passpeth and The Knocks (Charlton, 1996, 52).

The summer upland grazing of stock went on well into the seventeenth century in this part of what is now the National Park. In terms of enhancing our general understanding of the archaeology of shieling practices, Charlton and Day’s work confirmed that most of the sites identified on the Range as shielings conformed to the dimensions and structural appearance of sites recorded in the RCHME’s *Shielings and Bastles* publication of 1970.

The isolated structures are predominantly of the one roomed type, although a few have two or three rooms with a single doorway in the most sheltered long wall. The majority are rectangular, but there is the occasional square building. External length varies from 6 to 14 metres and the width from 3 to 8 metres. The thickness of walls varies from 0.5 metres to 1 metre. Whilst the average measurements for single room roomed structures are 4 by 9 metres, those with two and three rooms tended to be much greater in length, sometimes up to 25 metres. (Charlton, 1996, 54).
Our knowledge of Medieval settlement within the area of the National Park increased dramatically after 1990. Peter Ryder’s detailed study of Towers and Bastles (Ryder, 1990), provides a good jumping off point in that he produced detailed surveys of some 50 extant sites. This database gives an insight into a range of architectural variations within the monument categories and it provides a good record of the state of these features in 1990. What it did not do however was to examine the sites in relation to their general landscape setting and while we have discussion of problems of terminology and nomenclature there is little on the social aspects of bastles and towers.

By the same token his detailed surveys of the bastles at Snabdough and Woodhouses, published in the same year provide detailed architectural and building history discussion but nothing tangible on the background histories of the two sites. This aspect of bastle/tower archaeology is returned to in the list of potential research topics set out below.

The work of the Tyne and Wear museums service at Mounthooly in the College valley contributed further data on the morphology and location of potential shieling sites, but little else (1994). But two years later, with the publication of the Lancaster Archaeology Unit’s survey on the Otterburn Range, a significant contribution to our knowledge of Medieval settlement and land-use patterns in the region was made. 1996 saw the first of two reports on the archaeology of the Range. The area around Davy Shiel provided evidence of a complex Medieval and post-Medieval landscape comprising of drying kilns settlements, field systems with broad rig cultivation in evidence and a potential bastle house.

The second phase of this survey work involved trenching on particular sites and in the course of this a Medieval farmstead at Potts Durtrees was sampled. The ceramic assemblage, dominated by green glazed pottery was tentatively assigned a fourteenth century date. This site was later excavated in more detail by ASUD as part of the AS 90 works on the range in 2002/2003. We await a final report on this.

A detailed survey of the area around Davy Shiel was also produced. This identified three potentially Medieval settlement nuclei in the area examined. All are related to broad rig ploughing remains which may indicate two key periods of agricultural activity. An extensive area of these fields was lost when the AS 90 Central
Maintenance Facility was constructed close to the existing Otterburn Camp in the heart of the field system. Some work was carried out as part of a watching brief by ASUD staff and fourteenth century pottery was recovered from the areas of destroyed rigs.

The importance of this area was further enhanced by the publication of Tim Gates’ air survey of the Range in 1997. Gates demonstrated that wide tracts of broad rig ploughing survived on the range and he highlighted the fact that:

> virtually every single one of the place names referred to in documents of the early thirteenth to mid fourteenth century that have been listed by Charlton and day now turns out to be associated with arable land cultivated by broad rig ploughing.

(Gates, 1997, 11)

Similarly his detailed photographs of the bastles at locations such as Branshaw and Iron House give a real insight into the complex Medieval/post-Medieval landscapes that these sites must have functioned within.

The 1997 surveys of the bastles at Shilla Hill and Boghead in the Tarset valley also shed more light on the complexity of the bastle landscape and these two pieces of work also provided detailed records of the nature and condition of extant structures and related earthworks (RCHME, 1997, 1997a).

The work of The Archaeological Practice at Low Cleughs Bastle (Redesdale), in advance of a detailed conservation programme cast further light on the history and development of bastle sites generally. The related structural survey with limited test pit excavation was important for the level of constructional detail recovered, but the topographical survey work around the site showed again just how complex its contemporary landscape probably was. Other paddocks and enclosures, related to a field system containing evidence for broad rig cultivation were recorded in some detail. The documentary survey (NUAP, 1998) also casts much light on the origins and development of the site as recorded in both cartographic and written documentary sources.
The excavations by The Archaeological Practice at the site of the Bogle Hole on Hadrian’s Wall demonstrated the ephemeral nature of archaeological remains that might be encountered on shieling sites. The primary aim of the work here was to evaluate the extent and to mitigate the damage caused by rabbits on the easternmost structure visible at the site. A second trench was located within another potential shieling structure (NUAP, 1998, 10). Linked to this work was a general topographical survey of the surrounding area which produced evidence for a total of twelve probable structures, nine of which were arranged in a row or terrace along the southern and eastern slopes of the Bogle Hole. All of these structures were linked by a low wall, L shaped in plan with a possible entrance on the eastern side.

Excavation revealed that the larger structure had an earthen floor but no hearth, and no dateable archaeological material was recovered. The lack of a hearth was taken by the excavators to imply that the site was only occupied in the warmer months of the year.

The Bogle Hole does not appear as a functioning settlement on any maps of the area, the first of which appear in the mid 18th century. Maps of the 19th century do, however, show a permanently occupied farmstead, Shield on the Wall, at the site of Milecastle 41 c. 300m east of Bogle Hole. This farm is probably the same as that marked on several 18th century maps as Melkridge Shiel. This earlier name would seem to imply that before its change to permanent occupation it was at one time the principal shieling site for Melkridge township, a continuation of the system of shieling in this area seen from Medieval times. The proximity of the Melkridge Shiel/Shield on the Wall site at Milecastle 41 suggests that this may represent the successor to the Bogle Hole settlement (NUAP, 1998, 21). A supplementary report on the work at the Bogle Hole published in 1999 reported on the radio-carbon date obtained from the excavations. This was in the range of AD 1451 – 1659 (320+/- 45 BP - AA 33126) (NUAP, 1999, 2).

The enclosure wall at Bogle Hole may well have gone out of use when the shieling structures were erected. This may be evidence of an earlier stock enclosure similar to the site of the King’s Wicket some 71/4 km to the east near Housesteads.
In 1999, Tim Gates produced his report on the air photographic survey of the Hadrian’s wall area from Chesters to Greenhead, and whilst this was not a survey that was aimed specifically at increasing knowledge of the Medieval landscape, it did record several features worthy of further examination. In particular Gates drew attention to three earthwork enclosures at Greenlee Plantation, Great Lonbrough and Ridley’s Close which he suggested may have their origins in the Medieval period, being very similar to the so-called infield enclosures identified in areas like Somerset and which are thought to date back as far as the tenth century. (Gates, 1999, 25). He also documented around 200 new stack stands and related agricultural features. Many of these he suggests may have been used in the exploitation of local peat deposits (1999, 26).

A further contribution to our knowledge relating to Bastle houses appeared in 1999 when Lax produced her discussion of Bastles in the Tarset Valley. In this report she documented work carried out at five of the ten bastle sites still extant in the valley and she showed that on the basis of the available documentary evidence, the settlements at Black Middens, Hill House, Shilla Hill and Boghead were all probably in existence right at the end of the period under consideration in this discussion (i.e. mid – second half of the sixteenth century) (Lax, 1999, 172).

Nolan and Wardle produced a detailed report on survey work in the Wark forest area in 2000. In advance of the development of a new bridleway within the forest, they recorded some 15 structures at the site of Highhaugh, first noted by the Rev Tom Heyes in the 1970s (Heyes, 1976, 252). Though undated, these could well be further evidence of Medieval upland exploitation in this area of the National Park (Nolan and Wardle, 2000).

The same year saw the publication of Tim Gates’ aerial survey of the College Valley and Topping’s topographical survey of the same estate (Gates, 2000; Topping, 2000). In discussing the Medieval/post-Medieval landscape, Gates points out the ubiquity of broad rigg ploughing, especially over the northern part of the survey, on the hills flanking the Elsdon Burn and the Hetha Burn. Also important are the areas north and west of Hethpool, where broad rigg cultivation turns into lynchets and ‘cultivation terraces’, as the cultivation activity rises up the valley sides.
Gates also photographed the two deserted settlements known from the area at Heddon and Trowhope. The former is documented before the thirteenth century while the latter was certainly in existence before the fourteenth century (Gates, 2000, 18; Dixon, 1986).

In 2001 Iain Hedley undertook excavation work in advance of housing development on the site of the Rectory Garden in the village of Ingram. The main aim was to expand the results of an earlier site that had produced evidence for gullies, ditches and possible post holes indicative of Medieval settlement activity. The full investigation revealed an undisturbed plough soil containing 12th and 13th century pottery and two cut features post dating the plough soil. Botanical remains relating to wheat and barley cultivation and crop processing were also recovered (ASUD, 2001, 2).

**Castles, Manors and Military Sites etc.**

The detailed study of castles and military structures has a relatively recent history within the National Park. Harbottle Castle was the subject of a detailed architectural and historical discussion in the 1930s (Hunter-Blair, 1932 – 1934). This paper was important because it contains the only serious attempt to document the excavation work carried out at the site in the same period by H.L. Honeyman. This was fairly detailed trenching work in the interior of the castle but it was never properly written up and very little of the original archive remains extant. Honeyman examined the cross wall gateway within the castle and he also trenched the domestic buildings on the summit of the motte (Hunter Blair, 1932 – 34; Hope Dodds, 1940, 482 – 487; Ryder, 1990). Hunter Blair also discussed the site in a 1944 publication on the early castles of Northumberland. (Hunter Blair, 1944, 116-170). An assessment of the excavations was also provided by ASUD (1997, 22 – 24).

Ryder subsequently produced a short historical and descriptive account of the castle in 1990. This included a brief review of the known documentary history relating to the site and an assessment of the state of the castle today. He also discussed the importance of Harbottle Castle as a monument and archaeological site.

As part of a larger programme of research and conservation beginning in 1996, ASUD monitored the masonry consolidation work, recording things such as the presence of worked stone and the lime content of the original mortars, and they also produced an
assessment of Honeyman’s work at the site (ASUD, 1997). One year later as part of the same programme, Rushworth and Carlton produced a definitive record of documentary evidence relating to the Castle. This also included an account of the surviving data relating to Honeyman’s work (1998, 21).

In the synthesis of information attached to this documentary review, Rushworth and Carlton discussed pre-Conquest occupation and land-use on the site and the likelihood that a pre-Conquest stronghold existed at Harbottle. They also dealt with the origins of the Umfraville Liberty of Redesdale and the whole issue of Border Liberties and Franchises in the Medieval period. This led on to a detailed attempt to understand the extent of the Umfraville domains, the nature of early Medieval patterns of lordship in the Harbottle area, Harbottle’s relationship with the earlier Umfraville castle at Elsdon and a consideration of the strategic importance of the site (Rushworth and Carlton, 1998, 24 – 33).

Other aspects of the synthetic discussion touched upon the foundation of the castle, and its relationship with the other castles of Henry II’s reign, the pattern of Medieval settlement and land use in Redesdale and Upper Coquetdale, a general discussion of the role of the castle in Medieval society, its reconstruction as an artillery fortress and its final decline (1998, 34 – 48). Overall, this was a phenomenal piece of work that allowed the detailed contextualization of the excavations that were carried out at the site in the period 1998 – 1999.

In 1997 Northumbrian Surveys used ground penetrating radar to produce a detailed set of profiles across the bailey of the castle to include the inner ditch, the eastern gateway and the outer ditch. This highlighted the original depth of the ditches and showed that the inner ditch was some 2m deeper in the Medieval period than it is today. (Northumbrian Surveys, 1997). Further GPR survey work was carried out on top of the motte to reveal a detailed ground plan with the possibility of a vaulted cellar area beneath the surface structures (Northumbrian Surveys, 1998).

In 1999, Peter Ryder also produced a detailed gazetteer, and discussion of the worked stone collection at Harbottle. This report also contained recommendations for their storage, conservation and preservation (Ryder, 1999).
Whilst all of this survey work was being carried out, a series of excavations was also undertaken in the period 1998 – 1999. These were co-ordinated by Jim Crow of Newcastle University Dept. of Archaeology and concentrated on uncovering the middle gate and curtain wall between the inner and outer baileys. This work revealed the front of the gate and the barbican drawbridge pit as well as a smaller postern gate and a section of the gatehouse proper.

In 1999 the work revealed the full extent of the front and northern side of the middle gate. Excavation within the gatehouse was limited to the partial excavation of the northern gate tower and the fill of robbed debris within the passage of the gatehouse was left untouched. The gatehouse with its drawbridge pit was dated to the fourteenth century (Crow, 1998, 1999).

The Mote Hills motte and bailey castle at Elsdon, the earlier seat of the Umfravilles, was the subject of a detailed earthwork survey by Adam Welfare for Heritage Site and Landscape Surveys Ltd in 1996 (Welfare, 1996).

Dally Castle has also seen some archaeological work prior to its recent consolidation and display. In 1991 the site was the subject of an undergraduate dissertation in the Dept. of Archaeology at Newcastle University (Brook, 1991). This was an excellent piece of work that entailed a good quality plane table survey of the site and some well executed elevation drawings of standing walls. In 1996 Welfare carried out a similar survey of Dally Castle. As well as producing a detailed topographical plan this work also sought to detail the history of the site and to collate the results of previous excavations.

In 1888 Dally Castle was partially excavated by W.L.S. Charleton. A short note detailing this work was published in 1905 (Dendy, 1905 – 1906). Charleton had begun his work close to the north wall of the site in the interior and recorded a doorway in the north-east corner. A fireplace was also recorded in the western gable of the hall. He did produce a plan of the area excavated. Finds included clay pipe fragments, the remnants of a helmet and a sword. All of these came from the north-west tower (Welfare, 1996). In 1936–37 H.L. Honeyman produced a detailed architectural analysis of the castle site (Hope Dodds, 1940, 278 – 280). He suggested three main structural phases for the site:
I) A simple rectangular building defended at ground level by fish tail loops for bowmen and having an upper floor that was presumably entered by an external flight of wooden steps (? Early thirteenth century AD).

II) The addition of a north-west tower and a southern wing – the defence being moved from the ground floor to the crenellated paprapet that existed at roof level. All the old arrow loops were carefully blocked up, save for one in the SW bay which lit a chamber equipped with a fireplace. This light was enlarged slightly and defended by two iron bars (Late thirteenth century AD).

III) The addition of a north-east tower, strengthening of the south-west corner and the introduction of an enclosure upon the southern scarp of the mound (Hope-Dodds, 1940, 278 – 280; Welfare, 1996).

Tarset Castle has never been subjected to detailed excavation or survey work. This site was certainly in existence before 1267 when John Comyn was given leave to fortify an existing ‘camera’ with a stone wall and ditch, but the castle disappears from history until 1523 when it was occupied by Sir Ralph Fenwick and 80 men. In 1525 it was taken and burnt by an alliance of Scots and Tynedale men. It was never restored and its ruins served as a local quarry. A plan of 1773 shows the original camera or hall to have been a long thin building with a small rectangular turret at each corner. As At Dally, the site was partially excavated by W.L.S. Charleton but no plan of the area affected by the work was produced. A bronze key may have been recovered during the excavations (Hope Dodds, 1940, 243 and 246).

Most recently Thirlwall Castle has received detailed analysis as part of a long term programme of conservation and preparation for display. Ryder’s architectural and historical survey of 1997 continued a long tradition of such work on the castles of Northumberland. The archaeological evaluation carried out by The Archaeological Practice at Newcastle University revealed cobbled floors and stone flagging within and just outside the castle and further work on the eastern side of site between the castle and the edge of the burn revealed a wall of two phases. It is thought that this might represent a barmkin curtain wall that was later reduced to a simple field wall as the castle fell into disuse (NUAP, 1998 and forthcoming). Rushworth and Carlton’s documentary survey, published in 2001, is again of an exemplary standard,
setting the site into both its historical and landscape contexts while at the same time producing a concise and clear account of the conservation and access project that has resulted in the castle as we see it today (Rushworth and Carlton, 2001).

**Religion**

As we have seen in the general discussion of this topic set out above, several of the churches within the National Park have been subjected to traditional architectural and historic surveys. Over and above this, very little work has been carried out relating to Medieval religious sites within the area.

At Holystone we have historical records relating to the Priory of Augustinian Nuns which may have been founded during the reign of Alexander I king of Scotland from 1107 – 1124. It was certainly in existence at the time of his successor, David I (1124 – 1152). We know that the nuns founded a grange at *Hetun* in 1213, but by 1312, the nuns had been reduced to such poverty from the Border wars that Bishop Kellawe of Durham granted them the chapel of Harbottle and the church of Corsenside. In 1535 the yearly income of the house was given as £11. 5s.7d. and it was dissolved by Henry VIII.

As the SMR for Northumberland says, we know nothing about the nature of the buildings. They were immediately south of the choir of the present parish church and it seems that the choir of the church may have been used as the convent chapel. This is supported by the fact that the graveyard is on the north side of the church. A fragment of late thirteenth century stone paneling is built into the churchyard wall. The conventual buildings may well have been destroyed in 1541 to provide material for Henry VIII’s new work at Harbottle Castle. Architectural fragments from the nunnery are recorded throughout the present village. The land to the south of the church preserves the traces of a cottage row some 20m distant from the church. It is suggested that these cottages occupied the area of the southern range of the conventual buildings.

Also of potential Medieval and later importance are the two enigmatic ‘holy well’ sites of St Mungo’s and the Lady or St. Ninian’s Well. A great deal of Christian myth relating to the activities of Paulinus in 627AD is attached to the latter site, but little documentary or serious archaeological data relating to either of these sites is extant.
Trade and Industry

There is no real archaeological evidence for detailed patterns of trade and exchange within the area that is now the National Park in the Medieval period. We fare slightly better for traces of industrial activity.

Coal Exploitation

Within the Park there are numerous deposits of coal throughout the Carboniferous succession. Rarely exceeding a metre in thickness, and usually considerably less than this, the coals invariably contain shaly bands, resulting in high ash content. Faulting is frequent and groundwater saturation is commonplace (Frost and Holliday 1980, 84). The principal coals are the Thirlwall Coal in the south west, the Plashetts Coal in the Upper North Tyne, and the Fourlaws Coal in the Rede and Grasslees Valley areas. No Medieval coal extraction sites have been excavated.

The surveyors of the Borderlands in 1604, wrote of the ‘store of Cole’ within the manor of Harbottle and although un-worked at that time they valued it at 13s 4d annually (Sanderson, 1891, 108,110). In North Tynedale, despite ‘great stores’ of coal there were no mines in use at that time as it was noted the inhabitants ‘have such store of Turfe and Peate as they will not bestowe labor to get coales’ (Sanderson 1891, 77). Further they noted that ‘if the Country weare inhabited by industrious men of Trade, the mynes would bee of great value farr exceedinge the rate set downe’ which was then 1l 6s 8d (ibid 75). Perhaps, as Winchester (2000, 139) suggests coal would have cost the local inhabitants money whereas peat digging cost only labour. Indeed, peat where it is sufficiently dry has been ‘cast’ (dug up) in most areas of the Park, (see above reference to Gates’ identification of potential peat extraction sites, a practice that was carried out commercially at Crag Flow, west of Nunwick, until 1991.

The surveyors of 1604 produced an over-optimistic assessment and one that was not borne out by the true quality of the coal itself, nor its distance from commercial markets. However, for the relatively small-scale rural industries and domestic hearth, remote from alternative supply, this poor quality, shaly coal was probably sufficient. The 1604 survey may have stimulated renewed interest in mineral resources among landowners keen to maximize returns from their estates. Certainly, there was sufficient knowledge of the nature and extent of the reserves to allow the surveyors to
record their value, suggesting than at least some commercial extraction may have occurred, within living memory of the survey, or perhaps was then being exploited on a non-commercial minor scale.

As highlighted above, limited survey work by Iain Hedley in the Grasslees valley has recorded iron working sites (Hedley, 1998, 20-25). The Rev. John Hodgson visited the area with a local guide in the early nineteenth century and noted in his *History of Northumberland* having seen heaps of scoria (slag) ‘all bladdery and glowry as if it had been boiled’ (Hodgson, 1827, 85). He also noted an *inquisition post mortem* of Gilbert de Umfraville, baron of Redesdale, in 1245 which noted furnaces and forges in the Manor of Otterburn giving an annual rental of four pounds and two shillings (Hodgson, 1827, 85). A rental of about one-seventh of output, which was common to the area, suggests a considerable industry here in the mid-thirteenth century.

The reasons why this industry developed at this time can be found in the rise in population caused by relatively good harvests and relative peace between England and Scotland, which led to an expansion in cultivated land and an increasing demand for agricultural and other tools made from iron. Thus there was an increase in demand for low priced iron of adequate quality at a local level; a demand that was eagerly met by enterprising landowners and monastic estates keen to maximize their incomes through the sale of leases.

The effects on iron production caused by the conflict with Scotland from 1296, or the famines of the second decade of the fourteenth century, are a matter for speculation. It is unlikely, however, that the industry survived much into the second half of the fourteenth century, following outbreaks of pestilence (Black Death), which not only reduced demand, witnessed by the wide scale reversion of arable to pasture at this time, but also added high labour costs to a labour intensive industry. These factors led in due course to the emergence of a water-powered bloomery industry and eventually to the introduction of the blast furnace into Britain at the end of the fifteenth century.

The 1398 *inquisition post mortem* for Maud Lucy, widow of a later Gilbert de Umfraville, lists a place in her possession called the *Hernehousefeld*, which translates as ‘the area of cleared land where the iron houses are situated’: *herne* being the Medieval form of the word ‘iron’ and the houses perhaps relating to the timber buildings or shelters within which the furnace and the smelters were protected from
the elements. However, the document records only waste places and shiels, with no mention of an iron industry at all. It is tempting, therefore, to see the fossilisation of the former industry in the place name which subsequently became associated with the later settlement of Ironhouse, situated above the west side of Grasslees Valley in an area particularly rich in bloomery slag heaps. It is interesting to note that a local legend records the occupation of Ironhouse by a community of metal workers (Hedley, 1998, 20).

In addition to the clay required for the furnace, the process requires sources of iron ore and charcoal to fuel the process. Charcoal is required at a roughly 1:1 weight ratio to the iron ore, which equates to an approximate bulk ratio of 20:1. For this reason, and the relative fragility of charcoal, the furnaces were always located at the site of the fuel rather than the ore. Most of the sites in the Grasslees Valley lie within the former township of Woodside, which from its name implies a ready fuel source. Also within this area are numerous outcrops of the Redesdale Ironstone Shale, and it is likely that many of the small pits and shaft mounds in the area, which do not appear to relate to coal outcrops, are in fact related to ironstone extraction. Thus, the Medieval iron smelting industry provides the earliest physical evidence in the National Park for both iron mining and charcoal burning.

A tentative model is emerging of the organisation of this industry which it is hoped will be enhanced in the light of additional fieldwork and excavation. Hedley has suggested that the slag tip sites were the locations of fairly dispersed bloomery furnaces. The ore was mined often close by from simple pits dug into the outcrop in the burns or from larger bellpits sunk through the glacial till higher up the burn sides. There was no shortage of suitable timber for charcoal along the burns and cleughs in what became known as Woodside Ward in the post-Medieval organisation of Elsdon parish. The blooms produced in the furnaces would be quenched and taken to a smithy site for hammering into billets or possibly manufactured directly into tools. It is suggested that Ironhouse, in support of the local tradition may indeed have been the location of a smithy.

So far the study in the Grasslees valley has located 12 slag sites within 3 km of Ironhouse, a further two are known within a radius of 4 km, and it is believed that further bloomery sites await discovery.
Building Stone
The building of a structure such as Harbottle Castle in the twelfth century, tower houses such as Dally and Tarset Castle in the thirteenth century, not to mention some of our early churches, such as St Michaels at Ingram and St Cuthberts at Elsdon, would have been considerable undertakings requiring the quarrying of suitable stone, stone dressing, transportation, and construction. Thus quarrymen, labourers, carters, stonemasons, lime burners, architects, and carpenters would all be required to undertake highly specialist work, even by the standards of today. And this would be costly. It is not surprising, therefore that in the more remote and marginal land of the National Park, few large building projects were undertaken during Medieval times.

Millstones and milling
The Fell Sandstone is occasionally gritty enough to produce stone suitable for grinding corn, and at Harbottle Crags this stone has been worked for millstones since at least the sixteenth century. It may have supplied a mill which existed in 1539 at nearby Holystone (LUAU, 2000, 15), but was never-the-less well-established by 1604, when it was held by Persivall Potte by custom and was valued at £10 annually (Sanderson, 1891,105). The documentary evidence suggests that the quarry was out of use by the early nineteenth century. A recent survey commissioned by the National Park Authority (LUAU, 2000) recorded some 137 discarded or unfinished millstones and 476 voids or quarry pits in an area of the quarry stripped of heather by a moorland fire.

These remnants serve to remind us of this once important local industry but more perhaps of the numerous corn mills that once existed throughout the area. One such mill was Grasslees, established between 1604 and 1618 (Cranstone, 1994, 1-2) by Alan and William Wanlass. The mill was part of a dramatic expansion of milling, and, by association, with cereal cultivation during the seventeenth century. In 1662 it passed by marriage to William Hedley of Landshot after which it was tenanted until its abandonment as a mill sometime in the 1870s, a further casualty of the influx of cheap cereals from the continent. Four millstones remain on the now fragmentary site, one course gritted resembling the Fell Sandstone on Harbottle Crags, one very fine grained probable ‘blue stone’ from the Eifel region of Germany, with the remaining stones of intermediate grain, reflecting the range from coarse shelling through to fine milling (Cranstone, 1994, 11).
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POST MEDIEVAL AND MODERN ARCHAEOLOGY
# Historical background to the post–medieval – modern period in Northumberland

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### The Post-Medieval Period (1603-1991)

*Paul Frodsham*

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### The Twentieth Century

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# A brief outline of some previous work on the post-medieval – modern archaeology of Northumberland and the National Park

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### Rural/agricultural landscapes and the archaeology of landscape improvement

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### Rural settlement and vernacular architecture

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### Country Houses and Gardens

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### Industry and Communications

#### Coal

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#### Iron

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#### Non-Ferrous Metals and Vein Minerals

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#### Quarrying

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#### Lime Working

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#### Milling and Related Activities

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#### Rope Making

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#### Brewing and Distilling

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#### Communications

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# Assessment of the current state of the post-medieval – modern archaeological resource in Northumberland National Park

*Iain Hedley*

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### Coal

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### Iron

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### Non-Ferrous Metals and Vein Minerals

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### Lead

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### Building Stone

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### Lime

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### Road Metal

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### Millstones and Milling

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### Transportation

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### Water Supply

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### Concluding Remarks

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# References
HISTORICAL BACKGROUND TO THE POST–MEDIEVAL – MODERN PERIOD IN NORTHUMBERLAND

For the purposes of this account, the post-Medieval period begins with the Union of the Crowns in 1603, when local communities were still being traumatised by the Border reivers. It ends with the death of Queen Victoria in 1901, when the tranquillity so often cited today as one of the National Park’s major defining characteristics was perhaps at its zenith, prior to the introduction of the mechanised transport and agricultural machinery of the modern age.

The Post-Medieval Period (1603-1991) Paul Frodsham

In 1603, James VI of Scotland became James I of England and decreed that:

‘The late marches and borders of the two realms of England and Scotland are now the heart of the country. Proclamation is to be made against all rebels and disorderly persons, that no supply be given to them, their wives, or their bairnes and that they be prosecuted with fire and sword.’

This was the beginning of the end for the Border reivers. Some benefits of the Union were immediate: old shieling grounds in Upper Coquetdale, which had long lain abandoned, were re-occupied as early as spring 1604. The surviving enclosures at Yearning Hall, high in Upper Coquetdale, may date from this time, and may represent shieling settlement by Scottish villagers from just over the border. Not all changes were quite so immediate, however, and it would be a few more years before all the ‘rebels and disorderly persons’ had been suitably dealt with (Watts, 1975).

The Reivers, who for much of the previous century had terrorised the lands either side of the Border, with little serious opposition from Edinburgh or London, proved very difficult to pacify. James abolished the Marches and the Wardens, and set up his Border Commission at Carlisle in 1605. He appointed members of the resident Northumberland gentry to positions of power, and his forces ruthlessly tracked down offenders. In stark contrast to the anarchy of previous centuries, the Border Marches, which James renamed the ‘Middle Shires’, were now under the firm control of the Crown. Hundreds of reivers were executed or banished, many without trial. Indeed, some officers were granted the specific power to hang offenders on the spot without any kind of trial. Many reivers who managed to hang onto their lives were conscripted into the British army and forced to fight in the Low Countries.
In 1609, after a mass hanging in Dumfries, the Middle Shires were declared to be as safe as anywhere in the Kingdom. This may have been something of an exaggeration as many more violent episodes are recorded from subsequent decades, but it was certainly true that the reiving way of life, developed over some three centuries and possibly with very ancient roots stretching back into prehistory, was largely extinguished in less than a decade of iron rule under King James.

James is sometimes accused of excessive violence, but what is beyond doubt is that he left the Northumberland uplands a great deal more peaceful than he had found them. The ‘poor wretched people (of Redesdale and North Tynedale) were the victims of circumstances for which by no means the whole responsibility was their own: when those circumstances were altered by the union of England and Scotland – a political measure – at once they began to emerge from their lost and degraded condition…There was in them the material for a far better life than they were leading, and it gives us less reason to be surprised when we learn what a solid, sturdy, and high-principled community their descendents form now’ (Collingwood, 1884, 168-169).

James’ vision of the Middle Shires within a truly united kingdom was never fully achieved, due to a combination of factors including continued rivalry between English and Scottish factions, and simmering tensions within the aristocracy (on both national and Northumbrian stages) between Protestant and recusant Catholic families, especially in the years following the failed Gunpowder Plot of 1605.

Although violence was not as deeply entrenched as in earlier centuries, the seventeenth century was not without its share of violent conflict. In a throwback to earlier times, a Scottish army entered Northumberland once more in 1639, and returned to occupy Newcastle in 1640. These ‘invasions’ were in protest at Charles I’s attempts to control the Scottish church, but they were not long lived and Scottish troops returned home in 1641. Following this, however, Charles recognised the strategic importance of Newcastle. He stationed extra troops here, making it a Royalist stronghold.

In January 1644, a sizeable Scottish army entered Northumberland in support of the Parliamentarians, leading to the Siege of Newcastle. Perhaps not surprisingly, the men of the old reiving heartlands had mixed loyalties. Writing of North Tynedale, Beryl
Charlton (1987, 50) notes that ‘the old ways died hard.....it mattered little to the broken kinships on which side they fought – as long as they were taking part. Some...helped the invading Scots to cross the Tyne and mine the walls of Newcastle in the siege of 1644. Others remained in North Tynedale and joined the Royalist cause – more from hatred of the Scots than of loyalty to Charles I’.

Little action is recorded within the bounds of the National Park during the Civil War, although David Dippie Dixon (1903, 331) notes that ‘the tide of war, with its train of evils, penetrated even to the remote vale of Coquet. Most of its leading families espoused the cause of Charles I, and when, in the summer of 1648, the army of that unfortunate monarch was defeated by Cromwell at Preston, Sir Marmaduke Langdale’s troops, many of whom were from the Coquet and the Aln, retreated northwards and obtained shelter amongst their friends in the neighbourhood’. Major Sanderson led Parliamentarian troops in pursuit, and recorded that ‘the first towne we fell into was Tossons, where wee took a lieutenant and sixe of his dragoons, all in bed’. At Glanton, a further 180 Royalist troops were captured ‘in bed’.

Most landowners in rural Northumberland had sided with the Royalist cause, and consequently lost lands or suffered crippling fines once the Civil War was over. The Charltons of Hesleyside, for example, had their estates confiscated, although they were later returned by Charles II. Cartington Castle, which had played an important role as a Royalist stronghold, was taken by the Parliamentarians after a two hour siege, after which it was largely dismantled. It was later partially rebuilt, but now lies in ruins.

The Jacobite rebellion of 1715 enjoyed considerable support amongst the recusant Catholic families of Northumberland. These families had suffered after the Civil War and saw a Jacobite victory as the most likely, and possibly the only, route to the restoration of their fortunes. The Earl of Derwentwater, who had extensive landholdings in the area of the National Park, along with the Tory MP Thomas Forster, gathered a group of fifty or so rebels together. These rebels travelled through Redesdale, Coquetdale and other areas gathering more supporters until they numbered a couple of hundred (Dickinson, 2001). They were then joined by a group of several hundred southern Scottish Jacobites, and, following the lack of expected support from Newcastle, it moved south in the hope of picking up much more support from amongst the Catholic families of Lancashire. Such support failed to materialise, and
eventually, the group, as part of the large Jacobite army under the Earl of Mar, was
defeated by government forces at Preston.

Some of the Northumbrian Jacobites, amongst them ‘Mad Jack Hall of Otterburn’,
were executed, while others were transported to America. The Earl of Derwentwater
was beheaded, and his lands were eventually given to the Commissioners of the
Greenwich Hospital who were responsible for the erection of many fine new buildings
over the next 150 years.

The later Jacobite Rebellion of 1745, which ended in the horror of Culloden, enjoyed
little support in Northumberland. The repercussions of the ’45 on the remains of
Hadrian’s Wall, however, were catastrophic. It had proved difficult to move troops
across country during the rebellion, so to avoid the possible recurrence of such
problems ‘General Wade’s military road’ (the present day B6318) was built from
Newcastle to Carlisle. This used the remains of Hadrian’s Wall as its foundations for
much of its route between Newcastle and Sewingshields (where the Wall heads off up
onto the crags of its central sector) thus committing the worst ever single act of
destruction to Northumberland’s archaeological heritage, but at the same time making
access to the surviving remnants of the Wall so much easier for visitors (Lawson,
1973). It should perhaps be added that the blame conventionally heaped upon General
Wade for the destruction of so much of our beloved World Heritage Site may be
unjustified, as many turnpikes were being built at this time and it is quite probable
that the road would have been built regardless of the perceived need for faster cross
country troop movements (see Hedley, below).

In contrast to the archaeological damage done by the construction of the Military
Road, the maps produced during its planning are of great value to students of the
eighteenth century Northumberland landscape. These show the Wall corridor in
astonishing detail, and demonstrate that in many ways the present day landscape does
not differ all that greatly from that of the 1730s. The same is true for most of the Park.

Despite the distraction of the Jacobite Rebellions, the Act of Union in 1707 had
confirmed the nature of the relationship between England and Scotland, guaranteeing
stability in the Borderlands and thus encouraging further investment in the region.
Outside the Park, several substantial houses had been built or enlarged during the
seventeenth century, most of them based on earlier towers. Examples include Belsay
Castle, Chipchase Castle, Chillingham Castle, Callaly Castle, Cartington Castle and Wallington Hall (a completely new mansion built in 1688 on the site of an older house). As we will see shortly, however, it would not be until the mid eighteenth century that these peaceful conditions would become reflected in the domestic architecture of the upland regions.

Throughout the seventeenth century, those families that could afford them continued to reside in their bastles, and, as previously discussed, it may be that most bastles were actually constructed after 1603. In the mid seventeenth century, at the time of the Civil War, the uplands were infamous for the so-called ‘moss-troopers’, cattle raiders and horse thieves whose methods owed much to their predecessors, the reivers. However, the moss-troopers (some of whom may have been disbanded Royalist soldiers with nowhere else to go after the Civil War) were not enmeshed within all levels of society as the reivers had been a century earlier. Although tales of livestock thieving and associated lawlessness continue well into the eighteenth century, it is fair to state that the seeds of subsequent improvements in living conditions and agricultural production had been firmly sown by King James in the first decade of the seventeenth century.

The end of Anglo-Scottish hostilities led to an acceleration in the abandonment of the traditional system of customary tenure, whereby individuals inherited the right to hold land for low rents in exchange for Border service. Such arrangements were now completely obsolete as the Border no longer existed. James I commissioned a survey of Crown land in Northumberland in 1604 with the intention of raising rents and maximising income (Sanderson, 1891). The results of this survey provide much fascinating information about life in North Tynedale, Redesdale and Coquetdale at the turn of the seventeenth century.

In North Tynedale, for example, in 1604 there were 67 farmhouses with 80 outbuildings, 468 acres of meadow, 841 acres of arable, 1,140 aces of pasture and 9,750 acres of waste or common (Butlin, 1973, 125). The most notable characteristics of the communities recorded in the survey are the small size of settlements, the small quantity of arable land, the predominance of cattle rearing, the practice of transhumance and the tradition of partible inheritance or ‘gravelkind’. In total, the 1604 survey covers 351,130 acres held by 1143 tenants who paid an aggregate annual rental of £302. The survey concluded that the yearly value under leasehold
arrangements should be in excess of £5000. It is therefore easy to see why James was keen to abolish all customary tenure and introduce profitable, fixed term leases. Other landowners, such as the Earl of Northumberland, followed suit, with old tenants who refused to co-operate being forcibly evicted in what has been described as ‘Northumberland’s highland clearances’.

These changes were not instant and took decades to institute. In 1608, only about 13% of tenants on royal land in Northumberland were leaseholders, with 68% still customary tenants. However, thirty years later it was observed that ‘most of the ‘poorer sort’ in Northumberland now held leases’ (Watts, 1975, 160).

After the Union, landowners set about improving large areas that had previously been subject to regular raids by the reivers, and the rental value of land increased dramatically. The Earl of Northumberland, for example, had let the township of Alnham for £17 per annum in 1596, but by 1613 it was described as a handsome manor worth £100 per annum (Watts, 1975, 174). These improvements were further helped by consistently good harvests between 1603 and 1611.

Most of the wealth generated by the improvement in conditions found its way to wealthy landowners based outside the area of the National Park. Very few large gentry homes in the Park benefited directly, those at Hesleyside (North Tynedale) and Biddlestone, along with the stunning Clennel Hall (a stone’s throw outside the Park in Coquetdale) being of particular note. All of these underwent substantial degrees of rebuilding during the seventeenth century and again in subsequent times. The house of 1567 at Clennel is an unusually early example of an unfortified addition to an earlier tower, though many such towers would receive similar additions later.

Other than the bastles, there are very few surviving examples of seventeenth century houses in the National Park. The fascinating but sadly ruined house overlooked by the ramparts of the Iron Age hillfort at Harehaugh, Coquetdale, was rebuilt in the nineteenth century, but sufficient seventeenth century work survives (e.g. the front door and windows) to suggest that this represents the earliest recognisable form of non-defensible domestic architecture in the Park. Not far away, Priory Farmhouse, Holystone, probably dates originally from the later seventeenth century.
To the south in Hadrian’s Wall country, there is a later seventeenth century house within the dramatic ruined farmstead of Grandy’s Knowe, along with an earlier bastle and nineteenth century farm buildings. This important farmstead illustrates perhaps better than any other the stages in development which many upland farms went through during the second half of the second millennium AD, though in this case all now lies abandoned and collapsing.

As the need for defence became less of a priority, many bastles were adapted to more peaceful conditions: many, for example, had stone staircases built to upper floor entrances, while others had large windows inserted. Some bastles are still lived in today, while others are in use as agricultural buildings, often with a comfortable late eighteenth or nineteenth century farmhouse built next door.

By the latter half of the eighteenth century, with the threat of Reivers and moss troopers now long gone, many bastles must have been relatively cosy and desirable residences, especially when compared to the squalid conditions in which most peasant families were apparently still living. Writing in the 1770s about his travels in the vicinity of Wooler, the eminent historian William Hutchinson (1779, 258) observed that ‘the cottages of the lower class of people are deplorable, composed of upright timbers fixed in the ground, the interstices wattled and plaistered with mud: the roofs, some thatched and others covered with turf; one little piece of glass to admit the beams of day; and a hearth stone on the ground, for the peat and turf fire’. A typical such dwelling contained a ‘wretched couch……wooden utensils that scarce retain the name of convenience…..the domestic beast that stalls with its master’, and ‘disconsolate poultry that mourn on the rafters’. Such dwellings must have differed little, if at all, from the houses that were regularly burned to the ground by Scottish troops or Border reivers in previous centuries.

After discussing the nature of the houses in which they lived, William Hutchinson goes on to paint a rather less than complimentary picture of the people who lived in the shadow of the Cheviot Hills in the 1770s. They were ‘of abject countenance, and miserably clothed, seeming to confess the lowest degree of poverty’. Hutchinson further observes that most men were shepherds or herdsmen, and interestingly notes that cornfields were not fenced off but that the corn was protected by ‘many an indolent herdsman’ who ‘stands for hours wrapped up in his plaid, hanging over a staff, half animated; or otherwise lying prostrate upon the ground’. Hutchinson goes
on to suggest that had someone thought to place shovels in the hands of these herdsmen they could have made use of their time to fence the fields, but that 'evil customs, when they correspond with habitual indolence, are as hard to be eradicated, as to move a mountain.'

Clearly, Hutchinson did not enjoy the company of Cheviot farmers, though he was much fonder of those north of the Border who generally displayed a 'singular openness and benevolence of countenance' arising from 'a generous nature, and the liberality of a mind enlarged with education'. He notes that almost every Scottish village had a free school, which was apparently not the case in Northumberland. He ascribes much of the difference between English and Scottish Borderers to their attitude towards religion: the Scottish are 'strict in their religious principles' while many of the Northumberland lower classes 'have never even been informed of their Redeemer; thousands have never entered a place of worship' and 'the Sabbath is distinguished only as a day of idleness, in which gaming and drinking are pursued'.

While it is perhaps hard to accept that such a clear distinction in character existed between people north and south of the Border in the late eighteenth century, Hutchinson’s observations on the drinking habits of Northumberland farmers are not without foundation. Despite the restrictions on production and high taxes on liquor imposed by the Tippling Act of 1751, whisky was apparently not in short supply. This was due in part to the illicit whisky stills such as those which operated in the wilds of Upper Coquetdale (Philipson and Child, 1960). Evidently, much of this liquor was consumed at a ‘whiskey house called Slyme-foot’, high in Upper Coquetdale, which was ‘the winter rendezvous of all the neighbouring sheep-farmers: here they resigned themselves to gambling and hard drinking; and, lost in a whirl of dissipation to all care and recollection, the days passed by unheeded, while their servants travelled to and fro to receive orders and transmit intelligence’ (Mackenzie 1825 vol II, 83). Mackenzie makes a further observation on the drinking habits of farmers from the Kidland region in the early nineteenth century: ‘Like all other people devoted to a tame, languid, and insipid occupation, they were fond of strong liquors, which exhilarate the spirits, and, by a temporary madness, vary the uniform circulation of thought’ (ibid, 83).
At the time that Hutchinson and Mackenzie were writing, dramatic changes were occurring in the Northumberland landscape generally, and the National Park landscape in particular. These changes were the result of the enclosure movement, whereby large areas of common land were enclosed by Act of Parliament, with the commoners awarded parcels of land in exchange for their previous grazing rights. Permanent settlements expanded into the traditional shieling grounds, and the shieling way of life disappeared for good. Enclosure Awards also clarified other issues such as quarries, roads and footpaths, but it was the enclosure of the fields and the subsequent improvement of the land that most concerns us here.

John Bailey and George Culley, residents of Glendale, published their famous ‘General View of the Agriculture of the County of Northumberland’ in 1794. In this they noted (in stark contrast to William Hutchinson’s observations of less than a generation earlier) that:

‘The parts of the county capable of cultivation are in general well enclosed by live hedges; the only exception is a small part of the Vales of Breamish, Till and Glen, but even here the advantage of having well-fenced fields is so well understood, and so much desired by the tenants, that we hope, in eight or ten years, the whole of this valuable district will be enclosed by fences.’ (Bailey and Culley, 1794, 60).

In the third edition of their book, in 1805, it was noted that the enclosure of the whole district referred to above was ‘very nearly accomplished, there being now very few unenclosed farms’. Enclosure represented the single biggest change in the character of the landscape since the clearance of the natural forests in prehistoric times.

The Enclosure Award for Elsdon Common is dated 1731, although the Rev. Dodgson, vicar of Elsdon, observed in the 1760s that ‘the inhabitants are fond of a pastoral life, but have no taste for agriculture. The enclosed lands are only separated by a dry ditch and a low bank of earth…The people are enemies to hedges, because the sheep would be entangled in them’ (Tomlinson, 1888, 308). Gradually, however, vast areas of moorland in Hadrian’s Wall country, North Tynedale, Redesdale and Coquetdale were effectively enclosed during the late eighteenth and early nineteenth centuries. Some parts of the Cheviots (despite Bailey and Culley’s optimistic forecast) were not enclosed until the 1860s, but virtually the whole of the Park was eventually enclosed.
An Archaeological Research Framework for Northumberland National Park

The Cheviots are now unusual, in an English context, in being a range of high hills with no common land at all.

In some parts of the Park the new boundaries were stone walls, in others they were hedgebanks – earthen banks planted with what soon became impenetrable hedges of hawthorn. The nature of stone walls varies according to the nature of the available local stone, from the characteristic volcanic, pink and grey random rubble of the Cheviots to the pleasant and more easily worked buff sandstones further south. It is worth considering the back-breaking work that went into the building of the countless miles of stone walls that criss-cross the hills, work that was completed at a time when labour was cheap. It is also worth noting the degree of damage done to numerous ancient monuments at the time of enclosure, from Hadrian’s Wall in the south to numerous burial cairns and ancient settlements in the Cheviots, all of which provided a ready source of stone for the wallers.

The massive burial cairn known as Tom Tallon’s Grave, at Yeavering, stood for 4,000 or more years in its wild landscape setting before being dismantled to provide enough stone to build nearly a kilometre of the splendid wall that now surrounds the Yeavering Estate. One wonders what the nineteenth century wallers made of such ancient monuments as they systematically destroyed them. Ironically, the walls themselves are now regarded as essential elements of the historic landscape, and there is a constant need of funds to ensure their survival in the face of the modern alternative of cheap wire fences. Mackenzie would have been surprised. After praising the beauty of the hawthorn hedge, he observed in 1825 that ‘in some situations stone walls are used for fences, but they give the country a cold, bare and uncomfortable appearance’ (Mackenzie, 1825, vol. I, 135). This provides a good illustration of how public perception can change over time.

While most enclosed fields were for pasture just as the common land had been previously, the process of enclosure enabled the improvement of individual fields by draining, burning, ploughing, liming and reseeding. Drainage was very important in the wet uplands of the National Park, and both pasture and arable land benefited from the Drainage Act of 1846 which made low interest loans available for landowners to lay tile drains. The introduction of such sub-surface drainage in arable areas enabled fields to be ploughed and sown without the need for rig and furrow, much of which was gradually flattened by subsequent ploughing.
Perhaps the most dramatic monuments from this period in today’s landscape are the limekilns, most of which operated on a local scale but a few of which were built on a more industrial scale. The kilns burnt a mixture of coal and limestone to produce quicklime for spreading over the fields, thus improving the quality of pasture in many areas. Some limekilns have been consolidated by the National Park Authority as atmospheric reminders of this period, most notably those at Crindledykes near Hadrian’s Wall, and at Tosson and Low Alwinton in Coquetdale. Lime produced in these kilns was also used for the production of lime mortar, used in the construction of the numerous late 18th and 19th century farmhouses and associated buildings that we must now consider. (Further details of the most important buildings in the Park, and many others, may be found in Pevsner’s *Northumberland* (1992) and in John Grundy’s (1987) *Historic Buildings of the Northumberland National Park* (the latter being an unpublished document available for consultation at NNPA offices upon request).

At the same time as the fields were being enclosed, a great many new domestic and agricultural buildings were constructed in and around the Park. Writing of Holburn, near Lowick, in the early nineteenth century, Mackenzie notes that prior to this time cottages were built ‘chiefly with oak trees, which, in many instances, rested upon the ground, and were joined at the tops so as to form a kind of sloping roof. These rude log-houses are now replaced by neat well-built cottages.’ (Mackenzie, 1825, vol I, 382). He also observes that Rothbury Forest ‘has lately been much improved and beautified by the erection of many neat cottages, to each of which a plot of ground is annexed, varying in size from twelve acres to a rood’ (ibid, vol. II, 52). Change was not uniform throughout the county, however, as ‘in many parts of the county the landlords still appear shamefully ignorant of the advantages which result from increasing the comfort of the labourer. It is shocking that a man, his wife, and half a dozen children should be obliged to live huddled together in one miserable hovel’ (ibid, vol. I,129). Gradually, though, throughout the late eighteenth and early nineteenth centuries, these old ‘hovels’ were replaced with stone cottages.

A discussion of the interesting aspects of all the late eighteenth and nineteenth century buildings in the Park, together with their social history, could easily fill a whole volume. What follows is an attempt to provide an overview illustrated by brief references to specific examples. The sturdy, dignified farmhouses found throughout
the Park and most of upland Northumberland, exhibit considerable variety but are
generally based on a standard two-storey, three-bay model with symmetrical façade
and grey slate roof with two chimneys.

Mackenzie (ibid, vol. I, 129) records that ‘Most of the farm houses were formerly
very shabby and ill contrived. The barn, stable, byer, dunghill, and the dwelling
house, being huddled together, without any regard to convenience, cleanliness, or
health. Those that have been erected of late years are substantial neat buildings,
excellently adapted to the various purposes wanted for extensive farms and improved
cultivation’. These new buildings are primarily functional rather than in any way
ostentatious, but they now appear most pleasing within their often magnificent
landscape settings.

As with the field walls discussed above, the stone employed in building these houses
varies from north to south in accordance with the local geology. The mid nineteenth
century house at Hotbank is built with stones taken from the adjacent Roman Wall. It
has an earlier core and farm buildings of probable early eighteenth century date.
Shillmoor, built of random sandstone rubble in the early nineteenth century,
represents the first permanent settlement in this part of Upper Coquetdale since
Medieval times. These farmhouses are usually associated with a number of
contemporary agricultural buildings which can include threshing barn, gingang,
stables, shelter shed, byre, cart shed, forge, harness room, and granaries or hay lofts.
In some cases these farm complexes were planned and built from scratch as integrated
‘farm villages’. Prendwick in the southeast Cheviots is a splendid example, with
Elilaw, a few kilometres to the west, being another. Rows of single storey
farmworkers’ cottages were built in association with some of the new farmhouses.
Picturesque mid-nineteenth century examples can still be seen at Kilham, Kirknewton,
Westnewton and Akeld in the northern Cheviots.

In addition to all these farm buildings, the Park contains an interesting selection of
larger houses, some completely new and others built around earlier structures. Some
of the old towers underwent further considerable modification. For example,
substantial ranges were added to Elsdon Tower in the late eighteenth and early
nineteenth centuries, when major changes were also made to the tower’s interior.
Alnham tower, described as ‘uninhabitable’ in 1821, was restored and extended in
the 1840s.
The remains of the Medieval tower at Otterburn were incorporated into the picturesque castellated mansion now known as Otterburn Tower in about 1830. Otterburn Hall was largely built in 1870, although the elaborate porch that gives the building its unique and dramatic façade was not added until 1905. Its associated buildings, including a planned farm, stables and lodge, are all late nineteenth century in date. The Otterburn Hall buildings are most unusual in the context of the National Park in that they are all built in brick.

Hesleyside Hall, North Tynedale, is by far the finest mansion in the Park. Although the remains of a Medieval tower are probably concealed somewhere within the present structure, most of what is visible today dates from 1719 to the mid nineteenth century. Befitting the house, the gardens of Hesleyside are the finest landscaped gardens in the Park. It was once thought that Capability Brown had worked here in the late eighteenth century, but although this is no longer the case the gardens are still of great interest.

Hackett (1960) suggests that the original garden may have been a formal garden in the seventeenth century French tradition. The splendid radiating avenues, originally of sycamore and lime, date from the eighteenth century, and there are many other fascinating features which date from various times over the past three centuries. The eighteenth century kitchen garden was once famed for its pineapples.

Cragside, near Rothbury, although just outside the Park, demands a mention in any account of local post-Medieval buildings. Originally built in 1864 for the first Lord Armstrong, ‘this lovely mansion – one of the most beautiful and unique of country seats’ (Dixon 1903, 432) is largely the work of the architect Norman Shaw who transformed it between 1870 and 1885 into ‘the most dramatic Victorian mansion in the north of England’ (Pevsner et al., 1992, 244). Lord Armstrong was an accomplished inventor and innovator, and Cragside was the first house in the world to be lit by hydro-electric power.

The house known today as Harbottle Castle was originally built by the Widdringtons, probably not long after the Medieval castle was abandoned following the Union of the Crowns, thus beginning the large scale plunder of stone from the Medieval site. The building which survives today, however, was almost completely rebuilt in 1829 by the Newcastle architect, John Dobson, for the Clennel family. Many other buildings in the
village were probably built or rebuilt at about this time. Some of these probably used stone taken from the old castle, but sketches from about 1830 show the castle ruins pretty much as they are today, so any building after this date must have used either recycled stone previously plundered from the castle or freshly quarried stone.

Holystone Grange began life in the early nineteenth century as an unexceptional farmhouse, but was substantially enlarged in a Tudor style in 1897 by the Newcastle architect F. W. Rich who lived here. This impressive house was subsequently further enhanced by the addition of the substantial surrounding garden terraces and balustrades, imported in the 1930s from the demolished Haggerston Castle.

Biddlestone Hall, perhaps the saddest architectural loss of recent times in the Park, still remains an important site on account of its surviving Catholic chapel. Biddlestone Manor, the ancient seat of the Selbys, was recorded as a substantial mansion as early as 1715, but was rebuilt as a Georgian country house in about 1800. David Dippie Dixon (1903, 243) describes it as standing ‘on the southern slopes of the Cheviots, peeping out from a Druidical grove of oaks at an elevation of about 750 feet, guarded on the north by a deep ravine and the massive green hills of Cold Law, Silverton and Harden….On the south, the valley of the Coquet opens out to view, encircled with the heather-clad hills of Simonside.’ Biddlestone is sometimes assumed, though apparently on rather shaky foundations, to have been the model for Osbaldiston Manor in Sir Walter Scott’s ‘Rob Roy’. Regardless of its history and possible literary associations, however, the house is no more: it was demolished in the late 1950s.

The unique High Green Manor, an exotic Victorian chateau with conical roofed corner towers dating from the 1880s and 1890s, should appear outrageously out of place in the National Park landscape, but it does not. Somehow it looks quite at home in its wild moorland setting, an example of high quality, exotic architecture working splendidly within a generally conservative landscape.

A large number of other stone buildings were constructed during the eighteenth and nineteenth centuries. These include numerous cottages in the National Park’s villages and hamlets, together with schools, mills, inns, coach houses and communal halls. The best-known mill in the vicinity of the Park is the Otterburn woollen mill, where the famous Otterburn rug was manufactured. This dates back to the eighteenth century, with many new additions and alterations reflecting technological
developments prior to its closure in the late twentieth century. Unfortunately, much interesting machinery was disposed of after the closure of the mill, but there is still a great deal surviving for visitors to see.

Shooting lodges were built in more remote locations, including Evistones and Ramshope in Redesdale, and Bonny Rigg Hall near Greenlee Lough in Hadrian’s Wall country. The Duke of Northumberland built Kielder Castle as an impressive shooting Lodge for his North Tynedale Estates in the 1770s.

The transport network also saw major improvements. Several attractive, and very functional, new stone bridges were constructed to replace earlier structures or fords. In the mid nineteenth century the railways came to the Park, and much attractive railway architecture survives in the form of old station buildings along the Border Counties Railway (North Tynedale) and the North East Railway’s Cornhill Branch which passes close by the north eastern and northern fringes of the Park.

Finally, in this brief review of post-Medieval buildings in the Park, we must mention Causeway House, dating from 1770. This, with its characteristically steep gables stands in splendid isolation adjacent to the road to Vindolanda Roman fort, and is an otherwise unexceptional house worthy of particular mention on account of its reconstructed heather-thatched roof. This gives an impression of what many roofs in upland Northumberland would have looked like before the almost universal adoption of Welsh slate following the coming of the railways. Prior to this, heavy stone slate roofs, a few of which still survive today, were common, and clay pantiles provide a distinctive local variation in parts of the Cheviots. Many low status buildings would have had straw thatched roofs, but these buildings, where they survive, now have slate roofs.

Life in the Northumberland uplands has generally been dominated by agriculture rather than industry, and industrial complexes never developed to the extent that they did in other upland areas of Northern England (such as lead mining in the North Pennines or copper working and other industries in the Lake District). There are, however, some interesting remnants of post-Medieval industry hidden away within the historic landscape of the Park.
Substantial remnants of mid-nineteenth century ironworks can still be seen at Hareshaw (North Tynedale) and Ridsdale (Redesdale). Commercial coalmining took place from the seventeenth century at several locations, with large-scale collieries developing around Haltwistle, in the North Tyne valley, and around Elsdon in the nineteenth century. Stone quarrying was necessary throughout the Park, but generally only on a local scale. Other industries, such as millstone quarrying, lime production and brick and tile-works (which also produced field drains) were intimately linked to agricultural production and have also left their marks on the landscape. Further details of the Park’s fascinating industrial heritage, together with the development of the post-Medieval transport network, are provided by Iain Hedley below.

With regard to religion in post-Medieval times, the Medieval churches discussed previously remained in regular use, and many fascinating eighteenth-century gravestones can be seen in some churchyards (notably Elsdon, Alwinton and Falstone). These churches underwent varying degrees of modification during the late eighteenth and nineteenth centuries.

The first ‘new’ church in the Park since Medieval times, the tiny but beautiful Church of St. Francis of Assisi at Byrness, was constructed 1796. A little further down Redesdale, the Church of the Holy Trinity at Horsley dates from 1844. In North Tynedale, three new churches (at Greystead, Thorneyburn and Falstone) were in use by 1824.

Of the non-conformist religions which flourished in parts of Britain from the late seventeenth century, Presbyterianism was the only one to gain much ground in the area of the National Park, becoming much more popular than conventional Protestantism in some areas. The Rev. Dodgson, writing of people in and around Elsdon in the 1760s, observed that ‘their religion descends from father to son, and is rather a part of the personal estate than the result of reasoning, or the effect of enthusiasm’. He also notes a very good understanding between ‘Churchmen and Presbyterians’, with much intermarrying.

The so-called ‘chapel’ of Memmerkirk is located in the inaccessible heart of Kidland. Edward Chandler, Bishop of Durham, recorded in 1736 that the ‘remains of an old Chapel appear among the mountains called Mimer or Member Kirk.’ In 1769, Armstrong marked ‘Memmerkirk, ruins’ on his map of Northumberland. Subsequent
writers assumed the remains at Memmerkirk to be those of a Medieval chapel, built for the seasonal use of the monks of Newminster while out in the hills of Kidland tending their flocks. The site was excavated in 1962, and the results suggested that the structure was nothing other than a rather ordinary fourteenth century shieling of which many other examples survive in the vicinity (Harbottle and Cowper, 1963). It may reasonably be conjectured that the persistent tradition of religious activity here results from its possible use in the seventeenth century as a meeting place for Presbyterians, prior to the Toleration Act of 1689 that rendered such meetings legal.

Another early Presbyterian meeting place may have existed at the distinctive natural rock formation on Simonside known as Little Church Rock, while in Redesdale such meetings were held at places like Babswood Kirk, Deadwood Kirk and Huel Kirk (Charlton 1986, 40). Many other isolated locations throughout the Park may have witnessed illicit meetings of seventeenth century Presbyterians, but such activity need leave no archaeological trace, so, having kept them this long, these places are unlikely now to reveal their secrets.

At Harbottle, a Presbyterian congregation was established by 1713, and a meeting house built in about 1750. The surviving chapel, which replaced the meeting house, was built in 1855 in a very prominent position at the west end of the village. A meeting-house at Elsdon was provided at about the same time. In North Tynedale, a real stronghold of Presbyterianism, a meeting-house of 1735 at Falstone was replaced by the present church in 1807, with its distinctive tower added in 1876. Another Prestyberian church was built in Bellingham (1803), and the Duke of Northumberland built a meeting-house for his estate workers at Kielder in 1874. Perhaps the most unusual of the non-conformist establishments within the Park is the Presbyterian chapel at Birdhope Craig, Rochester. Built in 1826 to replace a nearby late eighteenth century predecessor, this is designed entirely in the style of a domestic house.

Further churches and meeting-houses were built at various places just outside the Park, for example at Glanton, Wooler and Thropton. At both Wooler and Thropton, Catholic chapels were built to serve wide areas; the latter is thought to have replaced a chapel within Cartington Castle. Elsewhere, Catholics were served by Biddlestone Chapel, mentioned earlier, and, further south in North Tynedale, by the Chapel of St Oswald, built in 1839 at The Shaw near Bellingham. It is interesting to note that no Catholic church existed in Redesdale until St Peter’s at Otterburn was built in 1955.
Residents of the scattered farms in Hadrian’s Wall country looked to the churches and chapels of various denominations in the towns and villages of the Tyne Valley south of the Park boundary.

**The Twentieth Century**

Throughout much of England, the landscape has changed dramatically through the development of transport infrastructure during the twentieth century. This has certainly not been the case in the Northumberland National Park, which is penetrated by only one ‘A’ road, the A68, which effectively cuts the Park in two as it follows part of the line of the Roman Dere Street from Corbridge towards Scotland. To the north of this line, dead-end roads follow ancient routes into each of the main Cheviot valleys, linked in places by unsurfaced tracks. To the south-west of the A68, a network of narrow roads and tracks links the many isolated farms and few villages to ‘General Wade’s Military Road’ or to the unclassified road through North Tynedale. Following the closure of the Border Counties Railway through North Tynedale in the 1950s, no railways survive in the Park. This lack of a modern transport infrastructure both reflects and contributes to the tranquility of the Park, and is certainly something that sets it apart from most of twenty-first century England.

The Park is also characterised by a general lack of large-scale twentieth century industrial activity. Stone quarrying is the only industry to have taken place on any great scale. In the north, the distinctive ‘red whinstone’ is still quarried at Biddlestone. This stone is in international demand for road surfacing, and was famously used to surface the Mall outside Buckingham Palace in London. In Hadrian’s Wall country, the whinstone quarries at Walltown and Cawfields, which between them destroyed considerable lengths of the Wall, were closed in 1943 and 1952 respectively and are now public open spaces. Although quarrying did much damage to some sections of the Wall, it also contributed indirectly to better protection of the archaeological remains as it was the threat to quarry 200,000 tons of Whinstone a year from the crags between Shield-on-the-Wall and Housesteads that led directly to the strengthening of the Ancient Monuments Act in 1931. It was also during the 1930s that the National Trust began to acquire land along Hadrian’s Wall, enabling the conservation and public interpretation work that continues to this day (Woodside and Crow, 1999).
Very little substantial building work was undertaken in the Park during the twentieth century. One exceptional new house which is worthy of special mention is Hethpool, gloriously situated within the College Valley, built in 1919 for the Tyneside industrialist Sir Arthur Munro Sutherland. This incorporates a date-stone of 1687 from an earlier structure on the same site, but is a complete new build in Arts and Crafts style. The 1919 house was built by George Reavell of Alnwick, and additions of 1928, including the attractive conical-roofed tower, were by Robert Mauchlen: the house thus bears the imprint of two of the most accomplished North-East domestic architects of the early twentieth century. The associated farm cottages (1926) are among the finest cottages to be seen anywhere in Northumberland. An altogether different early twentieth century house, but in an equally magnificent landscape setting, is the unique shooting Lodge at Linhope, high in the Breamish Valley. This was built in 1905 for Lord Joicey of Ford Castle, and is described by John Grundy (1987) as being of ‘single-storey, bungalow style as if it was in the Himalayas in British India’. Another unique building, constructed for a Captain Leyland in 1905 and demolished in 1954, was the huge shooting lodge at Kidlandlee. This was said to have had eighty rooms, and was reputed to be ‘the highest mansion in England’. Associated with it were a croquet lawn and gardens with exotic trees. The site is now entombed within Kidland Forest, planted with rather less exotic trees in the 1960s and 1970s.

In continuance of nineteenth century practice, a few existing houses were given grand extensions. At Kilham House, a substantial extension of 1926 effectively transformed a traditional farmhouse into a small country house, the attractive appearance of which owes much to the use of identical 12-pane windows throughout. The unique, early twentieth century extension to Otterburn Hall has already been mentioned.

As we have already seen, most villages within the Park were in existence by Medieval times. There are two notable exceptions, Byrness and Stonehaugh, both built by the Forestry Commission in the mid twentieth century. These were needed to house the many forestry workers required to manage the extensive plantations of Wark, Kielder and Redesdale Forests (now known collectively as Kielder Forest – see below). The original plans for Stonehaugh, near Wark in North Tynedale, were for a new village of more than 200 houses. In the event only 113 were built due to reductions in the numbers of forestry workers required. The brick-built, tile-roofed houses were built in
terraces, and are of a standard 3 bay design. In the 1980s, in an attempt to relieve their generally depressing appearance, the houses were painted bright colours, and they certainly provide something of a contrast to the Park’s traditional villages. At Byrness, high in Redesdale, plans for the new village included 47 terraced houses, shops, a church and a village hall (Charlton, 1986, 69). Further Forestry Commission housing was provided at Kielder and, on a much smaller scale, at Falstone.

Many small, traditional domestic buildings were added to the Park’s villages during the twentieth century, most of which merge comfortably into their historic settings. In the latter half of the century, National Park planning policy ensured that most new buildings were of a traditional style. The Park Authority’s Design Guide now provides clear guidelines for all new domestic, agricultural and other buildings, as well as advice on alterations and extensions. While recognising the need for development, the Design Guide stresses the historic value of the Park’s built environment. It is intended to ‘draw out the abiding qualities and character of buildings and settlements in the National Park and to help prevent inappropriate development intruding on the harmony achieved by the slow evolution of rural building in the past’ (NNPA, 1998, 7). With careful planning, even large, modern cattle sheds can usually be designed to merge into the surrounding historic landscape.

Within this discussion of twentieth century architecture in the Park, we must consider the Otterburn Training Area (OTA). The ‘Ad Fines’ field artillery range, based on Redesdale Camp, was opened in 1912, followed by Otterburn camp in 1940. Further land purchases between 1940 and 1987 enabled the range to expand to its current 23,000 hectares, covering nearly a quarter of the National Park. In addition to the accommodation and administrative blocks, workshops and other buildings within the two camps, the OTA includes numerous structures charting the course of twentieth century military training. It is interesting to note in passing that much of this training took place on the same turf as the Romans had trained on 1800 years earlier, and that twentieth century tanks and multiple rocket launchers now drive along routes originally set out by the Roman legions for their proposed conquest of Scotland.

Military land-use has, in general terms, enabled the survival of extensive and very important archaeological landscapes on the OTA, while also contributing some novel ‘ancient monuments’ of a type not to be seen elsewhere. Clearly, there are occasions when National Park purposes and military objectives do not sit side by side in perfect
harmony, but the Ministry of Defence, National Park Authority and other partners now work effectively together to enable the best possible management of the OTA’s archaeological landscape. The OTA does not provide the only space for military training within the Park: the skies above are in frequent use for training fighter pilots, and in the more remote corners of the Park the roar of military jets is often the only reminder of the modern world.

Sadly, the need for adequate military training was demonstrated all too often during the twentieth century. The First and Second World Wars affected every village in the National Park just as they affected villages the world over, with many young men losing their lives for the greater good of the nation. War memorials in the Park take various forms, including plaques in churches, the lychgate at Ingram Church, the Memorial Hall at Alnham (now a private house) and the distinctive Arts and Crafts style memorial at Rochester. Perhaps the most poignant of all such memorials is the recently erected ‘Cheviot Memorial’ in an exquisite landscape setting adjacent to Cuddystone Hall (also known as Sutherland Hall) in the College Valley. This was unveiled at a dedication ceremony on 19th May 1995, and commemorates the 35 allied airmen who lost their lives in eleven air crashes in the Cheviots between 1939 and 1945. At the dedication ceremony, tribute was paid to the ‘courage and endeavours of the people of the Cheviot who distinguished themselves rescuing survivors, often in atrocious weather conditions’. One such rescue occurred in December 1944, when four injured members of a B17 bomber crew were discovered in a blizzard by Sheila, a collie dog belonging to local shepherd, John Dagg. Two other airmen were tragically killed in the crash, but three others walked down the hill to safety, and the four injured men were all saved. Sheila became the first ever civilian dog to be awarded the Dickin Medal for animal gallantry. One of her first her first puppies, Tibbie, was flown over the Atlantic by the RAF and became the adopted town pet of Columbia, South Carolina, the home town of Sgt. Frank R Turner, one of the men killed in the crash.

Between the Wars, the Forestry Commission was set up to establish new forests and ensure that the nation was never short of timber. The vast open spaces of the Northumbrian uplands were soon targeted for extensive new conifer plantations. Kielder Forest in North Tynedale, on the western fringe of the National Park, was begun in the 1920s and is now one of the largest man-made forests in Europe (an
estimated 150 million trees over some 50,000 hectares), extending from the southern edge of Wark Forest just north of Hadrian’s Wall to Redsdale Forest which straddles the A68 adjacent to the Scottish Border. Elsewhere within the Park, several relatively small, but far from archaeologically insignificant areas (such as Threestoneburn (named after the impressive stone circle) and Fredden Hill, were similarly planted with conifers. The damage done to archaeological sites by such planting remains unquantified. While many of the newly planted areas in Tynedale and Redesdale were on poor ground, where few such sites would ever have existed, forestry workers (most notably Fritz Berthele) have picked up many hundreds of prehistoric flint tools from ground in the Cheviots disturbed by ploughing for forestry, and regrettably many buried archaeological sites must have been damaged or destroyed by such plantations. The situation could have been much worse, however, if areas such as Yeavering Bell, once targeted for planting, had not been saved through the diligent campaigning of archaeologists in the 1970s. Today, National Park staff work closely with the forestry authorities, enabling projects such as that at Simonside (Hedley and Quatermaine, 2004), and ensuring that all known archaeological sites within forestry plantations are monitored and sympathetically managed.

Fortunately, many archaeologically sensitive areas that were previously threatened with extensive conifer planting are now managed as heather moorland for sheep and grouse, and several long-term management agreements have been signed between the National Park Authority and landowners to ensure the continuation of sympathetic patterns of land use in such areas. Today, many new ‘native’ deciduous woodlands, largely financed through government grants, are planted principally for long term environmental improvement rather than commercial gain. Sites for such woodlands are always carefully scrutinised prior to planting to ensure that no damage is done to any archaeological sites that might have been constructed, used and abandoned since the original ‘native’ woodland was cleared, probably in prehistoric times.

The forest was not the only major development in the vicinity of Kielder during the twentieth century: of no lesser landscape impact was the construction of the Kielder Reservoir. Upper Redesdale and Upper North Tynedale had long been recognised as potential reservoir sites, and Catcleugh reservoir in Redesdale, itself a massive feat of engineering, was in use by 1905. Kielder Reservoir, however, is on an altogether
different scale, and represented the largest scale engineering project in the region since the initial construction of Hadrian’s Wall some nineteen centuries earlier.

The Kielder Reservoir, and its associated transfer works, (which carry water as far as North Yorkshire for domestic and industrial use) opened in 1982 at a cost in excess of £160 million. The main dam, over 1,100 metres in length and a little over 50 metres in height, holds back over 40 thousand million gallons of water within the seven mile long reservoir. In addition to the dam and transfer works, the project included the provision of new housing for families whose homes were to be flooded by the development, a new road to replace the valley road which now lies submerged, the conservation of the spectacular Kielder Railway Viaduct, and the provision of a visitor centre and recreational facilities. Many archaeological sites were investigated prior to the flooding of the reservoir, including the Romano-British settlements discussed earlier in this book, but these have all now been replaced by the extraordinary Kielder complex which must now feature in any assessment of North Tynedale’s historic landscape. Kielder demonstrates better than anywhere else in rural Northumberland the ability of modern developments to radically alter long established historic landscapes.

Despite the impact of forestry and military training, farming remained the main influence on the landscape throughout the twentieth century. Dixon (1903, chapters 4 and 5) paints a vivid picture of the farming communities of Upper Coquetdale at the turn of the twentieth century. The community was of isolated farming families, often at the mercy of the winter weather, whose lives were intimately bound up with the events of the agricultural calendar. The annual sheep show at Alwinton was a ‘great gala day’ each September, with wrestling and other sports. Other social events were also important, and Dixon notes that ‘even in this hurry-scurry age the shepherds of Coquet can still enjoy those social meetings of which their fore-elders were so fond and which tend to encourage friendly intercourse amongst neighbours (and) break the monotony of their solitary hill life.’ If Dixon really thought of 1903 as a ‘hurry-scurry age’ then one dreads to think of what he would have made of today’s lifestyles, as the twentieth century was to see many developments in farming life throughout the Park.
All upland farmers have seen dramatic changes. These include the construction of decent roads to even the most isolated holdings, the arrival of electricity and telecommunications at isolated farmsteads, and the provision of factory produced feeds for stock. Mechanical developments include the crucial introduction of the Landrover (enabling farmers to travel up into the hills with heavy equipment, do a good day’s work, and return to the house for tea), and a host of other agricultural machines enabling the more efficient production of food. In general, these developments have resulted in little change to the overall appearance of the landscape, which remains one of enclosed in-bye land clustered around isolated farms and villages, beyond which stretch the vast swathes of open moorland that, as we have seen, contain much evidence for the activities of mankind over the past 10,000 years. The management of this moorland is now subject to international rules and regulations. In the 1970s grants were available to ‘improve’ agricultural land, and some areas were enclosed and ploughed for the first time since prehistory. More recently, grants have been available to help reinstate heather moorland, and landowners are paid to manage land for perceived environmental benefit.

The National Park Authority itself has a key role to play in the management of this upland landscape. The National Park was initially set up in 1956 and was managed from within Northumberland County Council: it achieved the status of a fully independent local authority in 1996. Today, the Park Authority consists of 22 members appointed to reflect local and national interests. The Authority is the Planning Authority for the Park, giving it a degree of control over controversial developments, but it is also a great deal more than this. Its purposes, as updated by the 1995 Environment Act, are:

1. To conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park

2. To promote opportunities for the public understanding and enjoyment of the special qualities of the National Park by the public.

In working towards these purposes, the Park Authority must also seek to foster the social and economic well being of local communities. This book explains much work undertaken with regard to the first purpose, and should in itself contribute to the achievement of the second purpose. A well managed and accessible historic
environment is a major social and economic asset, and work such as that presented in these pages has much to offer local communities and businesses. Indeed, the Park’s historic environment is undeniably one of its greatest assets, and is greatly appreciated by tourists who provide much employment for local people.

The impact of tourism has, to date, been varied throughout the Park. Hadrian’s Wall is now a World Heritage Site, and the economy of the Wall corridor is increasingly dependent on tourism. The new Hadrian’s Wall National Trail should result in still more visitors in future. This all has an impact on the landscape, as visitor facilities (car parks, visitor centres, information panels, toilet blocks) are required, and waymarkers are needed in even the wildest landscapes to ensure that people, having been encouraged to explore the hills, do not get lost in them. One day, archaeologists may write about ‘the archaeology of the tourist industry’, debating the impact of tourism on the landscape and on society. For now, tourism should be encouraged, but carefully managed, as excessive numbers of visitors will be detrimental to the very tranquillity that people come to experience, as well as potentially causing damage to ancient monuments and other environmental assets.
A BRIEF OUTLINE OF SOME PREVIOUS WORK ON THE POST-MEDIEVAL – MODERN ARCHAEOLOGY OF NORTHUMBERLAND AND THE NATIONAL PARK.

Writing in 2002, Stafford Linsley, one of the northeast’s best known industrial archaeologists, lamented the lack of regional interest in the industrial heritage. He put this down in no small part to institutional disinterest on the part of University archaeology departments at both the regional and national level (2002, 207 – 214). Indeed, one might extend Linsley’s lament to encompass all aspects of the post-Medieval archaeology of the county of Northumberland. As our historical background above highlights there is a massive amount of documentary evidence for all aspects of life in the period after 1600 and this has often been privileged, as a source of insight into the period, above the archaeological record. As Linsley himself has said, one would not expect that archaeological data would threaten to overturn the majority of ideas derived from documentary sources (2002, 207) but this should not mean that the archaeology of the period should be understudied or written of as simply a footnote to the better understood document led account of the period. Footnotes are often worth examining in detail.

As will be seen in the following review, (which does not deal with work carried in the city of Newcastle upon Tyne) little detailed post-Medieval/modern period archaeological research has been carried out in the region. As one might expect, most of what has taken place is concentrated on Northumberland’s industrial heritage – a point further highlighted in Hedley’s discussion below. For the purposes of what follows however we might identify four major subject areas:

- **Rural/agricultural landscapes and the archaeology of landscape improvement**
- **Rural settlement and Vernacular Architecture**
- **Country houses and gardens**
- **Industry and Communications**

The discussion of work carried out at a general county level does not aim to be an exhaustive review. It is set out here as a broad contextual background against which our knowledge of the National Park can be set.
Rural/agricultural landscapes and the archaeology of landscape improvement.

Northumberland is indeed fortunate in that it has been well served by historical accounts of the development of agriculture and general landscape improvement in the post-Medieval period. In 1975 S.J. Watts produced has magisterial survey of the early post-Medieval period in Northumberland. In *From Border to Middle Shire: Northumberland 1586 – 1625*, he charts the development of the agrarian economy and the decline of customary tenure and the concomitant rise of leasehold tenancies (1975, 159 – 243). He also deals with the development of the enclosure movement in the early period, highlighting the fact that there are very few records of Northumberland landlords engaging in depopulating land enclosures in the period 1603 – 1625. As he says, ‘most of the enclosure which did take place in Jacobean Northumberland can be divided in to two kinds. The first consisted of encroachments onto waste and commons, and took place mainly in the transitional zone. In such areas, grazing land was generally unstinted and there was little shortage of pasture.’ (1975, 170).

The other form of enclosure, most common in the period, ‘involved the division of lowland common field villages and the gradual establishment of self contained and individually held farms’ (1975, 171). Watts details some of the problems and serious rental and ownership issues that emerged in the light of this kind of enclosure.

Paul Brassley has continued the story of agricultural development in the County for the period 1640 – 1750 (Brassley, 1985) and the period from 1750 – 1850 has been covered by Stuart Macdonald in his excellent 1974 PhD thesis for the University of Newcastle entitled *The Development of Agriculture and the Diffusion of Agricultural Innovation in Northumberland, 1750 – 1850*. Indeed, Brassley’s work is one of the few pieces of research into the agricultural development of Northumberland that deals with the fate of the county’s open field systems. This has built on earlier work by Butlin (1973) and Butlin’s survey of agricultural development in Northumberland in the period 1600 – 1880 (1975). In 1992 Ian Roberts completed his doctoral research on upland farming in Northumberland from 1850 – 194 (Roberts, 1992).

These are four exceptional, generalised, surveys designed to elucidate broad trends in agricultural development, but very little site-specific research has been carried out in
Northumberland as a whole. One exception to this was Harbottle and Newman’s campaign of excavation and survey on the Starsley Burn in North Tynedale in 1972 (Harbottle and Newman, 1973). Here they examined a significant tract of landscape prior to its flooding as a result of the construction of the Kielder Reservoir, excavating the site of Stone House and surveying the sites at Gordon’s Walls and Starsely. They documented the history of the North Tynedale landscape throughout the Medieval period and they have shown that by the seventeenth and eighteenth centuries seasonal grazing of the North Tynedale uplands had largely given way to pastoral farming all year round, with the shieling sites being replaced by permanent farms (1973, 146).

By 1663 new settlement was documented at Sundaysight and High Green, Wellhaugh, Plashetts and Kennel. A new system of landholding seems to have been instigated when the Earl of Northumberland leased land to Henry Widdington in 1685. For the first time this placed a large amount of land in North Tynedale into the hands of someone who was not a native of the area. As Harbottle and Newman say, Widdrington, who came from black Heddon, ‘presumably sub-let the ground’ (1973, 146). This trend seems to have developed throughout the seventeenth century and as they say ….‘It seems possible, therefore, that in the second half of the seventeenth century, possibly extending into the eighteenth, there was an intermediate period between the earlier custom of shielding and the later division into permanent farms when the uplands were let and sub-let to a few individuals. By 1769, however, when Armstrong published his large scale map of Northumberland, agricultural settlement had reached its furthest extent in North Tynedale, and farms existed at the heads of the valleys, as at Emblehope, Scaup, Deadwater and Willow Bog (Harbottle and Newman, 1973, 147 and Fig. 4).

They go on to document changes in land use and communications in the late eighteenth and nineteenth centuries. These seem to have affected different parts of North Tynedale in different ways, leading to variation in population density along the valley. The number of farms in the area decreased after the latter part of the eighteenth century and this was probably due to the amalgamation of smaller holdings into larger units so as to facilitate better estate management and probably also to realize a smaller number of strong landlords desires for property expansion by taking over neighbouring farms. Increasing rents may also have made some farms cease to
be economically viable (Harbottle and Newman, 1973, 148). They illustrate this latter point very graphically by reference to the farm of Dunstead. This had been advertised for rent in 1848 but by 1866 the farm buildings were no more than ruins (1973, 148).

Belling Farm, which was the focal point of Harbottle and Newman’s work, developed as a result of the merger of smaller land holdings and they documented the impact of this kind of development on wider patterns of settlement in North Tynedale (see Harbottle and Newman, 1973, 150 – 151 for a detailed account of the development and impact of Belling Law Farm). They also documented the landscape and settlement pattern impact of the development of the Border Counties Railway in the late 1850s and early 1860s.

Their detailed survey work on the steadings at Stone House and Gordon’s Walls and their excavation of the site at Starsley was all set against this historical background. Both Starsley and Gordon’s Walls were sites with very late Medieval origins that were still functioning farms in the nineteenth century. The excavated site at Stone House probably began life as a bastle, fell into disrepair and was restored to a habitable condition in the nineteenth century (Harbottle and Newman, 1973, 158 – 175). A similar landscape history approach was taken in the final publication of the North Tynedale survey and excavation work in 1977.

In 1995, Barbara Harbottle produced a detailed account of the draining and enclosure of Prestwick Carr (1995, 1-15). This is a model of clear research and shows again the importance of integrating documentary survey with field observation.

In 2002, Leslie Hepple published a paper on the the work of Charles Francis Forster an eighteenth century landowner who held property at Low Buston and at Lanternside (Holystone) or Campville as he re-named it. These were two contrasting Northumberland estates that he owned from 1787.

Northumberland at the end of the eighteenth century was a region that was witnessing much agricultural change and improvement. As Bailey and Culley in their General View of the Agriculture of the County of Northumberland (1805) said ‘There are probably few parts of the Kingdom where estates have made such rapid improvements as in this county; there being several instances of the value being more than trebled within the last 40 years’ (1805, 23). Forster was an enthusiastic agricultural improver as the evidence from both of his estates shows.
Hepple deals with both estates in turn, beginning with Low Buston. By the mid-eighteenth century, the township had been split up into several different farms and by 1750 the Forster family owned the major part of Low Buston, comprising some 500 acres on the southern part of the township. Charles Francis seems initially to have let out most of the land, but by 1791, Hepple documents his increased involvement with farm matters and farm improvements. He instituted a regime of crop rotation that by 1793 he was able to claim three years of success using the new methods as advocated by practitioners such as Bailey and Culley. He pioneered manuring, and the growing of turnips, having first drilled the seed rather than broadcasting them.

Forster also practiced another form of ‘improvement’, characteristic to Northumberland, namely, as Hepple says, ‘the depopulation and clearance of old Medieval settlements as part of the creation as part of the creation of new parklands and farmsteads and parklands (2002, 156). Forster actively re-modelled the landscape around the decayed hamlet of Low Buston, diverting the road so that his stately house could look out eastwards across a ha-ha onto open pasture-land. He also planted a drive of trees to the north of the house. This is the reason that the remains of the Low Buston Medieval settlement are so well preserved today as earthworks.

Forster’s ‘improvements’ at Campville were of a different sort to those promulgated at Low Buston. Campville was his ‘Highland Place’ and a base for his antiquarian expeditions into Redesdale. Here too he pursued his love of country sports (Hepple, 2002, 157).

He improved this estate too, though we have no record of these in his surviving letters. In this area though, the remains in the landscape are a testimony to his work. (Hepple, 2002, 159; Philipson, 1975, 12–14). A number of enclosures on Lanternside and Turnberry, which must be Forster’s work, can still be seen as banks and walls, and these have been mapped by Philipson. By the same token, Philipson suggested that he planted the area extensively with various tree types, some of which still survive in the North Wood at Holystone.

Very little other work relating to the development of Northumberland’s rural landscapes and to post-medieval agricultural improvement in general, has been carried out.
Rural settlement and vernacular architecture

Again, both of these topics have seen little research within the post-Medieval period in Northumberland. A good general discussion of vernacular buildings can be found in Pevsner’s *The Buildings of England: Northumberland*. Grundy and McCombie discuss architecture in general in the region from 1500–1800 and Grundy deals in more detail with small domestic buildings of the countryside (Grundy and McCombie, 1992, 67–77; Grundy, 1992, 77–84). Grundy and McCombie also deal with nineteenth and twentieth century architecture in the county as a whole (1992, 104–118). John Grundy also produced a survey of Historic Buildings in the Northumberland National Park (1987), which dealt in some detail with buildings of both national and local architectural merit. This is a sound data base for work on vernacular architecture within the Park boundary. Frodsham’s introductory remarks above also give a flavour of the potential of the archaeological resource relating to vernacular architecture within the area of the National Park.

The North Tynedale research, documented above, gives a good insight into the state of our knowledge of rural settlement within certain areas of the county but in general terms our knowledge of post-Medieval settlements from excavated data is slight.

In 1956, Sir Edmund Craster published an account of the social organization of the village of Beadnell in the eighteenth century. This was mainly based on documentary evidence, but it shows the kind of work that could be done to set a standard that might be enhanced by detailed archaeological research (Craster, 1956, 162–175).

In 1962 M.G. Jarrett published the first account of work on the deserted village of West Whelpington, and this project went on to give us a great deal of insight into the history of one settlement that was deserted, Jarrett believed, some time around 1715 when the village was mentioned in the parish register of Kirkwhelpington. From a variety of sources Jarrett went on to pin down the likely dates for desertion as lying between 1715–1735 (Jarrett, 1962, 192). A survey of surviving ridge and furrow ploughing around the village was completed in 1959 – 1960 (Jarrett, 1962, 196, and Fig 2). The first season of excavation revealed structural details of various crofts. Site 19 was particularly instructive in that it revealed at least six different construction phases on the site. Most of the finds were of sixteenth and seventeenth century date, including imported and English pottery. Overall though, the structural remains were highly ephemeral (Jarrett, 1962).
More detailed work on the site from 1965 – 1976 revealed a mass of data relating to
the form and function of Medieval, Late Medieval and Post- Medieval structures on
the site and it remains to this day the best excavated and published deserted village
site (Evans, Jarrett, and Wrathmell, 1988,139-192; Evans and Jarrett, 1987,199 –
308.) The work has given a fascinating insight into post-Medieval settlement and
land-use change as well as offering a view of the range of ‘vernacular’ building types
that may be encountered in the period after 1600AD.

In 1985, Deirdre O’Sullivan published the results of her excavations in Holy Island
village. (These have been referred to in the document dealing with the Later Medieval
period above). Her phases 4, 5 and 6 are germane to the present discussion. Phase 4
was evidenced by a series of pits, the finds from which spanned the period of the later
part of the sixteenth century (1985, 37 – 38). Phase 5 consisted of the remains of two
buildings, the northernmost of which had been badly damaged by a large pit, though
some paving and the remains of a well-constructed drain did survive. The
southernmost building on the site (Building A) had rough, un-mortared but clay
bonded walls with the remains of a packed clay floor that had been covered with a
skim of mortar.

Phase 6 which she termed early modern consisted of features underlying garden soil
but cutting the remains of the phase 5 buildings. This phase can be broadly dated from
about the mid seventeenth century to the mid eighteenth century. Clay pipe dating
suggests that the garden soil developed around 1750 (O’Sullivan, 1985, 38 – 41). The
range of Scottish, English and imported Post-Medieval ceramic fabrics, and types
from the excavations demonstrates the interesting position that the island of
Lindisfarne must have occupied in the regional trade network of the period after the
sixteenth century AD.

In the same year, one of the few studies of working farm buildings in the post-
Medieval period in Northumberland was published by Stafford Linsley. In a C.B.A.
regional publication on ‘Making Sense of Buildings’, he discussed the fixed barn
threshing machine and its influence on the layout of farmsteads in Northumberland.
1990 saw the publication of the detailed survey of the heather thatched, Causeway House, located just inside the National Park boundary, at the side of the road leading down to the site of Vindolanda (see also discussion by Frodsham, above). The house was constructed in 1770 and is one of the sole survivors of a tradition of building roofing that would have been fairly common in upland areas in the region (Emery, Warner and Pearson, 1990, 131 – 149). The published report gives a detailed structural analysis of the building and also discusses a small group of post-Medieval artifacts that were recovered from the thatch of the roof (1990, 135 – 136). The building is set into the context of other surviving heather thatched buildings in the North East of England.

A general discussion of ‘Colliery Cottages in the Great Northern Coalfield’ was published by Diana Brown in 1995 (1995, 291 – 305). This was extracted from her 1988 PhD thesis on The Colliery Cottage 1830 – 1915: The Great Northern Coalfield (Brown, 1988). Whilst the article deals with case studies from both Durham and Northumberland her overall conclusions are worth noting in detail in the present context:

- Analysis of building plans and sections shows that there was surprising variation in the nature of colliery cottages. Several different categories have been identified and there were variations on a theme within each category.

- There was a hierarchical structure, with larger, better quality dwellings occupied according to status within the mining community. This was even reflected in the naming of streets.

- There is clear evidence for ‘planning’ in the design and construction of colliery cottages. Original drawings can be traced as far back as 1838.

- Low quality external services e.g. water, drainage etc. seems to have been a major contributory factor to the seeming squalor of pit village life. (Brown, 1995).

In 1993 and again in 1998 the Traditional Architecture Group based in the Centre for Lifelong Learning at Newcastle University produced volumes of a publication entitled ‘Northumbrian Building Studies’. The second of these is particularly pertinent in this assessment of previous work done in the county as it contains the detailed analysis of a derelict seventeenth century farm cottage in the village of Elsdon (Maddison, 1998).
Ryder’s detailed discussion of the building known as Steel House or ‘The Tenement’ in the hamlet of Steel just south of Hexham (2002), is a fine example of the kind of recording work that can and should be carried out on post-Medieval standing buildings in the vernacular tradition. The report consists of a detailed plan and structural analysis of the building and a full consideration of its history and use. The building may have its origins as a low, two storey, defensible, house of sixteenth century date (2002, 148, Fig 9). A full cruck-built roof may have been incorporated in the building’s expansion during phase 2, which dates to the early part of the seventeenth century. Phase three, in the early eighteenth century, saw a further extension of the building with the addition of a further two story appendage and further modification took place in the nineteenth century. The house was lived in until just before the outbreak of World War 2, when it became a farm outbuilding (Ryder, 2002, 148 – 152, Figs. 9, 10, 11 and 12).

More recently over the last ten years or so the N.E. Vernacular Architecture Group under the leadership of Martin Roberts of English Heritage’s northern office has recorded vernacular buildings on Lindisfarne, but this work has not been fully published.

**Country Houses and Gardens**

Little archaeological research has taken place relating to the county’s country houses and gardens. Organisations like the National Trust and English Heritage have produced guide books for properties such as Wallington Hall, Cragside and Belsay Hall, but there is little direct archaeological input into these. Individual entries in Pevsner’s ‘The Buildings of England: Northumberland’ are also important in the present context (Grundy et al., 1992). Again, Frodsham’s Introduction to this section sets out a fair indication of what is known about ‘country houses’ within the boundaries of the National Park.

In 1953, Herbert Honeyman did produce a detailed architectural and historical discussion of ‘Three Jacobean Houses’ in the region. Of the three sites discussed, Ovingham Vicarage and Aydon White House are directly relevant here, whilst the third example, Washington Old Hall is a useful comparative study. The paper uses a similar approach to Honeyman’s architectural work on castles and churches discussed in earlier sections of this Research Framework document. We are given a
documentary history of all of the sites along with an annotated ground plan with relevant chronological phasing, and any other illustrations relevant to the discussion (Honeyman, 1953, 127 – 148).

In 1960 Hackett discussed the formal landscape and garden at Hesleyside, within the boundary of the National Park. This contribution looked at the chronology of the development of the Garden and paid passing reference to the Hall itself. It points out the possible imprint of Capability Brown on the parklands and gardens (Hackett, 1960, 161–168). Hesleyside remains the only site within the National Park to be on the English Heritage Register of Parks and Gardens of Special Historic Interest.

Thirty five years later M.F. Downing produced a similar discussion of the development of the Ewart Park estate in north Northumberland from the eighteenth century (Downing, 1995, 269–289). The great house at Ewart Park had been re-built in 1788 and Downing’s paper charts the development of the parkland and garden after that period. His account is built on surviving documentary evidence in the collection of Butler papers held in the County record Office and it also deals with the changes to the estate layout in the nineteenth century.

An intriguing piece of garden-related archaeology was published in 2000, by Fiona Green, when she examined the heated garden walls of Belsay Hall (Green, 2000, 223–230). This work was carried out as part of an English Heritage programme of repair to these features and Green’s paper details the structure and functioning of the Belsay ‘hot walls’. Her contribution sets the ‘hot walls’ into a historical and geographical context and deals in detail with the structure of the heating system and the walls themselves. This is a fascinating contribution to the burgeoning subject of garden archaeology.

In the present context we should also note again the paper by Leslie Hepple on Charles Forster and his two estates at Low Buston and Campville (Holystone). These have been discussed in detail above.

**Industry and Communications**

Clearly, Northumberland as a county has a rich industrial heritage. Again, though, it must be said that the actual archaeology of this heritage, as opposed to its historical study, has been little considered. In what follows we have dealt with only the ‘major’ industries of the county in an effort to provide a context for our detailed knowledge of
the National Park’s Industrial archaeology. Obviously, because of both time and space constraints, this review cannot go into great detail in terms of historical/document based research on the regions old, established, industries. Many specialist groups exist within the region, dealing in detail with almost all aspects of the industrial past.

**Coal**

As Linsley has said, ‘there has been no more important industry in the north’s history than the coal industry’ (2002, 209). Several excellent historically based studies of the coal industry have been produced. Coll’s *Pitmen of the Northern Coalfield* is a perceptive insight into the social history of coal mining and the five-volume *History of the British Coal Industry* is an important context provider for the regional industry in the post-Medieval and modern periods (Flynn, 1984; Ashworth, 1986; Church, 1986; Supple, 1987; Hatcher, 1993).

Linsley decries the lack of field research into coal mining, and he highlights the fact that, although numerous locations throughout the region exhibit evidence of bell-pit mining, none have been properly surveyed and analysed. The chronology of bell pits is little understood, as is their technology and the methodology seems to span the period from the twelfth to the twentieth centuries (2002, 209). This is only one aspect of the archaeology of coal mining that needs more research.

Individuals have contributed much to our knowledge of the archaeology and history of the coal mining industry in Northumberland and the region also figures large in the work of the Monument Protection Programme (Gould and Cranstone, 1992).

The late Frank Atkinson produced a detailed consideration of the technology of coal mining in the northeast region (1966) and this has stood the test of time. Indeed he also contributed a historical note on Northumberland collieries in 1724, through his assessment of the journal of Sir John Clark (1965). In 1962 R.A. Mott had discussed the differences between the London and Newcastle Chaldrons for measuring coal weight (1962).

Beryl Charlton and John Day first recorded the remains of coal mining activity in the landscape in 1977 in their initial survey of the archaeology of the Otterburn Training Area (1977). This initial work was expanded upon in 1996 when Charlton produced her book *Fifty Centuries of Peace and War*. In this she discusses the field evidence for coal mining on the Otterburn ranges in some detail. This takes the form of shallow
bell shaped crop pits, which follow outcrops of coal bearing strata. She has identified five key areas on the Otterburn Range where mining has left traces of more than forty crop pits and waste heaps. These are: Yardhope, Sills Burn, Carrick, Pengeford and East Wilkwood. Other areas worked were less prolific with between fifteen and twenty crop pits in evidence (1996, 139).

Mining seems to have been a late activity in Redesdale, possibly only really taking off in the seventeenth century. As early as 1633 a colliery was recorded at Loaningburn. Pengeford may have had early nineteenth century origins and in 1880 a shaft some 34 fathoms deep was recorded there (1996, 139).

The area around East Wilkwood was at its most productive in the late eighteenth and early nineteenth centuries. There are several eighteenth century references to Wilkwood but by 1871, Wilkwood Pit House was listed as unoccupied in the census returns for that year (1996, 139) Charlton discuss the chronology of mining on the Otterburn Ranges in some detail (1996, 139 – 140).

The Pengeford (Penchford) Burn area was subjected to detailed field survey by the Lancaster Archaeology Unit as part of the mitigation works resulting from the AS90 ‘Options for Change’ public enquiry (LUAU, 1996, 38 – 42). As the report says ‘The surviving remains represent a very good example of small-scale mining, showing a broad range of pit head features relating to the developmental chronology of this type of enterprise, making its continued survival intact of importance to the study of mining technology’ (1996, 42).

From 1993 to 1995 in the pages of the History of the Berwickshire Naturalists Field Club, J.T. Bainbridge published a survey of the collieries of north Northumberland. His first contribution dealt with Berwickhill Colliery (1993, 37–74) his second dealt with collieries in the ‘Scremerston Triangle’ (1994 137–178) and his third covered the county from Duddo to Wandylaw (1995, 237–271). All three papers took the same basic format, listing known collieries in the study area and recording what was known of their history and development and any remaining standing structures. This work deserves to be better known than it is.

In 1998 Goodchild charted the development of the Mickley Colliery in South Northumberland. This was based largely on documentary sources, but does give a
keen insight into the way in which individual investments might prosper or fail in the period (1998, 110 – 118).

1998 also saw the publication of the results of excavations at the Wallsend Colliery B Pit (Oram et al., 1998, 115 – 161). This was a fascinating exercise, revealing as it did evidence for the actual shaft of the mine and related ancilliary structures such as the bases for boilers. It remains the only large-scale published colliery excavation in the county.

Clearly there is a welter of historical data relating to the coal industry in Northumberland, but as the discussion above shows very little archaeological activity relating to coal extraction has been carried out. More work has been done on waggonways but this is dealt with in the section on ‘Communications’ below.

Iron

Within Northumberland as a whole very little iron working seems to have taken place and most ventures, for a variety of reasons, seem to have been unsuccessful. Linsley documents a blast furnace at Allensford, (Linsley and Hetherington, 1978) which worked for part of the seventeenth century and he also refers to smelting sites of eighteenth century date at Bedlington and possibly Lee Hall. He notes too the occurrence of smaller iron working undertakings in Newcastle and the existence of an iron and tin foundry at Guizance in the Coquet valley. The iron works dam designed by the great John Smeaton still survives at Guizance (1992, 96).

Larger scale iron works developed in the latter part of the eighteenth century. Integrated iron ore smelting and iron working was introduced to the county at this time with the opening of the Tyne Iron Works at Lemington. Linsley notes the dates of the opening of other iron works at Wylam (1836), Ridsdale (1836) Walker (1842) Brinkburn (c. 1845) and Haltwhistle (1856). To this list we should add the works at Hareshaw near Bellingham, founded in 1838-9 (Linsley, 1992, 97). All of these works were short-lived.

In 1978 Linsley discussed the iron works at Hareshaw and at Ridsdale in two separate articles (1978a, 1978b). As Hedley points out below, a furnace was built on the site of Foundry Yard and a two dam system was constructed on the Hareshaw Burn to supply water for a waterwheel-powered cold blast; coke ovens were built, and ironstone, coal and limestone were extracted from the local vicinity. In 1845 the company was taken
over by its principal mortgagee, the Union Banking Company of Newcastle upon Tyne. It expanded production with the construction of two new furnaces with steam-powered blast in order to improve profitability but production declined whilst labour costs increased significantly. At its peak, the venture employed some 1,000 men and boys (Roberts, 2000, 290). It was mothballed in 1849 and never reopened. A railway link was established in 1855 but there was no attempt to restart the works.

Subsequent demolition and redevelopment has removed much of the site, including four terraces of workers’ housing, though a few of the buildings survive as dwellings (Roberts and West, 1998, 13). The lower dam on the Hareshaw Burn survives remarkably well despite having been damaged by flooding in 1968 (Roberts and West, 1998, 62). A well-known local landmark, it provides a dramatic reminder of this once extensive industrial landscape.

The Ridsdale Ironworks, was opened in 1839 by The Chesterhope Iron Company formed by Messrs Hedley and Reed. Hedley has discussed the development of this set of works below.

**Non-Ferrous Metals and Vein Minerals.**

**Lead**

Lead mining and working has been an important element of the Northumberland economy in that part of the region, which lies within the North Pennine Orefield. Linsley’s review of lead mining in Northumberland highlights the sixteenth century origins of the industry at Allenheads. This mine spawned a planned village over the period 1845 – 1871, and the site is discussed in more detail below (Linsley, 1992, 93).

Mechanisation came late to the Northumberland lead industry and pumping engines were installed at the Shildon mine near Blanchland in 1808 and at Newborough in 1850. Linsley points out that there was little scope for mechanization of the smelting process, but he highlights the construction of ‘horizontal chimneys’ in the first decade of the nineteenth century in the area. ‘In essence these were long, stone-built condensers which trapped the lead and silver vapours or particles that would escape from the normal short chimney of a lead smelting furnace’ (1992, 93).
Much has been written on the social and economic history of lead mining in the county as a whole. Most recently Forbes et al. have produced an excellent general survey of the lead mining landscapes of the North Pennine Area of Outstanding Natural Beauty (Forbes et al., 2003). This deals with all aspects of the lead mining landscapes of the region and has some excellent pictures of Lead related sites in SW Northumberland.

In 1958 L.C. Coombes produced a magisterial overview of the history and development of lead mining in east and west Allendale, documenting the location of mines, smelt mills, flues, reservoirs, races stream diversions and roads. He even discussed the knock on effect of mining and smelting on the local economy in the area (Coombes, 1958, 245–270).

Much of real interest has been published in the journal of the Northern Mine Research Society, and in 1994 Fairbairn produced a detailed discussion of Bale hill sites on Alston Moor and in Weardale (Fairbairn, 1992, 93–99). A year later Chapmans discussion of the Sikehead lead mine at Ramshaw appeared (1995, 31–36) this included a discussion of eighteenth and nineteenth century working practices and also included a surveyed plan of the above ground remains at the site. Fairbairn again ventured into print in 1999 with a discussion of the Allen Mill flues and chimneys (1999, 141–146). This used material in the Northumberland County Records Office to produce a series of surveyed drawings of these features.

In 2000 Fairbairn published a full survey of the lead mines of Allendale, Tynedale and Derwent. This was a massive contribution to knowledge, dealing as it did with sites on a mine by mine basis. A similar approach was adopted by Pirt and Dodds (2002) in their discussion of the lead mines of the Derwent valley. This covers the mining districts of Blanchland, Ramshaw, Townfield, Edmundbyers and Healeyfield.

**Quarrying**

Again little archaeological research has been carried out on the archaeology of quarrying in Northumberland in the post–Medieval period. Little is known of the quarrying of building stone but we do have some research that gives knowledge about millstone quarries. In 1986 Jobey produced a very detailed account of *Millstones and Millstone Quarries in Northumberland*. He produced a distribution map of known quarry sites and discussed the technology of millstone extraction and the movement of...
the stones form ‘factory’ to mill. The general discussion is accompanied by a detailed inventory of known millstone quarry sites, the detail of which is meticulous (1986, 49 – 80). One year later in 1987, John Philipson, produced a note on a minor millstone quarry site at Barrow Knocks that had been omitted from Jobey’s review.

In 2000 the Lancaster Archaeological Unit published the results of its survey of the Harbottle millstone quarry which was working from 1604 to around 1800. This is one of the first detailed topographical surveys of a quarry site carried out in the county and as such it has contributed much to our knowledge of the technology and relative chronology of millstone quarry working (LUAU, 2000).

**Lime Working**

The post–Medieval/modern exploitation of limestone for the purposes of producing lime for fertilizer and building mortar is a subject that has seen some study in Northumberland. In 1952 S.D. Allhusen discussed the history of the limekilns at Beadnell and in the same year Sir Edmund Craster also published notes based on his family papers relating to the Beadnell limekilns (Allhusen, 1952, 124 -127; Craster, 1952, 127–129).

1991 saw the publication of a general review of limekilns in north Northumberland by J.W. Bainbridge. He discussed the occurrence of two main types of kiln in the region the ‘flare’ type and the ‘continuous kiln’ and he followed their development in the region from the fifteenth century onwards (1991, 111–138).

In 1992, Roger Jermy produced a small survey of the lime-workings and related structures on Lindisfarne (1992). This work discusses the evidence for quarrying, waggonways, limekilns and jetties relating to the transport of the burnt lime. The results of a detailed survey of standing structures, relating to the Lindisfarne lime-working, industry were published in 1995 by Deirdre O’Sullivan and Robert Young.

In 1996 Beryl Charlton documented the exploitation of lime and the occurrence of limekilns on the Otterburn Training area (Charlton, 1996, 145 – 146).

**Milling and Related Activities**

Few archaeological surveys relating to mill structures have been published in the county, however the Northeast Mills group is actively involved in researching these buildings and their archaeological remains and historical records. In 1977 John
Philipson published a discussion of corn drying kilns at Grasslees and at Barrow Mill, Alwinton (1977, 155 – 162)

In 1982 Charlton and Day published the fourth part of their long term survey and excavation programme in Upper Redesdale. This article was devoted to recording water corn mills, millstones, corn drying kilns in the area and it documented one of the few excavations of a corn drying kiln at Loaning Burn. This is an exceptional piece of work demonstrating as it does how archaeological and historical/documentary research really can complement each other for the post-Medieval period. In addition to the report on the excavation, the article contains a detailed appendix, setting out all available literary sources for mill sites in the area and an inventory of known corn drying kiln sites (Charlton and Day, 1982, 149 – 170).

Two mill surveys have been produced in recent years, both within the National Park. In 1994 David Cranstone discussed the Grasslees Corn Mill in some detail and in 1997 Peter Ryder produced his survey of the Dallycastle Mill with its related corn-drying kiln (Ryder, 1997).

Tobacco Pipe Making

The archaeology of the manufacture of the clay tobacco pipe in the north east generally first received serious study in 1964 when Eric Parsons produced his survey of the archaeology of the clay tobacco pipe. This was a general discussion on the typology of clay pipes and their usefulness as a dating tool on excavations, but it also included, for the first time, a detailed listing of northeastern pipe makers (Parsons, 1964, 231 – 254).

Jarrett had begun the initial discussion of this topic in 1960 (1960, 238 – 239) and he again published on the subject in the same volume of *Archaeologia Aeliana* as Parson’s study (Jarrett, 1964, 255 – 260). A full treatment of the Archaeology of tobacco on Tyneside was produced by Lloyd Edwards in 1988 and in the same year J.E. Roberts published a detailed account of the Tennant’s pipe factory at Tweedmouth (1988, 87 – 102) In this he discussed processes of manufacture and outlined the range of stamp types that the factory produced. This was based on a series of wasters recovered from the site of the factory itself.
Rope Making
Historically, and for obvious reasons relating to the proximity of the sea, rope making was an important industry on Tyneside. Unfortunately the only ropewalk building of any architectural merit that still survives in Northumberland is in Hexham (Linsley, 1992, 87). In 1990 J.W. Bainbridge published an account of two centuries of rope making at Berwick upon Tweed. In this paper he documented the history of the industry from 1752–1956. Shipbuilding was first established in Berwick in 1751 and rope making obviously followed. In the eighteenth century there were four roperies in Berwick and by the nineteenth century, north of the Tweed there was a huge expansion in rope and twine makers workshops. The paper includes a good social history of the rope making industry in the town (Bainbridge, 1990, 15–44)

Brewing and Distilling
The post-Medieval archaeology and history of brewing and distilling in the region has also received some attention. In 1960 Philipson and Child discussed the remains of illicit distilleries in Upper Coquetdale (1960, 99–113). They used Dixon’s account to relocate stills in Coquetdale, producing a distribution map and they excavated on example at Wholehope. The still site was probably in use from the late eighteenth to the early nineteenth century.


In 2000, Brian Bennison published a review of Tyneside breweries in 1801. This used a range of documentary sources to discuss the prominent breweries in the area in the period and he also charts developments in the brewing industry generally in the northeast in the early nineteenth century (Bennison, 2000, 215–221).

Communications
The archaeology of post–Medieval communications and transport has, again, been little studied. Of particular importance is the development of waggonways related to the coal industry and the railways generally. There is great deal of specialist literature on the history of railway development in the region (e.g. Warn, C.R. 1976. *Waggonways and Early Railways of Northumberland*; Allen, 1964; Hoole, 1965; Hoole, 1985; Maclean, 1948: Slade, 1975; Tomlinson, 1967; Whittle, 1979) and much
of this can also be accessed through the internet. That which is included here is intended to give a broad feel for the range of accessible data.

In 1951 Charles Lee published a massive overview of the wagonways of Tyneside (1951, 135–202). In this he dealt with the economics, social history and geographical aspects of wagon way development spanning the period of the earliest horse drawn structures right up until the development of the complex modern rail network that criss-crossed Tyneside. The earliest of the Northumberland wagonways leading coal to the staithes below Newcastle seems to have dated from around 1749 (1951, 165). This is a serious work of scholarship that subsequent authors have referred to extensively.

In 1955 Gotch published an account of the role of the architect and engineer Robert Mylne in the design and construction of bridges at several locations across the Tyne. Eleven years later William Lawson discussed the origins of the military road from Newcastle to Carlisle (1966, 185–207) and in 1973 Lawson again discussed the military road, this time dealing with the detailed costings for its construction and outlining the progress in the work. The paper also included illustrations of the designs for some of the bridges that were to be incorporated into the roads course (1973).

In 1989 H.W.Edgar discussed the Coxlodge waggonway which ran from the Jubilee Colliery to Gosforth Colliery, charting the history of this railway in terms of the transition from horse drawn to steam locomotive haulage (1989, 61–70). In the same year Groundwater discussed in a highly anecdotal way, the lost railways of the Border County (1989, 70–80). This was followed by Sian Thorntwaite’s discussion of the history development and decline of the Border Counties Railway in 1991 (Thorntwaite, 1991, 93–108).

In 1994 Stafford Linsley published a detailed industrial history and archaeology of the Tyne crossings at Hexham up to 1795 (1994, 235–255). This was a detailed account of bridge design and construction in the post–Medieval period. Bridges also figured again in Rennison’s discussion of the Great Inundation of 1771 and its implications for the development of bridge architecture in the northeast in general. A distribution map shows the substantial number of bridges in the region that were destroyed as a result of this episode of flooding, and the paper catalogues the history of their rebuilding (2001, 269–291). In 2002, Rennison again discussed the location form and design of ‘Three Overlooked Bridges in Newcastle’ (2002, 163–171).
The Northumberland National Park is a sparsely populated, largely marginal upland landscape dominated by hill farms and grouse moors. Until the arrival of turnpikes in the eighteenth century and the railways in the nineteenth century, much of this landscape was relatively inaccessible and local resources were exploited, wherever practical, for local need. Many of these small-scale ventures left their indelible mark upon the landscape, whilst others require reconstruction from oddments of the historical record and often fragmentary archaeological remains. This contribution will briefly assess the archaeology of a small number of primary extractive industries in the National Park, namely coal, iron, stone, lead, and vein minerals, and will illustrate these where possible by reference to sites at which the Park Authority has undertaken work over the past decade. It will also examine the development of transportation and briefly outline the impact of the water supply industry. It will not consider, largely due to lack of space, manufacturing industries such as textiles, food processing, distilleries and smithing, though these were no less important to the social and economic well being of local communities. The definition of the National Park boundary is a here taken very liberally and a number of adjacent sites will be included where these demonstrate a significant impact on local communities.

Coal

Within the Park there are numerous deposits of coal throughout the Carboniferous succession. Rarely exceeding a metre in thickness, and usually considerably less than this, the coals invariably contain shaly bands, resulting in high ash content. Faulting is frequent and groundwater saturation is commonplace (Frost and Holliday 1980, 84). The principal coals are the Thirlwall Coal in the southwest, the Plashetts Coal in the Upper North Tyne, and the Fourlaws Coal in the Rede and Grasslees Valley areas. Coal fragments are not uncommon finds from Roman excavations along Hadrian’s Wall, such as Sewingshields (J. Bayley in Haigh and Savage 1984, 107) where, not untypically, coal was found in association with metal-working. Coal has also been found on native sites such as the Romano-British stone-built rectilinear settlement at Tower Knowe (Jobey 1973, 75). It is likely that local sources were exploited on a small scale probably from shallow workings on the outcrop. Such shallow intermittent
scratchings on the outcrops are likely to have persisted up to and including the Medieval period, though peat and timber are likely to have been the main sources of fuel, with perhaps some charcoal production for metallurgical processes.

The surveyors of the Borderlands in 1604, wrote of the ‘store of Cole’ within the manor of Harbottle and although un-worked at that time they valued it at 13s 4d annually (Sanderson 1891, 108,110). In North Tynedale, despite ‘great stores’ of coal there were no mines in use at that time as it was noted the inhabitants ‘have such store of Turfe and Peate as they will not bestowe labor to get coales’ (Sanderson 1891, 77).

Further they noted that ‘if the Country weeare inhabited by industrious men of Trade, the mynes would bee of great value farr exceedinge the rate set downe’ which was then 1l 6s 8d (ibid 75). Perhaps, as Winchester (2000, 139) suggests coal would have cost the local inhabitants money whereas peat digging cost only labour. Indeed, peat where it is sufficiently dry has been ‘cast’ (dug up) in most areas of the Park, a practice that was carried out commercially at Crag Flow, west of Nunwick, until 1991.

The surveyors of 1604 produced an over-optimistic assessment and one that was not borne out either by the true quality of the coal itself, or its distance from commercial markets. However, for the relatively small-scale, rural, industries and the domestic hearth, remote from alternative supply, this poor quality, shaly coal was sufficient. The 1604 survey may have stimulated renewed interest in mineral resources among landowners keen to maximize returns from their estates. Certainly, there was sufficient knowledge of the nature and extent of the reserves to allow the surveyors to record their value, suggesting than at least some commercial extraction may have occurred, within living memory of the survey, or perhaps was then being exploited on a non-commercial minor scale.

By the early 1620s, coal was being mined on a commercial basis in the Grasslees Valley as attested by an Agreement of 1621 between the Lord of the Manor, Theophilus Lord Howard of Waldon (mineral owner) and Roger Widdrington of Cartington, granting the latter ‘full power, liberty and authority’ over the Paunchford and Loaning Burn coalfield [Northumberland Records Office 1356 Box 11/1]. The Agreement imposed a number of restrictions upon the scale of Widdrington’s operations, setting out that he ‘shall not have more than one wrought pitt going at any one tyme, nor shall not have more than two workmen, laborers or hewers in the same
*pitt at any one tyme*. The nature of these restrictions, common to most mineral leases in the seventeenth and eighteenth century uplands, and the technology employed, may have represented the most cost-effective and safe means of working shallow deposits in remote areas where demand was generally low (Linsley, 2002, 209). However, they may also represent an attempt by the mineral owner to deliberately limit output. If the latter is correct it may suggest that at this date there were other leased pits in operation in the area or other leases available to let, thus requiring mineral owners to introduce some form of regulation in their leases to protect what passed at that time for a local market. Alternatively it may have been a means of ensuring that the lessee did not produce too little to settle the price of the lease, nor too much to make a profit at the mineral owner’s expense. Extensive areas of outcrop workings and shallow bell pits can still be traced on the Fourlaws Coal in Redesdale, particularly around and across the Otterburn Ranges, and on the Plashetts Coal in the Upper North Tyne Valley where they were locally known as ‘Fairy Holes’ or ‘Kelties’ (Miller, 1887, 124).

In the later eighteenth century there was a gradual shift in many of the early coalfields away from the exhausted outcrops, to deeper shafts producing larger shaft mounds located away from the outcrop, where horse gin or cog and run methods of winding may have been employed. From about 1800 some of the more enterprising landowners employed the services of professional colliery viewers to assess the potential of their coal reserves. The encouraging reports of these viewers, together with improved transportation, led to the investment of, often substantial, sums in various mining ventures (Day and Charlton, 1981, 273).

At Carter Fell at the head of Redesdale, the turnpiking of the coach road across the Border during the early years of the nineteenth century provided the opportunity for the construction of a spur from the Scottish side (avoiding the toll at Carter Bar) across the desolate moor to coals high up the Batinghope Burn. It is said that as many as 90 carts were sometimes there in the morning, waiting to be filled and transported to Jedburgh for use as house coal (Clough, 1889, 54).

From the beginning of the nineteenth century there was a considerable increase in demand for coal from the growing lime burning industry. Following the Drainage Act of 1848, the availability of local coal combined with the presence of fireclays and shales led to the construction of numerous rural brick and tile works serving local need (Day and Charlton, 1981, 288), such as Brieredge (near Hesleyside), Redshaw.
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and Garretshiels (near Elsdon), and Ovenstones in the Grasslees Valley (Frost and Halliday, 1980, 87; Miller, 1887, 124).

A larger scale of colliery operation was undertaken at Plashetts Colliery (now beneath Kielder Reservoir). Although beyond the Park boundary, it had a major effect on the whole community of the Upper North Tyne through employment and supplies of coal for local domestic fuel. The Plashetts Coal had been worked extensively from at least the eighteenth century, when bell pits were worked on Plashetts Moor for the benefit of the Duke of Northumberland’s tenants (Clough, 1889, 53). In the later nineteenth century, the availability of low cost transport offered by the Border Counties Railway allowed a substantial increase in the development of coal working. The ‘round’ coal (big lumps) was considered a fair house and gas coal, and the smaller coal was converted into coke in ovens close to Plashetts Station, though the greater proportion was transported by rail to limekilns in Liddesdale. The ‘brasses’ (nodules of iron pyrite) were collected and sent by rail to Kirkcaldy where they were used in the production of sulphuric acid, and the ‘catheads’ (ironstones) were sold for smelting. The fireclay was also extracted and used for brick and tile making (Clough, 1889, 53). In 1914, Plashetts Colliery employed 254 men, but it went into decline after the First World War and from the 1930s until its eventual closure in the early 1960s employed less than a dozen men below ground.

Large-scale mining ventures also sprang up around Haltwhistle in the nineteenth and early twentieth centuries. At Thirlwall Colliery some coal working had taken place from a drift mine as early as 1834 but it was not until the early twentieth century that substantial investment was made. By 1910 the Thirlwall Coal Company Limited had opened up a new drift and constructed coal drops (structures facilitating the transfer of coal from narrow gauge colliery wagons to broad gauge mainline wagons) close to the Newcastle to Carlisle Railway. Although the colliery was relatively short-lived and much of the site cleared soon after, the coal drops remain an impressive structure. Constructed using buff-coloured bricks, it appears from a distance to be sandstone leaving many on a passing train to wonder what a strange looking castle they have passed.

Coal continued to be worked below ground at one or two isolated sites within the Park in the later twentieth century, the last at Robin Rock in Wark Forest closing as recently as 1989. An opencast mine was operated at Brieredge near Bellingham...
between 1984 and 1988 but an application for an extension was refused (NNPA, 2000, 18), and thus an extensive area of earlier shallow workings has survived almost certain destruction. These early mining landscapes, together with the fragments of the more developed later ventures, serve to remind us of the smaller-scale coal working landscapes of the Great Northern Coalfield that have largely been destroyed through land reclamation. This rarity significantly enhances the importance of the remains within the National Park.

Iron
So important was the introduction of iron as the primary material for artefact manufacture, from domestic utensils to the instruments of war, that antiquaries in the late eighteenth century made it the third tier of the Three Age System (Stone, Bronze and Iron), an overly simplistic system but one that continues in general use. Unlike Bronze, whose principal ore copper is found in a small number of locations, workable iron ore can be found in many areas of the country. Residues from the smithing of iron (the working of bar iron into useable products, their maintenance and recycling) are common finds on excavated settlement sites from the later Iron Age onwards. In contrast, evidence for iron smelting (the production of bar iron from iron ore in a furnace) is very rare in the archaeological record until Medieval times. Even the few earlier examples, e.g. the Romano-British settlement at Tower Knowe (Jobey, 1978, 22), should be treated with caution since smithing and smelting slags can appear very similar. Although there is a clear need for further research, it may be that prior to the Middle Ages, the region was largely an importer of iron, rather than a producer.

Following the demise of the bloomery iron industry (discussed in the ‘Medieval’ section above), it was a further five centuries before iron production returned to the Park. An attempt was made in the 1760s to establish a furnace at Lee Hall, but this was short lived due to shortages of fuel (Riden, 1993, 125). In 1839, Messrs Batson, Campion and Co. established an ironworks by the Hareshaw Burn, Bellingham. A furnace was built on the site of Foundry Yard; a two dam system was constructed on the Hareshaw Burn to supply water for a waterwheel-powered cold blast; coke ovens were built, and ironstone, coal and limestone were extracted from the local vicinity. However, the company made a loss of £1 on every ton of iron produced and was taken over in 1845 by the principal mortgagee, the Union Banking Company of Newcastle upon Tyne (Sewell, 1992, 11; NRO P669, 75).
The Company expanded production with the construction of two new furnaces with steam-powered blast in order to improve profitability but production declined whilst labour costs increased significantly. At its peak, the venture employed some 1,000 men and boys (Roberts, 2000, 290). It was mothballed in 1849 and never reopened. A railway link was established in 1855 but there was no attempt to restart the works. When the rail link was established with Hexham and the Newcastle and Carlisle line, one of the first passenger services brought bidders from Newcastle to an auction of the plant (Sewell, 1992, 28), and the site was cleared in the following year.

The main reasons for the failure of the Bellingham ironworks have been explored by Roberts (2000, 283-298). Despite the obvious advantages of having coal, ironstone and limestone in close proximity, an advantage not available in the North East Coalfield, the venture was a victim of the incompetence of its founders. As Roberts notes, the original company employed technology that was already behind the times. The design of coke ovens was primitive by contemporary standards, and they relied on the availability of cheap water power as a cost saving over the greater investment required for a more efficient steam-powered blast. This was to a degree corrected by the Union Banking Company when it installed two new furnaces with steam-power blast. However, by this time the Bank was itself in financial difficulties and, by increasing both their capital investment and running costs when output was actually falling, merely increased the losses.

Secondly, the company exported pig iron by cart to its foundry in Hexham rather than manufacture at Bellingham, thus incurring extra transport cost and the cost of reheating in Hexham.

Thirdly, the company was forced to built worker’s housing as there was no ready pool of workers in the local area, and the quality of employee it managed to recruit was low as the company could not compete with the wages available in the North East Coalfield.

Lastly, the original company did not factor in high running costs and interest payments on the mortgages it chose to use when setting up the ironworks instead of raising capital from share issues. Thus the inability of the company to curb losses and to compete with its more efficient rivals meant that it was almost bound to fail. The arrival of the railway link made no difference to its fortunes.
Subsequent demolition and redevelopment has removed much of the site, including four terraces of workers’ housing, though a few of the buildings survive as dwellings (Roberts and West, 1998, 13). For a decade the ironworks was a major employer, and it has left a significant mark on the character of the town. The lower dam on the Hareshaw Burn survives remarkably well despite having been damaged by flooding in 1968 (Roberts and West, 1998, 62). A well-known local landmark, it provides a dramatic reminder of this once extensive industrial landscape.

The Ridsdale Ironworks, Redesdale, fared little better. This complex was opened in 1839 by the Chesterhope Iron Company, formed by Messrs Hedley and Reed. It was necessary to construct an entire village for the workforce which was largely imported from outside the parish. In consequence, the venture lost money, and was taken over by the well-established Derwent Iron Company in 1840 (Roberts, 2000, 293).

The expense of opening a new pit in 1848, however, coupled with the fact that the company had a further 18 furnaces more conveniently located elsewhere, ultimately led to its closure. Lord Armstrong subsequently purchased it in 1862, in order to supply un-smelted iron ore for the production of high calibre shells at his Elswick works (Roberts, 2000, 295). It finally ceased production in 1879 (Redesdale Society, 1999, 21). The impressive ruins of the blowing house by the side of the A68, the village itself, and the dramatic pattern of the finger-like spoil tips across the surrounding landscape remain as vivid reminders of this once important local industry.

**Non-Ferrous Metals and Vein Minerals**

**Lead**

Within the Park *galena* (lead ore) is restricted to a few minor veins and only a small number of trials have been made. The most significant of these within the Park were undertaken at various times during the nineteenth century on the Tarret Burn on a vein beside the High Green basalt dyke, nearby at Hollinhead, and in a small vein at the head of Smithy Cleugh, including exploratory work between 1882-88 by the Tarset Mining Co (Burt et al., 1983, 76; Smith, 1923, 15). However, none of these ventures produced more than a few cabinet specimens of *galena* and *sphalerite* (zinc ore) (Miller, 1887, 124). Just outside the park, more significant activity took place at Redpath Mine to the east of Jock’s Knowe near Fallowlees. Although worked
periodically in the nineteenth and early twentieth centuries, Wallis, writing in the
eighteenth century, relates that the miners called it ‘the old man’ (1769, 121), a term
commonly used by miners to indicate earlier workings. A further lead mine was
worked directly by Sir Edward Blackett above Whitton Dene in the eighteenth century
but appears to have produced little ore (Smith, 1923, 16). A trial at Lordenshaws was
similarly unsuccessful.

A more substantial lead mining operation was conducted intermittently, from the early
seventeenth century, at Settlingstones close to the southern boundary of the Park
(Smith, 1923, 29). Between 1849 and 1873 it produced almost 12,000 tons of lead and
almost a ton of silver (Dunham, 1990, 268). In 1870, however, the mineralisation
changed dramatically with the extremely rare mineral, *witherite*, forming the bulk of
the composition and only small amounts of other minerals present. A barium
carbonate with between 90 and 95% purity, *witherite’s* uses were many and varied
including the paint, paper and chemical industries (Young and Nichol, 1997, 43).
From 1873, witherite was the sole mineral produced at the Settlingstones mine, which
was for long periods the world’s leading producer of the mineral with a total output of
around 630,000 tons (Dunham, 1990, 268). Between 1909 and 1911, 185 people were
employed at the mine (Burt et al., 1983, 67). With commercially viable quantities of
witherite finally exhausted, the mine closed in 1969, ending world production of the
mineral. The site was almost completely cleared, leaving a fine terrace of worker’s
housing (Settlingstones Cottages) and the former mine office still occupied,
surrounded by fragments of concrete foundations, the overgrown course of a
tramway, and partially landscaped spoil tips (Young, 1997, 10).

**Building Stone**

It perhaps goes without saying that humans have utilised stone for tools since the
Stone Age. It has been suggested (Schofield and Waddington, 1999, 175-176) that a
Neolithic axe factory may have existed in the crags between the Breamish and
Harthope Valleys based on a recently discovered axe from Ewart which was found to
be a close geological match to outcrops of andesite in the vicinity. However, until
further research is undertaken at possible quarry sites such as Cunyan Crags, this must
remain conjecture.
Although stone was used for the construction of ritual and funerary monuments, field walls and other structures during the Neolithic and Bronze Age, the earliest clear evidence that we have for the quarrying and shaping of stone for building comes in the form of the massive drystone walls of the Iron Age hillforts. Although this activity cannot be described as industrial in a traditional sense, the ‘craft’ of the stonemasons and their knowledge of the character of the Cheviot andesite can be readily appreciated at sites such as Sinkside Hill and Brough Law.

Not until the arrival of the Roman Army did the extraction of stone reach ‘industrial’ proportions. The construction of Hadrian’s Wall alone was a massive undertaking requiring extensive quarries throughout its length, and including the wall ditch that in certain places would have provided an additional source of building stone. At Queen’s Crags near Housesteads, a quarry face bares a crude inscription recording the names of Saturninus and Rufinus, believed to be centurions and that of an ‘optio’ (a military officer just below the rank of centurion) named Henoenus.

At the opposite end of the crag lies a large block of stone which has been prepared for splitting using the feather and plug technique. This technique was in use until the eighteenth century, so a Roman date cannot be assumed here with any degree of certainty. It is interesting to note, however, that the forts, milecastles, turrets and the Wall itself became a convenient quarry for Medieval and later builders; with so much dressed stone available, would anyone go to the expense of quarrying fresh stone from such an isolated site?

Throughout the Medieval period, building in stone was largely restricted to high status buildings and for bridge building on some of the more important routes. The building of a structure such as Harbottle Castle in the twelfth century, tower houses such as Dally and Tarset Castles in the thirteenth century, not to mention some of our early churches, such as St Michael’s at Ingram and St Cuthbert’s at Elsdon, would have been considerable undertakings requiring the quarrying of suitable stone, stone dressing, transportation, and construction. Thus quarrymen, labourers, carters, stonemasons, lime burners, architects, and carpenters would all be required to undertake highly specialist work, even by the standards of today. And this would be costly. It is not surprising, therefore that in the more remote and marginal land of the National Park, few large building projects were undertaken during Medieval times.
In the post-Medieval period, the revolution in land tenure and the growth of inward investment, particularly following the Union of the Crowns in 1603, brought relative economic prosperity to a small band of local head men and a number of incomers attracted by low land prices and rents (Watts, 1975, 164-5). Prior to this time the people of these wild and remote districts were said to inhabit dwellings built of little more than turf and timber. However, these new developments heralded the arrival of a new form of building known today as the bastle house, representing a huge increase in capital investment, of permanence and of protection. The bastles were commissioned by men of means and built by men with all the skills displayed in the construction of high status building projects in the preceding age. That many hundreds of these buildings were constructed (from Weardale to Clydesdale) in a matter of decades suggests a countryside almost alive with the sounds of hammer upon chisel, of the clatter of waggons laden with blocks, and of the noxious smell of burning limestone emanating from crude lime burning clamps.

During the seventeenth century, freestones were required in considerable quantities for the improvement of many of the old Border holds to provide more favourable living conditions. This is exactly what happened at Hesleyside, and many new country homes were constructed, often obliterating more humble settlements, such as the original Hethpool House in the College Valley.

Another significant revolution in stone use occurred during the eighteenth century with the drive towards the permanent division of common land represented by the Enclosure Acts. The hedges on sod cast dykes that typified earlier irregular enclosures on the moors were replaced by a geometric pattern of fields enclosed with drystone walls. Large areas of surface stones were quarried, convenient crags were utilized wherever possible, and the burial cairns that had survived millennia were found a ready use. This was an age of agricultural improvement, where farms were designed using principles of efficiency.

A new programme of farm building was also undertaken throughout the second half of the eighteenth and more particularly in the first half of the nineteenth century, and most of the farm buildings in the Park relate to this period. Again, local stone was exploited, though in the Cheviot area the andesites were suitable only as random rubble for walls, and freestones were brought from considerable distances for sills, lintels, etc (Carruthers et al., 1932, 147). One exception is the pitchstone-andesite
from Thompson’s Walls, which dresses almost like a freestone and was used in
squared coursing in the construction of Yetholm Church. Throughout this period
many of the principal settlements expanded, requiring stone from large local quarries.
The growth of Bellingham, for example, was facilitated with stone supplied
principally from the nearby Longheughshields Quarry (Frost and Holliday, 1980, 86).
The development of the major urban centres also required large quantities of stone
and extensive quarries were worked just outside the Park boundary at Prudhamstone
and Blaxter, supplying building stone for Newcastle and Edinburgh respectively.

We are left then with many ‘holes’ in our landscape, holes which are all too easily
dismissed as ugly, are infilled or become refuse tips for agricultural and domestic
waste. Yet the very fabric of the Park, its patchwork of dispersed farmsteads and
drystone walls, are all reminders of our reliance upon stone. Local stone is an
essential element of the local built environment and it would be a shame if future
generations were condemned to build or conserve with inappropriate stone from
elsewhere. Each stone is unique to its location; no two stones will weather together.

Lime
From Roman times, lime has been required for mortar for building, but from the later
eighteenth century agricultural improvements led to the widespread use of lime to
‘sweaten’ acidic soils (reduce acidity), improve the soil structure and availability of
plant nutrients, and allow soil organisms to be more active (Younger and Almond,
1989, 47). The application of lime could significantly increase the value of the land.

The heyday of the upland lime kiln perhaps came during the Napoleonic period, with
the increased price of corn and in consequence an increase in the amount of land
under cultivation (Younger and Almond, 1989, 42). During this time, most of the
slopes of the main valleys, such as the North Tyne and Rede were under cultivation,
and corn was grown as high as it could be made to ripen. In the 1830s wheat was
grown in Tarset at an elevation of more than 700 feet (213m), and rye at Highfield at
800 feet (244m). In the 1820s corn crops were said to occupy most of the ground
between Otterburn and Elsdon (Miller, 1887, 125).

Many small, seasonally operated kilns sprang up on farms, whilst some of the larger
landowners established estate kilns, compelling their tenants to lime their land but
preventing them from burning their own (Younger and Almond, 1989, 41). A small
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number of commercial limekilns such as Greatchesters, Rookem, and the Buzzard Crag and Whitelee limeworks at Batinghope were established, primarily to supply lime to the neighbouring districts of Scotland (Miller, 1887, 122). The Whitelee limekilns were established by a consortium of Scottish landowners led by Major Rutherford of Edgerston and were locally known as the ‘Concern’ (Clough, 1889, 54). Cultivation declined steadily throughout the remainder of the century, in tandem with the decline of local lime burning and milling, chiefly caused by increasing labour costs and declining cereal prices due to cheap imported cereals from the continent (Miller, 1887, 126).

Many fine limekilns survive and a number have been conserved and interpreted for the public by the Park Authority. A fine example can be seen at Tosson, near Rothbury, where the Alnwick architect George Reavell in 1888 designed a kiln of uncommon architectural sophistication, perhaps telling us more about how the venture viewed itself, and wished to be viewed, than about the process of lime burning. Other fine examples can be seen at Low Alwinton, Coquetdale and Crindledykes, South of Housesteads.

Road Metal
The construction of turnpike roads and the later modernisation of the road network all required large quantities of stone for road metal. In Redesdale and Coquetdale the road metal has been quarried from the limestones and the basalt dykes (Miller, 1887, 122), whilst the Cheviot andesite was quarried south of Wooler in the north (Carruthers et al., 1932, 147). The dolerite of the Whin Sill is however the most important road metal to have been quarried within the Park, principally at Walltown, which worked from 1876 until 1976, and at Cawfields, both destroying part of Hadrian’s Wall in the process. Following the closure of these quarries, both sites are now managed by the Park Authority as car parks and recreational areas. The only permanently active quarry within the Park today is Harden Quarry at Biddlestone. This produces the distinctive red stone known as Harden Red, used in the resurfacing of The Mall and the grounds of Buckingham Palace in London.

Millstones and Milling
The Fell Sandstone is occasionally gritty enough to produce stone suitable for grinding corn, and at Harbottle Crags (Fig.11.9) this stone has been worked for
millstones since at least the sixteenth century. It may have supplied a mill which existed in 1539 at nearby Holystone (LUAU, 2000, 15), but was never-the-less well-established by 1604, when it was held by Persivall Potte by custom and was valued at £10 annually (Sanderson, 1891, 105). The documentary evidence suggests that the quarry was out of use by the early nineteenth century. A recent survey commissioned by the Park Authority (LUAU, 2000) recorded some 137 discarded or unfinished millstones and 476 voids or quarry pits in an area of the quarry stripped of heather by a moorland fire. These remnants serve to remind us of this once important local industry but more perhaps of the numerous corn mills that once existed throughout the area.

One such mill was Grasslees, established between 1604 and 1618 (Cranstone, 1994, 1-2) by Alan and William Wanlass. The mill was part of a dramatic expansion of milling, and, by association, with cereal cultivation during the seventeenth century. In 1662 it passed by marriage to William Hedley of Landshot after which it was tenanted until its abandonment as a mill sometime in the 1870s, a further casualty of the influx of cheap cereals from the continent. Four millstones remain on the now fragmentary site, one course gritted resembling the Fell Sandstone on Harbottle Crags, one very fine grained probable ‘blue stone’ from the Eifel region of Germany, with the remaining stones of intermediate grain, reflecting the range from coarse shelling through to fine milling (Cranstone, 1994, 11).

**Transportation**

The Romans were the first to introduce a system of carefully engineered roads and bridges superimposed upon a landscape of primitive trackways and fording points, and until comparatively recently these remained the only engineered roads and still provided the framework for Northumberland’s transport network. Indeed when the monks of Lindisfarne conveyed Cuthbert’s remains they did so using the Roman road network (O’Sullivan and Young, 1995, 39). However these roads were few and following the withdrawal of the Roman administration the major part of this remote landscape continued, as before, to be held together by a network of un-maintained, barely passable, track-ways. It would be a further twelve centuries before the trunk road would re-emerge under the inspiration of Macadam and Telford (Wilkinson, 1934, xii).
As Bird (1969, 12) notes, the original word ‘road’ meant a right of passage rather than the surface upon which that right could be exercised. In theory maintenance could not be enforced, and evasion of obligations towards maintenance was the rule rather than the exception. During Medieval times, responsibility for maintaining the means of passage for the King, his officers and subjects, fell upon the parish and was classed as a charge on land so was adhered to sparingly and irregularly.

In 1555 a new system was introduced requiring everybody to do their share, by labour in person or money payment (Wilkinson, 1934, xiii). The inequalities of this system were obvious, as the better maintained the road the more use it encouraged, and considerable damage could be caused by livestock, sled and drag carriage of bulk items, a situation made more acute when wheeled vehicles became more widespread (ibid 1934, xiii). Thus many parishes were reluctant to maintain the surfaces at their own expense, and this often led to little improvement and frequent indictments of parishes and landowners at the Quarter Sessions. Indeed, sixteenth century county officials in Northumberland were forced by the poor condition of the roads and bridges to conduct their business on horseback (Watts, 1975, 38). Thus the early state of the transport system impeded both the social and economic condition of the rural landscape, and this was magnified in remote areas such as Redesdale and the North Tyne Valley.

In the mid eighteenth century, a virtual transport revolution occurred with the introduction of the first turnpike roads on the principal routes, inspired by local landowners and commercial farming concerns, which provided more efficient year-round traffic, considerably reducing overland transport costs. Established by Act of Parliament and supported by subscription, fees for usage were collected at strategic points and in theory the revenue would provide enough funds to maintain the roads in good order.

The first turnpike to be built in Northumberland was the so-called Military Road from Newcastle to Carlisle constructed between 1751 and 1757, crossing the southern edge of the Park. Legend records this venture as one of General Wade’s Roads, built in response to his difficulty during the 1745 Jacobite Rebellion in conveying his forces from their encampment on Newcastle Town Moor to the relief of Carlisle. Wade however died in 1748 and as Lawson observes (1966, 193) ‘while it is unlikely that he [Wade] had any part in the petition, it is certain he had nothing to do with its
construction’. The petition included the names of several hundred commissioners from leading landowning families, largely from Northumberland.

When the Act came before Parliament, three of Wade’s former officers did give evidence as to the difficulties encountered on their abortive march to Carlisle. Major-General Chalmondeley gave the reason as ‘the Badness of the Road, which was almost impassable for the Carriages, and quite so for Artillery’. Unlike most other turnpikes it was considered impossible to improve the existing route by means of subscription and the costs were met by the Parliamentary Committee of Supply. Given that the Trustees were spending government money, the construction of the road and its infrastructure of toll-houses, bridges and milestones were to a higher standard that was the norm.

The Jedburgh to Newcastle Turnpike, which was constructed between 1801 and 1806, forms part of the modern A68, marking the boundary of the Park from Carter Bar to Low Byrness, then dissecting the Park to Elishaw where the A68 leaves the turnpike and follows the course of Dere Street southwards. Funded by subscription, the turnpike was established in response to increased traffic, particularly the coal trade across the Border via the Redeswire and the consequential deterioration of the road. A number of contemporary bridges, culverts and milestones survive, but no systematic archaeological survey of the route has yet been undertaken.

A private toll road was constructed in the early nineteenth century above Kielder by Sir John Swinburne of Capheaton to facilitate coal transport from the Upper North Tyne across the Borders to Hawick. The monument at Bloody Bush on the Border marks the location of the Toll Bar (Mack, 1926, 183-5).

By the time Bailey and Culley undertook their survey of the state of agriculture in Northumberland at the end of the eighteenth century, the turnpike roads in the county were deemed ‘mostly in good order’. The local township roads, however, were largely in a deplorable state, which they attributed to neglect and the manner of performing statute work (Bailey and Culley, 1805, 169). In their report they record the contemporary interest in the construction of a grand canal from Newcastle to Maryport through the Tyne Gap (Bailey and Culley, 1805, 171). This was ultimately to come to nothing, however, due to fierce objections from landowners and the growing interest in waggonways and inclines that led to the development of railways.
in the early nineteenth century. In 1830 work began on the Newcastle to Carlisle Railway which was completed in stages, with the crossing of the Tyne completed in 1839. The line had a profound effect on the communities of the Tyne Valley, cutting the transport time for goods from three days by cart from Newcastle to Carlisle to just three and a half hours (Wells, 1999, 25-28). This inevitably stimulated industrial activity at various locations along the line, such as Haltwistle, providing employment in a variety of industries, not least in the coal industry.

The Border Counties Railway Company formed in 1845. In 1860 it amalgamated with the North British Railway which had intended to create an independent line connecting Scotland to the Newcastle to Carlisle line. Although the railway had arrived at Bellingham as early as 1855, the line did not become fully functional between Hexham and Riccarton Junction until 1862. This line closed to passengers in 1956, and in 1958 the freight link from Bellingham to Riccarton Junction also closed. The final section from Bellingham to Reedsmouth closed to freight in 1963. A coal depot was built at Bellingham station and a coal and lime depot at Falstone. Following closure, the track and signalling equipment was scrapped and parts of the line returned to agriculture. Some elements remain however, such as the station and signal box at Falstone, the magnificent Kielder Viaduct, a fine viaduct with two skewed arches at Tarset, and an array of cattle arches, sheep creeps, culverts, occupation crossings and under line bridges.

In 1845, the Newcastle and Berwick Railway Company received authorization to construct a railway line between Gateshead and Berwick, including powers to construct branch lines. In September 1887 a branch from Alnwick to Coldstream was opened by the then North Eastern Railway. The Coldstream Station was actually located across the Tweed at Cornhill, at which point it connected to the Tweedsmouth to Kelso line. The service was never profitable and during the 1920s competition from road transport for both passengers and goods caused serious reductions in usage. The main problem with the line was that most of the stations were situated in remote locations, a long way from the communities they were meant to serve. All passenger services on the Branch were withdrawn at the end of the summer timetable in September 1930. In 1948, a flood washed out the line between Wooler and Ilderton and it was not rebuilt due to the high cost. The route (goods only) continued in two parts - Alnwick to Ilderton (finally closed 2nd March 1953), and Wooler to Coldstream.
(closed 29th March 1965) (Hoole, 1973, 178). The final journey on the line was a special steam locomotive service for railway enthusiasts in 1968 (Chris Donald pers. comm.). Though the recyclable fixtures of the line were removed, many of the fine buildings have survived and are now in residential use.

**Water Supply**
The National Park itself is particularly well-supplied with springs and wells of varying quality, and, as in most remote areas, these have been tapped for local water supply. However, forecasts of critical water shortages on Tyneside, caused by the steady growth of its industrial population, led to the construction of the Catcleugh Reservoir in Upper Redesdale. Built between 1889 and 1905 by the Newcastle and Gateshead Water Company, it was to have a major impact on the local landscape and for a short time upon the local community. It even required the construction of a narrow gauge railway from West Woodburn Station on the Border Counties Line to Catcleugh for both freight and workers, with a branch line to a clay pit at Yatesfield (Rennison, 1979, 173). At its peak up to a thousand men were employed and most of them and their families were accommodated in two temporary villages (fig.11.10). Situated on either side of the river, they became known as Newcastle and Gateshead. In 1899 504 persons were living in 47 huts (Rennison, 1979, 218). Only one hut remains (fig.11.11), and this has been authentically restored both internally and externally by the Park Authority in partnership with Northumbrian Water. The more recent reservoir at Kielder is on a much greater scale, and is discussed by Frodsham in Part I of this volume.

**Concluding Remarks**
As Day and Charlton (1981, 290-1) note, the development of extractive rural industries owed much to contemporary agrarian advances, advances which also provided transport improvements. Therefore, these industries were both restricted in size and duration. Once they had satisfied domestic needs of the immediate locality, they began to decline. When the expansion in agriculture during the thirteenth century required iron tools, these were produced locally until the plague and Border conflict conspired to reduce demand. When the building booms of the seventeenth and nineteenth centuries required building stone, local quarries were worked. While cereals were widely grown there were mills, requiring millstones. When the
depression in agriculture set in, during the later nineteenth century, arable was once again turned back to pasture thus reducing local demand for lime, drains and coal. Only a small number of the more developed mines continued to satisfy local demand into the twentieth century. Demand for the transportation of commodities led to first the turnpikes, then the railway, and today modern roads, which continue to facilitate today’s main rural industry – tourism. Only the water industry saw lasting developments, but this was led by purely external factors relating to urban industrial demand.

This briefest of outlines cannot do justice to such a vast subject area, with each and every element deserving of a paper in its own right. It is clear that the scope for further documentary research, fieldwork and oral history is considerable. It is hoped that this brief account will act as a stimulus to historians and archaeologists to investigate more fully this often overlooked, but none-the-less important aspect of the Northumberland National Park’s cultural heritage.

All of the above simply serves to show what a wealth of opportunity there is for future research into the archaeology of the post-Medieval period. We have not touched on the archaeology of the pottery industry, engineering in general, shipbuilding in particular, or the wealth of other industrial activities which heralded Tyneside and Northumberland’s rise to fame in the eighteenth, nineteenth and early twentieth centuries. Much still remains to be done in both the County as a whole and the National Park as a microcosm of the broader picture.
REFERENCES

Readers wishing to discover more about the history of any part of the National Park should consult the relevant volume of ‘A History of Northumberland’. These fifteen volumes were published between 1893 and 1940, and cover most of the county. Most of the National Park is covered by volumes XI, XIV and XV. They do not, however, cover some areas which were deemed to have been covered in sufficient detail in earlier publications (for Elsdon and Redesdale, see J. Hodgson’s (1820) History of Northumberland part I vol. I, and for the Hadrian’s Wall corridor see J. Hodgson’s (1841) History of Northumberland part II vol. III).


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CONSOLIDATED LIST OF UNPRIORITISED RESEARCH TOPICS

PALEOENVIRONMENT

Palynology

- There is a general need to increase the pollen coverage for the northern half of the park area. At the moment there is a clear bias in terms of available data towards the south of the park. Suitable locations should be identified for sampling in a long-term programme of resource/knowledge enhancement. One way that this might be facilitated is through a partnership/joint research studentship with one of the region’s universities. Such a programme could have various uses:

  i) It would inform broader conservation decisions in the northern area of the Park e.g. tree planting ‘re-wilding’ schemes.

  ii) It would broaden our insights into climatic fluctuations in the area over time.

  iii) It would provide data relating to the human manipulation of the forest cover over time that would stand as a proxy indicator of human activity in the region in the light of a lack of detailed archaeological evidence (e.g. Mesolithic/Neolithic activity).

  iv) It would contribute to our general understanding of archaeological sites and landscapes.

The overall aim of such a programme of sampling would be to provide a holistic understanding of the principle agencies of environmental change (e.g. climatic, anthropogenic and autogenic) in the evolution of the northern Park uplands from the end of the last Ice Age to the present day. It would provide a detailed temporal and spatial understanding of vegetation patterns through the construction of an integrated network of sample sites, all of which were independently dated by radiocarbon assay. Linked to this, and to continued palynological research in the Park as a whole are a series of more general research issues and questions:
General Research Questions

It would be useful to have some enhanced insight into:

- The chronology of the recolonization of the Park area by trees and shrubs at the end of the Last Ice Age.

- The onset of peat formation at various locations within the Park.

- The overall impact of Mesolithic groups on the vegetation cover. This could be facilitated through fine resolution pollen analyses at selected sites.

- The nature of the regional transition to agriculture. This could be facilitated through fine resolution pollen analyses at selected sites.

- The chronology and character of the Elm Decline and the first appearance of Lime (*Tilia*).

- The earliest evidence for cereal cultivation and the nature of early farming impacts on the vegetation cover.

- Localized variations in Bronze Age agricultural activity. This is particularly important given the increasing evidence for developed upland settlement in the region in the early/middle Bronze Age and the arguments relating to landscape/settlement desertion highlighted above.

- The variable impacts of Iron Age and Roman/Romano-British communities on the existing vegetation cover. This would go some way to resolve arguments about the impact of the Roman Army on the regional landscape.

- The nature of immediately post-Roman land-use. This would contribute towards archaeological/historical debates about societal collapse or continuity after the Roman departure.

- The nature of agricultural activity and vegetational impacts or regenerations during the period of Border turmoil from the late thirteenth to the seventeenth century AD. This aspect of palynological research would have important implications for our broader understanding of the workings of the landscape at the time of the Pele towers and Bastles.
Plant Macro-fossils

As highlighted above, the range of archaeological sites producing plant macro-fossils is slight, not just for the NNP but for Northumberland as a whole. As a result, every opportunity should be taken during excavation work in the region to sample sites, of all periods, for such remains. Survival of information will invariably be fortuitous but any such evidence from archaeological contexts is a material contribution to our understanding of the dietary practices of earlier communities. As Stallibrass and Huntley have said a major, but very general, question has simply to be ‘what was being done by whom and where?’ (Stallibrass and Huntley, 1995, 64).

General Research Questions

Within this general quest for more basic information the following topics of interest should be noted:

• Are there any Mesolithic sites producing cereal remains?

• What was the range of plant materials actively cultivated and collected during the Neolithic period?

• At what point in the Bronze Age do spelt wheat and hulled barley make their first appearance?

• Were bread wheat and rye proper cultigens during the Iron Age or merely ‘weeds’?

• Is there any discernible difference between the dietary practices of Roman military sites and contemporary ‘native’ settlements? To what extent was the Roman food supply ‘local’?

• Is there any discernible difference between the dietary practices visible on early Medieval secular and monastic/religious sites?

Faunal Research

Our knowledge of the human exploitation of the fauna in the area of the National Park over time is also limited because of a lack of surviving data from archaeological sites.

Again then every opportunity must be taken during excavations to collect faunal remains where they survive. Particular attention should be paid to settlement sites of
all periods located in the limestone areas of the Park where soils should be less acidic and conditions for bone preservation should be enhanced. Some assessment of the potential of settlement sites in various environmental zones to produce faunal material should be undertaken.

**General Research Questions**

The following topics of research interest should be noted:

**Mesolithic**
- What was the faunal composition of the area before the human re-colonization of the region?
- What species did people exploit in the Mesolithic period?
- Did Mesolithic faunal exploitation vary in different ecological zones?
- Can we assess the relative contributions of plants and animals to the regional Mesolithic diet?
- Do faunal remains allow us to identify seasonal occupation(s) of Mesolithic sites?
- Can we identify evidence for proto-domestication or animal management from the Mesolithic faunal record?

**Neolithic**
- How did domestic animals replace the wild contribution to the food chain?
- Did the Mesolithic/Neolithic transition take place at different times in different locations? Were the mechanisms of replacement the same in all locations?
- How were wild and domesticated cattle exploited in the Neolithic period?
- Were Neolithic perceptions of animals different to those of Mesolithic communities?

**Bronze Age**
- Is there any evidence for a ‘Secondary Products Revolution’ in northern England in the Bronze Age?
• How might emergent Bronze Age field systems relate to animal exploitation patterns?

• Were there any discernible changes in the exploitation of livestock in response to Bronze Age climatic change?

**Iron Age**

• ‘Does the popular image of the cattle raiding Celts fit the data? How do the faunal collections compare with the sheep dominated faunas of southern Iron Age sites’ (Huntley and Stallibrass, 1995, 123).

• What were horses used for in the northern Iron Age?

**Roman**

• What was the impact of the Roman presence on the faunal make-up of northern England?

• Were Roman forts provisioned locally or can we see variation in terms of geographical location?

• What faunal variations (if any) can be seen on forts, *vici* and rural settlements?

• Can faunal remains shed light on the ethnic affiliations of various military groups along the line of Hadrian’s Wall?

• ‘Were new types of livestock introduced during the Roman period, and/or did new methods of livestock management permit new developments based on indigenous stock?’ (Huntley and Stallibrass, 1995, 135).

• How were wild fauna exploited in the Roman period?

**Early Medieval**

• Did sites occupied in the Roman period continue in use after the Roman departure or were new sites and areas settled?

• How were wild resources used in this period?

**Late Medieval**

• What links are there between rural sites and urban developments in terms of varied patterns of faunal resource exploitation?
• How do the documentary references relating to land holdings and land-use patterns in the area relate to the picture of animal exploitation that can be deduced from surviving faunal remains?

• How did Peles and Bastles function in terms of their animal exploitation and management strategies?

Post-Medieval

• Did ‘town/country’ relationships change over time?

• How and when did the ‘agricultural revolution’ in the management and breeding of livestock affect practices in the region? (Huntley and Stallibrass, 1995, 187).

Soil Science

• Further insights into humanly induced soil erosion could be gained by replicating Mercer and Tipping’s 1994 work in other parts of the NNPA area.

• Increased attention should be paid to the analysis of buried soil and other horizons recovered in the course of excavations with the express intention of understanding pedogenic processes. This will in turn allow the identification of ‘natural’ and humanly induced effects. Specific projects could be designed to sample areas such as ‘cultivation terraces’ etc. with a view to establishing the chronology and context of soils development and profile change.

Fluvial Geomorphology

• Passmore et al.’s research in the Tyne Valley has shown the way here. Specific partnership projects should be designed to capitalize on the expertise of the Dept. of Geography at Newcastle University. The geomorphological mapping pioneered by Moores (1998) could, and should, be extended to other areas of the river system within the NNP. The identification of other areas of old, in-filled, river-channels is paramount if we are to broaden our understanding of lowland landscape exploitation within the Park. In this light, the proposal for a detailed mapping project within the Milfield Basin area (Passmore et al., 2002) could be extended to include the terrace system of the River Breamish around Ingram, the Harthope Burn and even the College
Valley. A similar programme of mapping, coring, pollen and soil analysis and dating could be carried out for Coquetdale.

Passmore et al.'s geoarchaeological approach to understanding river valley development has a great potential contribution to make to a greater understanding of the human impact on the landscape of the NNP.
PREHISTORIC

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

  ii) 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 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 territorialia 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,
An Archaeological Research Framework for Northumberland National Park

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.

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/offering etc. Similar work might be undertaken on stone tools and other artefacts with the potential to demonstrate surviving residues.

• Isotope analysis of human bones to identify origins of early inhabitants.

• Targeted dating to improve chronological understanding for the prehistoric period.
THE ROMANS BEYOND HADRIAN’S WALL

Military Archaeology

i) Roman Forts

Away from the Hadrian’s Wall corridor there is only one Roman fort within the National Park boundary, High Rochester, (*Bremenium*). While this site has seen some excavation and survey there are still some questions outstanding, relating to the chronology of the site’s development and final abandonment. These can only really be addressed by more targeted excavation carried out to the most exacting modern standards. Specific areas for research might include:

- What is the earliest evidence for a fort on the site?
- The date of the final abandonment of the site.
- The sequence of internal developments.

Attention to all three of these areas would go some way to resolving problems thrown up by Richmond’s excavations and subsequent research and it would also help to set the fortunes of the fort against the backdrop of the phases of military campaigning north of the Wall. Answers could only be provided by more excavation at the site.

- Relationship of High Rochester to the forts along the Wall in terms of its development, use and final abandonment. How was it integrated into the wider military scheme of things?

- Relationship of High Rochester to the forts along the Wall in terms of similarities/differences in the economic base of the site? How was it supplied? - locally or from central stores etc. Contribution of the immediate hinterland and comparative studies of Wall forts at similar points in time.

- Impact of the Roman army on the area around the fort, i.e. on the indigenous population, subsistence systems etc. A contextualisation of the fort in its broader hinterland. This could integrate a lot of the previous survey work and might lead to its final publication. It would also necessitate a program of research on the ‘native’ settlements in the area around High Rochester. Recent work by Tim Gates has suggested that,
‘some of the largest and best preserved late prehistoric field systems in Northumberland are to be found on the grassy moorlands that overlook the Roman fort at High Rochester, though none have been subject to detailed analytical survey’ (Gates forthcoming). There are indeed some 15 stone built ‘rectilinear’ settlements within a 5km radius of the fort and while only Woolaw has been excavated to date (see above) it ‘seems very unlikely that at least a proportion of these settlements will not have been occupied at the same time as the Roman fort’ (Gates, forthcoming). Indeed this does raise the interesting question of whether the construction of the fort itself stimulated the expansion of ‘native’ settlement and agriculture in the surrounding area.

- Why didn’t a vicus develop around the fort?
- More work on the Petty Knowes cemetery to try and establish a more detailed relationship with the fort’s occupants and to gain a greater insight into the chronology and development of the cemetery itself.
- Further research on other potential cemetery locations around the fort. This might start by examining Richmond’s suggested area ‘near the turn in Dere Street’ (1940, 152) where two of the tombstones from the site were recorded in the nineteenth century (Hodgson, 1827, 90).
- Better ways of presenting the fort to the public.

ii) Temporary/Marching Camps, Semi-Permanent Camps and Permanent Fortlets.

As highlighted above, these categories of site have seen virtually no meaningful excavation. Clearly there are basic research questions that need addressing both for individual sites and for the category of ‘camps and fortlets’ as a whole. Again, most of these issues can only be resolved by further excavation. Topics might include:

- Production of a firmer chronology for the origins and development of the temporary camps in the Park.
- Greater insight into construction techniques and any interior features present.
- Comparison with other complexes of camps elsewhere in the Empire.
These areas could be addressed by a campaign of targeted excavation across the whole category of these sites and also by a programme of detailed geophysical research on all of the recorded sites. Individual, site orientated, questions might involve:

- **Examination of the Bagraw camp to further elucidate the relationship between the two earthwork elements of the site. In particular it would be useful to test:**
  
i) Maclauchlan’s proposal (1852a, 32) that the camp was doubled in size, with the southern element being later than that to the north.
  
ii) Richmond’s contention (1940, 120) that it had been one elongated camp that had been subsequently divided into two.
  
iii) Welfare and Swan’s assertion, (1995, 74), that the southern part of the camp played a subsidiary role, forming an annexe to a contemporary or slightly earlier camp to the north, ‘the semi-permanent status of which may be indicated by its well developed quasi-axial roadway’ (1995, 74). The nature of this supposed roadway could also be ascertained

- **Examination of the Birdhope camps to elucidate:**
  
i) The chronology and stratigraphical relationship of the three superimposed monuments.
  
ii) The nature of the so-called Roman mausolea and the small circular barrows inside the area of Camp 1 and outside its SE angle. These may well be related to the Petty Knowes cemetery.

- **Examination of the Chew Green Camps to elucidate:**
  
i) Richmond and Keeney’s original scheme for the development of the complex (1937) and in particular to prove or disprove the existence of ‘Fortlet II’ known only from Richmond and Keeney’s trenching work.
ii) To test Welfare and Swann’s (1995, 88-89) proposed scheme of development, based on recent re-survey work by what is now English Heritage (formerly RCHME).

iii) The nature of the internal roadways and supposed *ballistaria* in Fort IV.

iv) The nature of the so-called ‘stock enclosures’ that in places overlie the earthworks and run along the line of Dere Street. Are they Roman, Medieval or even later in date?

v) The nature of the supposed Norman Chapel placed inside Fortlet V. This was excavated by C.C. Hodges in 1883 and never fully published (Bosanquet, 1925).

- Examination of the Silloans Camp to elucidate:
  i) The chronological relationship between the camp and Dere Street which bisects it.

- Examination of the Sills Burn North Camp to elucidate:
  i) The relationship of the camp to the earthwork visible at its south east corner. This appears to precede the rig and furrow in the area and might represent a small annexe to the camp.

**Roman Roads**

As we have seen above, the course of the Roman roads in the Park area is relatively well understood as are the methods used in their construction. We also have a good idea about the current state of their preservation. There are however some relevant research questions that might still be asked about these features.

- Was the road system laid out *de novo* or was it following an earlier system of route-ways?

- What was the effect of the construction of the Roman roads on the ‘native’ population and the ‘social’ landscape? Recently Taylor has highlighted the impact of the Roman road from Brough to York on what he has termed the ‘social landscape’ of the area around Hayton Beck on the Wolds of East Yorkshire. (Taylor, 2001, 53- 55). Here the
construction of a short-lived Roman fort at Hayton Beck itself seems to have had little impact on the orientation of the landscape. What caused more upheaval was the construction of the road which by the 2nd century AD had become a focus for a substantial roadside settlement and which had led to the ‘ladder’ settlement at Burnby Lane being re-organised from two separate compounds into a single villa flanked by additional buildings. As Taylor says, ‘It seems that the ‘grain’ of this landscape was changed as settlement and landscape gravitated towards the road, both here and further south at Shiptonthorpe… during the later Roman period’ (Taylor, 2001, 53). Is there any evidence for a possible similar effect in the area of the Northumberland National Park?

‘Native’/Civilian Archaeology

Settlement Sites

Rectilinear Settlements, Scooped Settlements, Enclosed Stone-Built Settlements of ‘Cheviot’ Type

Clearly all of these categories of site require further excavation to enhance our knowledge of their chronology, development, function(s), material culture and economy. We do not have a large enough sample of excavated sites in any category on which to base a serious discussion of the areas outlined above. Once these basic building blocks are in place we might move beyond the sites themselves to consider topics such as:

- Assessments of the landscape contexts of these different settlement sites. This can only be achieved by detailed air and ground survey around selected sites and areas. This would facilitate an analytical rather than descriptive approach to the study of settlement patterns, field systems and the utilisation of the landscape in general (c.f. Gates, 1981). As Taylor has recently argued,’..it should be possible to study the dynamics of changing patterns of settlement location, land division and land use as a guide to changing rural social organization even if we cannot access tenurial and political relationships directly. Archaeological strategies that deliberately focus on the role, extent form and chronology of field systems utilizing
prospection, geo-archaeological and palaeo-environmental techniques hold out exciting possibilities for extending our understanding of the complex patchwork of land use strategies suggested by some important extant surveys’ (Taylor, 2001, 56).

- Differential structuring of social space on the different categories of settlement site. Can these be observed? If so do they represent different levels of social structure and differences in social relations on the settlements? Should we equate a lack of material culture items with overall poverty on these sites? Might ‘wealth’ be measured in a range of different ways among the indigenous populations of the area? Is there any evidence for continuity/disruption of the social processes that were observable in the Iron Age period? (see Taylor, 2001, 48 – 54).

- Relationship between different categories of settlement type and also relationships with the Roman military powers. What impact did the military presence have on the economy and social structure of indigenous groups? Did the through flow of military forces in the area north of the Wall over several centuries have any real discernible effect on the indigenous settlement pattern and economy? Did the growth of vici at military sites have an impact on rural settlement patterns? (see above and see also Higham, 1981, 105-122; Breeze, 1981, 148 – 165; Taylor, 2001, 47 –49)

**Religious/Burial Sites**

Clearly the discovery of more religious sites like the South Yardhope Romano-Celtic shrine is likely to be fortuitous.

- Further excavation could be carried out at sites like Petty Knowes, however, with a view to confirming the chronological, stratigraphic and cultural observations made in the course of the earlier excavations.

- Similarly, as already mentioned, work could be carried out to assess the nature of the supposed Roman burials associated with the temporary camps at Birdhope.
EARLY MEDIEVAL
For the area of the National Park, and indeed for Northumberland as a whole, there is still a need to collect more archaeological data about almost all aspects of the period from the end of Roman Britain until the coming of the Normans. The following list of topics should be seen merely as a first statement for discussion.

The Roman/ Anglo Saxon Transition
Traditional models for the transition from the Roman to Anglo-Saxon periods are based to a great extent on a literal interpretation of much later historical sources. It is widely accepted now that there was some folk movement to England from NW Europe, but most would now argue that it is highly unlikely that the native population of Eastern England in the C5th AD was replaced or removed completely. Does the presence of Anglian artifacts or the use of buildings with sunken floors imply that their users and builders were actual immigrants? Should we continue to accept the traditional document based model for the transition at face value or should we view it as simply one possible framework within which the transition may have taken place? If the latter course is taken then we must strive to test alternatives and the traditional view against available archaeological data (c.f. Wilmott and Wilson, 2000).

The Fate of Hadrian’s Wall
What happened along the line of the Wall in the aftermath of the Roman withdrawal? This topic could be addressed by a thorough re-analysis of the excavation records from the main fort sites along the Wall in the light of recent Late/Post Roman/Early Medieval finds at Birdoswald and Vindolanda. Research might also be more closely focused on the palaeoenvironmental record. This area of work could make a significant contribution to Hadrian’s Wall studies.

- Re-excavation of Ingram Hill with a view to dating the rectangular houses.
- Place name survey within the National Park area.
- Upkeep of Roman road system in Early Medieval period – fate of Roman roads.
- Study of field systems to identify early Medieval elements?
- More work on the emergence of the Township and Parish systems.
- Emergence of the village settlement system.
- Archaeology of early Christianity from Roman period to the Anglo-Saxon conversion and beyond.
MEDIEVAL

As the preceding discussion has suggested, there is much to be done in the area of the National Park in relation to its Medieval archaeology. As a distinctly rural location, questions of urban origins and development are not deemed to be important – most of the large settlements in the region are out with the area of the National Park as presently constituted. As a result the list of unprioritised research topics which follows is structured around the main headings used in the previous discussion e.g.

Rural settlement and Agrarian Activities
Castles, Manors and Military Sites etc.
Religion
Trade and Industry

Rural settlement and agrarian activities

- There is a need for a detailed, modern study of place names within the national Park. This research would cross cut various time periods, but would be an essential element of a better understanding of Medieval activity within the Park e.g. chronology and status of settlements, location of archaeological sites (e.g. mills).

- A study of place name data would also be important in helping to understand the origins and development of the National Park’s village settlements. Obviously to a greater extent this problem has been addressed in the recently completed Historic Village Atlas Project, which has dealt with the history of seventeen ‘historic villages’ within the Park, namely:

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<th>Akeld</th>
<th>Falstone</th>
<th>High Rochester</th>
<th>Tarset</th>
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<tr>
<td>Alnham</td>
<td>Great Tosson</td>
<td>Holystone</td>
<td>West Newton</td>
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<tr>
<td>Alwinton</td>
<td>Greenhaugh</td>
<td>Ingram</td>
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<td>Byrness</td>
<td>Harbottle</td>
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<td>Elsdon</td>
<td>Hethpool</td>
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However, the final report from this project must be seen as merely a platform for further future work on this issue. There is a need for:

i) trial excavations and/or test pitting in some village sites to refine our understanding of the chronology of their founding and development
ii) Geophysical survey of some of the village green and related areas which may show up traces of earlier structures. Villages such as Elsdon would seem to be good candidates for this kind of research which would contribute to our knowledge of the origins and developing morphology of medieval settlement.

iii) More work on building recording, especially the interiors of buildings within the National Park’s historic villages. This must be done with a view to isolating the earliest extant structures and refining our understanding of vernacular architectural development over time.

iv) Programme of dendrochronological dating of structural timbers.

v) Further work on both deserted and shrunken Medieval settlements in the area. In particular we need to set up a programme of selective excavations on some DMV sites. The work at Linbriggs and Alnhamsheles remains of limited value as both of these sites remain unpublished. Efforts should be made to ensure publication of these excavations. Key issues to be addressed are:

   a) chronology of desertion
   b) form and evolution of deserted Medieval settlements
   c) external links of DMVs as evidenced by pottery and other material culture remains.
   d) relationship of deserted sites with the surrounding landscape – nature and extent of contemporary field systems etc.
   e) form and development of ‘peasant’ buildings.

- Programme of research into shieling sites and the nature of seasonal exploitation of landscape niches. This would necessitate a programme of detailed excavation and field survey on shielings, possibly in one research area, and would give a greater insight into the chronology and typology of shieling sites. No shieling site has been fully excavated within the National Park area. Such a programme of work would also throw light onto upland/lowland relationships in terms of land use and agricultural practice over time.
• A programme of further work on isolated farming settlements in lowland locations similar to the work carried out by Harbottle et al. in areas like North Tynedale should be linked to this.

• More work needs to be done in isolating potential Medieval rural cemeteries within the Park area. We have quite a good data set relating to urban cemeteries, but information on rural populations is lacking.

• Understanding the origins, development and processes of use of field systems, especially in upland areas of the National Park such as the Breamish Valley, College Valley etc. This would necessitate a targeted programme of excavation and environmental sampling work at selected sites. It would also necessitate detailed mapping of archaeological features into a GIS and a further review of historic map data and available air photographic coverage.

• Linked to this should be more work on recording extant boundary systems within the Park area. Some work in this field has already been initiated as part of the *Traditional Skills/Traditional Boundaries Training Project*. Detailed programmes of boundary survey which could be carried out by interested local groups or NNPA voluntary ranger staff would be essential to clarify the chronology and development of field systems in the National Park.

• There is also a serious need for more research on the bastles and towers within the Park. These have been well served by detailed architectural surveys as highlighted above, but there has never been any detailed excavation of the bastles themselves. Such work could help to answer questions relating to origins and development of bastle sites, their local and ‘external’ links and relationship of bastles to their surrounding landscape.

• In the light of the above a ‘Bastles Environ Project’ might be developed, geared to collating all known information about the bastle sites within the Park, and then using this data, in conjunction with detailed field survey of related agricultural systems, to write a fully researched history and archaeology of each site.
• Work is also needed on the extent of Medieval emparment within the national Park area. As well as examining the localized field remains, the social /economic impact of such activities (c.f. the development of the deer park at Lordenshaws) should also be examined.

• Medieval Fairs and markets are also worthy of further work. Elsdon was renowned for its fair in the Medieval period (see above). Fair sites would be worth examining for archaeological traces of such activity. Geophysical survey may help here.

**Castles, Manors and Military Sites etc.**

• In general we need to know more about the history and archaeology of the Medieval manorial system within the National Park. Manorial boundaries, manorial structures etc.

• Origins and development of castles within the Park area. This would necessitate a targeted programme of excavation work on castle sites. This would enhance the display and interpretation potential of such locations. Of particular interest would be:
  
  i) The question of the transition from timber motte and bailey castles to stone keeps and the role of early castles (e.g. Tarset, Elsdon) within the border area between England and Scotland.

  ii) Provision of supplies within castles.

  iii) Organisation of space within the bailey areas of extant castles – again geophysics would be important here, linked to targeted excavation.

• Landscape context of castles in the Park–castles in their overall cultural and environmental setting.

• Archaeology of battle sites. Much more needs to be done on the archaeology of the known battle sites within the National Park area. Again this would entail survey work, using geophysical and possible metal detecting techniques in an effort to plot the overall area of battle related activity.
Religion

- Archaeology and history of Holystone Nunnery. This is an important location that is very little understood. The Historic Village Atlas may go some way to setting the site into the broader context of the village itself, but detailed work on the archaeology of the site and its related documentary history is essential.

- Survey of supposed ‘holy wells’ and related sites within the National Park.

- The nature of monastic estates and land holdings in the National Park area – their origins, evolution and development.

- Archaeology of early chapel sites in the National Park area.

- History and Archaeology of Medieval church building in the National Park. This would necessitate a programme of detailed archaeological and architectural analysis of extant church fabric and also, potentially, programmes of geophysical research in the areas around identified Medieval churches.

Trade and Industry

- Identification of Medieval pottery production sites. Only one Medieval pottery kiln (at Eshott) has been excavated in rural Northumberland. More must be out there in the landscape. Documentary evidence and place names could provide essential and so far untapped evidence for this area of research.

- Review of Medieval ceramics from the National Park area. This would entail museum and archive research to collate evidence of all extant Medieval ceramics recovered from excavations within the National Park. Fabric analysis would allow discussions of clay sources to emerge and thus the Park’s Medieval pottery could be linked to material from the larger urban sites such as Newcastle and Berwick, where good chronological and typological sequences of ceramics are available. Such work would also allow a detailed insight into modes of production and distribution and trade within the National Park.

- Mining and extractive industries generally - more needs to be done on the origins, development and social control of all the major Medieval extractive industries

- Archaeology of Medieval coal mining. There are many examples of bell pits and related structures within the National Park. None of these is really
securely dated and little is known about the related technology of extraction. More excavation and field survey is necessary to address this issue.

- Iron production - sites associated with Medieval iron production are a little understood and threatened resource. Research already carried out, as highlighted above, shows the potential for a detailed understanding of iron production within the National Park if more work was forthcoming. A greater understanding of the location of production sites is needed and this would mean further field survey targeted at the identification of iron working locations, especially bloomery sites and further documentary research. It would also be essential to carry out excavations on a range of bloomery and related sites. Areas of particular interest would be:
  
  i) Clarification of chronology and social context of iron production.
  ii) Detailed understanding of both extractive technology (ironstone etc.) and related smelting processes. This would give insight into adjunct industries such as charcoal burning, woodland management.

- Mills and Milling – more detailed research is needed on the history and distribution of grain mills and related structures within the National Park. This would involve a close working relationship with the Northern Mills Research Group and would entail documentary research and field survey to record earthwork structures.

- Stone Quarrying – possibly the most difficult of the Medieval industries to research. Most early quarries are now filled in and if a quarry kept on working then it is usually ‘dated’ by the period in which work ceased. Early extractive working sites are obviously removed by later workings. More work might be possible on the documentary evidence relating to stone quarrying. Much stone would have been needed throughout the Medieval period for castle, church and bastle construction etc. Research might be carried out relating to the petrological analysis of the stone used in such structures. This would identify the mineralogical structure of the stone and might allow the source of the rock to be identified. Such work might then be related back to rock distribution as outlined on existing solid geological map data. The digitisation of existing geological map coverage would further enhance the potential of this kind of work.
POST-MEDIEVAL/MODERN

Clearly, as Frodsham’s introductory remarks, the brief review of post-Medieval archaeological research in the county, and Hedley’s excellent summation of the current state of knowledge of post-Medieval archaeology within the National Park Boundary illustrate, there is a mountain still to climb in terms of the realization of potential research topics in the period after 1601.

Using the headings and subject areas dealt with in the foregoing discussion we might highlight the following topics for further work:

Rural/Agricultural Landscapes and the Archaeology of Landscape Improvement.

- There is clearly a need to promote an holistic approach to landscape studies in the post-Medieval period. These should combine work on houses, parks, gardens, farmland, wastes and commons as well as woodland and rural industry. Projects of the kind outlined above, in relation to North Tynedale and Redesdale, would seem to be the way forward.

- Detailed historic landscape characterization would seem to be essential to pick up all the subtle nuances of landscape change within the period.

- We need to plot lordship and land ownership patterns in this period for the National Park. This will give us the much-needed social background to understand the process of enclosure in the area.

- We need to research the archaeology of land improvement in more detail. This will necessitate the integration of good documentary research with air photographic survey and detailed fieldwalking and recording.

- An important aspect of this work would be the detailed study of ‘model’ farms of the period. This should be carried out to broaden our understanding of the form and function of a range of developing farm buildings in the post-Medieval period, the rate of uptake of innovative and ‘scientific’ farming methods and technologies. This might build on varies existing strands of research e.g. Rowe, 1971; Hellen, 1972; Macdonald, 1975a, 1975b, 1979.

- We need to identify and record features of the fox hunting and game shooting landscapes given the possibility that these might soon disappear completely e.g. kennels, hides, shooting butts, stables etc.
• Can we identify periods of agricultural intensification in the post-Medieval period?
• Linked to this is the need for more detailed survey of fields and field-boundaries. Carried out against the background of a detailed review of available cartographic and documentary evidence in clearly targeted areas this approach could contribute much to our understanding of the development of the land boundary pattern within the National Park. The recent sample survey carried out for the National Park Authority’s bid for funding for its Traditional Skills/Traditional Boundaries training scheme shows the potential of this kind of work.
• Is there an archaeology of post-Medieval forestry? Clearly there probably is, and we should devise ways of examining and researching it.

Rural Settlement and Vernacular Architecture.

• We need to understand the archaeology of the rural household from a programme of survey and excavation on selected sites, and the survey of standing buildings, many of which may still be occupied
• Work could be carried out comparing and contrasting probate inventories with standing buildings, dateable archeological finds and environmental assemblages.
• We need a Park-wide review of our knowledge of vernacular architectural styles and we need to set in motion a programme of building recording that builds on and goes beyond Grundy’s 1987 survey of historic buildings within the National Park.
• There also needs to be a programme of research aimed at recording the enclosure landscape in greater detail (see above).
• We need to excavate more abandoned cottages and farmhouses and related structures, with the aim of gaining a better understanding of the processes of desertion, their impact upon the local economy and the politics of farm-scape desertion and contraction. Again the work in Redesdale and North Tynedale could serve as exemplars here. Scientific approaches also have a key role to play here (e.g. Alexander and Roberts, 1978).
• As with the medieval period (above) there is a need for a programme of general research into shieling sites and the nature of seasonal exploitation of
landscape niches. This would necessitate a programme of detailed excavation and field survey on shielings, possibly in one research area, and would give a greater insight into the chronology and typology of shieling sites. No shieling site has been fully excavated within the National Park area. Such a programme of work would also throw light onto upland/lowland relationships in terms of land use and agricultural practice over time.

- What do we know about the development of the tied cottage system in this period in the National Park area? What can archaeology tell us about the development of smallholdings and allotments in the Park area?
- Can we write an archaeology of the poor in the rural landscape? We should certainly try.
- What light can archaeology shed on the life of the navvy population who built structures such as Catclaeugh and Keilder reservoirs?

Country Houses and Gardens

- We need to instigate research designed to record the architecture of country houses and gardens. There may not be many stately houses within the Park but as Frodsham’s comments above have outlined there are several fine architectural specimens within the Park area and these have not received sufficient detailed attention.
- We should recognize the value of geophysical and topographic survey, excavation and environmental sampling in shedding light on garden and park development.
- More needs to be done on the ecology of gardens and estate landscapes.
- We should pay attention to the social use of space within buildings and across estate landscapes.
- We should examine the manipulation of views and vistas.
- We should examine changing fashions in landscape design and their archaeological corellates. Do landscape design changes percolate downwards through society over time?
- What was the impact of continental ideas on local garden and park design?
- Can we write an archaeology of horticulture?
Industry and Communications

- There is a general need to map industrial landscapes within the National Park – BUT this should not be done in isolation and needs to be integrated with detailed work on the post-Medieval agrarian landscape of the area.

- There is need for a detailed synthetic ‘Industrial History and Archaeology of the Northumberland National Park’.

- Bell pit chronology and technology are poorly understood. Does the technique represent the most simple and cost effective and safe means of seasonal coal working in rural areas where demand for coal was low? We need a targeted programme of survey and excavation on selected bell pit sites.

- We need to carry out detailed survey and recording of the remaining standing structures relating to both coal and lead mining within the National Park.

- What do we know about the history of land contamination by industrial processes? Detailed research in conjunction with partners from academic science departments would be important here.

- Much is known about the history, expansion and decline of the railways within the National Park, but little is known about the remaining standing structures and landscape features relating to the railways. We need to begin to record these before they are lost forever.

- By the same token, more needs to be done on ‘official’ roads and route-ways such as turnpikes. Documentary surveys exist but they do not utilize field data to its full extent.

- ‘Unofficial’ tracks route-ways and drove ways, such as those relating to the transport of coal, lead, millstones etc. and the movement of miners and quarrymen and animals over the landscape should also be researched from both documentary and archaeological sources.

- The processes and structures of milling have received little attention within the national Park. The Northern Mills group is active in the regional generally, but little survey has been done in the National Park area. There is a real need for detailed documentary and archaeological work on mills in the park, with a view to establishing typological and chronological parameters.
PART TWO: RESEARCH STRATEGY
INTRODUCTION
This Research Strategy is organised in terms of a range of cross-cutting themes that has emerged from the overall Resource Assessment and Research Agenda exercise. As will be seen there is considerable overlap between themes.

 Eleven areas have been identified as priority ‘Research Themes’:

1) PALAEOENVIRONMENTAL RESEARCH
2) STONE AGE ARCHAEOLOGY
3) FARMING THROUGH THE AGES
4) DEATH AND BURIAL
5) IDENTITY IN THE ROMAN PERIOD
6) EARLY MEDIEVAL ARCHAEOLOGY
7) BOUNDARIES IN THE LANDSCAPE
8) BASTLES IN CONTEXT
9) MEDIEVAL/POST-MEDIEVAL INDUSTRY
10) TRANSPORT AND COMMUNICATION
11) AREA SPECIFIC RESEARCH PROJECTS

These themes should not be seen as exclusive or set in stone. The whole Strategy will be reviewed every five years as elements of both the archaeological resource base within the National Park and the overall agenda develop and evolve.

In what follows we have tried to outline a brief strategy statement for each of the eleven areas that might lead to constructive research in each field. It is envisaged that these statements will be developed into more detailed research designs, as and when opportunities arise. Some of the elements of the Framework as presently constituted might be addressed by one-off, stand alone projects. Other areas may necessitate a multiplicity of research projects to make a meaningful contribution to the overarching theme.
We envisage that these research projects and activities will be carried out by a range of partnerships including academics, professional contract archaeologists, volunteers etc., and that the Research Framework will allow further integration of archaeological activity with the National Park Archaeological Forum.

A central thrust of the Research Strategy will be partnership working. The National Park Authority cannot possibly lead on all of the research strands outlined above and members of the Archaeology and Historic Environment Team will be actively seeking to set up links with national, regional and local bodies, organisations and individuals to encourage and facilitate research activity. Some projects should be designed to straddle the National Park boundary, and constructive working relationships will besought with adjacent authorities in N. England and S. Scotland.

Of particular importance will be the construction of local, community based research networks through existing projects such as the Coquetdale Community Archaeology Project and the Archaeological Forum, but also at more informal levels. We will also actively seek to encourage University based research projects, in line with the Framework’s aspirations, within the Park. These might be organised as Academic Staff research projects, but there is also much scope for relevant Doctoral, MA/MSc and Undergraduate dissertation research. We are also keen to encourage Adult Education/Lifelong Learning Projects within the National Park and research by specialist local groups such as Northumberland Archaeology Group, North East Vernacular Architecture Group, Border Archaeology Society etc.

Funds for archaeological research are available from a variety of sources, especially for projects which bring together partners from academia and the local communities. The NNPA is uniquely positioned to enable such partnerships, and thus to make available funds which might not otherwise be available in the region. By way of example the Discovering Our Hillfort Heritage Project attracted funds from Europe, the HLF, English Heritage and others for a wide range of research initiatives, few of which would have received funding as stand alone projects. The NNPA will make some funds available for research that enables progress in line with its Vision, but the Authority’s main role will be in helping to obtain funds for partnership ventures. This Research Strategy should be quoted in all grant applications for relevant research, and should help to secure funds for a multitude of well-planned research projects in the National Park over the next few years.
Such research will not be done in isolation, but will be used to inform future conservation and interpretation initiatives. Indeed, research must not be regarded as an ‘optional extra’ – it is an essential element in the Northumberland National Park Authority’s programme for work to manage the historic environment, as well as offering exciting opportunities to local people to get actively involved in archaeological fieldwork.
RESEARCH THEME 1: PALAEOENVIRONMENTAL RESEARCH

As the Palaeoenvironmental Resource Assessment for both the County and the National Park has made clear there is still a marked regional imbalance in our knowledge of the past environment of the north in general. The un prioritised list of research topics has also highlighted the need to increase our knowledge of all aspects of the National Park’s palaeoenvironment.

This is a very broad research area and in the first instance the Archaeology and Historic Environment Team will look to initiate discussions with relevant experts to draw up a programme of targeted research designed to tackle some of the issues that arose in the un prioritised research topic list. A key area of future research interest must be the whole of the National Park to the north of Redesdale. In this area we have seen substantial amounts of archaeological fieldwork over the last twenty years or so but very little accompanying palaeoenvironmental work. The Breamish Valley must be an important area of focus here and given the nature of most of the terrestrial deposits that are likely to be encountered it is envisaged that pollen analysis will be a key research tool.

This sort of research is likely to go out to tender and be carried out by qualified professional archaeologists. Because of the highly technical nature of a lot of the techniques used then local community involvement is likely to be at a minimum.
RESEARCH THEME 2: STONE AGE ARCHAEOLOGY

Very little is known about the Palaeolithic/Mesolithic/Neolithic periods in the area of the National Park when compared with other parts of Britain. There is a real need for targeted data collection relevant to all three periods. This could be realised by research relating to:

i) Re-examination of all existing lithic collections from the region with a view to gaining more up to date knowledge of location, content and context.

ii) Evaluation of rock-shelter sites within the National Park. These are likely to be the locations where relevant palaeoenvironmental as well as archaeological data will be preserved. This could/should be done in conjunction with both amateur and professional archaeologists and some work might well be carried out under the aegis of the Upper Coquetdale Community Archaeology Project.

iii) Formalised field-walking projects in discrete areas of the Park. This kind of work can only be progressed in areas where fields are actively under plough. It is here that projects such as UCCAP will come into their own; as the local network of project participants grows then knowledge about areas about to be ploughed etc. will become more readily available. A programme of fieldwalking should be capable of revealing data relevant to all three ‘stone age’ periods.

iv) Field survey of possible Neolithic cairns within the National Park. As the Resource evaluation exercise has shown there is much uncertainty about the dating of large isolated cairns within the Park area. This would be an ideal topic for a postgraduate research dissertation and at the time of writing one Durham University student has expressed an interest in this work.

v) Excavation at at least one standing stone and one stone circle within the National Park to modern standards. This is essential to aid in refining the chronology of these of monuments within the region.
vi) At the time of writing there are currently two major rock art projects being developed within the region. Both of these are geared towards the recording and interpretation of rock art images. Within the NNPA it is felt that more work must be done to contextualise rock art in the landscape. To this end we would like to see more excavation and survey work being carried out around rock art panels in an attempt to isolate contemporary archaeological features which may shed more light on the chronology and function of decorated rocks.
RESEARCH THEME 3: FARMING THROUGH THE AGES

This research strand aims quite overtly at being diachronic and cross cutting in terms of period boundaries. There will be clear links with the palaeoenvironmental research project, and the aim is to provide an integrated overview of the origins and development of agriculture and agricultural communities within the National Park.

One area of emphasis will be on the enhancement of our understanding of field systems from the Bronze Age to the post-medieval period and with this a deeper insight into the chronological, functional and morphological variation of related settlement structures. The project could pick up and develop all of those agriculture related topics that have arisen in the course of the Research Agenda setting exercise, for example:

- the development of the first agricultural communities in the Neolithic;
- the expansion into the uplands during the Bronze Age;
- the possible agricultural functions of hillforts in later prehistory;
- the relationships between native farmers and the Roman military;
- the analysis of variation in ridge and furrow field systems;
- the development and nature of transhumance in medieval and post-medieval times,
- and the effects of agricultural subsidies over recent decades.

The project would necessitate excavation of several different forms of agricultural settlement and as a result there is tremendous scope for local community involvement in this aspect of the work. We hope that local farmers will be very interested in this theme, and that they may well get actively involved in fieldwork. There is clearly a role for the NNPA Archaeological Forum here and partnership working with the local Universities and with bodies such as NAG would be essential.
RESEARCH THEME 4: DEATH AND BURIAL

Across all periods there is a clear lack of knowledge relating to death and burial within the National Park. With the exception of the cairns investigated in the Breamish Valley as part of the BVA Project, no modern excavation work has been carried out on Neolithic or Bronze Age burial monuments. Of particular importance at the moment is the need to resolve the issue of the chronology form and function of the so-called ‘tri-radial cairns’ that have been identified by members of the Borders Archaeology Group.

By the same token we know nothing of Iron Age burial ritual in Northumberland generally and the National Park in particular. We fair better for the Roman period with the excavations at Petty Knowes in Redesdale, but what do we know of the military cemeteries and Roman native burial sites in the Wall area and what do we know of the pagan burials of the immediately post-Roman period?

The impact of Christianity on the rural populations of the National Park area is also an important issue, raising questions about the development of the parish system and the emergence of parish churches with their related cemeteries. There is a real need to initiate detailed churchyard recording to relate surviving names on gravestones etc. to parish register data. At this level there is tremendous scope for initiating community led recording projects.
RESEARCH THEME 5: IDENTITY IN THE ROMAN PERIOD
Currently, at a National level, this is an important research strand. There is tremendous scope, within the National Park area, for a detailed project examining the impact of Rome on the local indigenous population. This might examine notions of ethnicity and group identity and association, tracing the material expressions of these abstract concepts through material culture remains. Expertise exists in both of the local universities that might be instrumental in setting up such a project and the recent report on the Roman cemetery at Brougham, by Hilary Cool, gives some indication of the levels of information that might be recovered. There is a wealth of Roman inscriptions data that has never been examined with this end in view.
RESEARCH THEME 6: EARLY MEDIEVAL ARCHAEOLOGY

For the area of the National Park, the Early Medieval period is still a relatively blank canvass. As was highlighted in the Resource Assessment part of this exercise, there is still a need to collect more archaeological data about almost all aspects of the period from the end of Roman Britain until the coming of the Normans. The following list of topics, taken straight from the Research Agenda should be seen merely as a first statement for discussion and might form the basis of a series of interlinked projects designed to increase our general knowledge about important aspects of this poorly understood period.

- **The Roman/ Anglo Saxon Transition**
  Traditional models for the transition from the Roman to Anglo-Saxon periods are based to a great extent on a literal interpretation of much later historical sources. It is widely accepted now that there was some folk movement to England from NW Europe, but most would now argue that it is highly unlikely that the native population of Eastern England in the C5th AD was replaced or removed completely. Does the presence of Anglian artifacts or the use of buildings with sunken floors imply that their users and builders were actual immigrants? Should we continue to accept the traditional document based model for the transition at face value or should we view it as simply one possible framework within which the transition may have taken place? If the latter course is taken then we must strive to test alternatives and the traditional view against available archaeological data (c.f. Wilmott and Wilson, 2000).

- **The Fate of Hadrian’s Wall**
  What happened along the line of the Wall in the aftermath of the Roman withdrawal? This topic could be addressed by a thorough re-analysis of the excavation records from the main fort sites along the Wall in the light of recent Late/Post Roman/Early Medieval finds at Birdoswald and Vindolanda. Research might also be more closely focused on the palaeoenvironmental record. This area of work could make a significant contribution to Hadrian’s Wall studies.

- **Re-excavation of Ingram Hill with a view to dating the rectangular houses.**
As the pottery data from earlier excavations has suggested, there may be an Early Medieval presence on this site. The location of the sub-rectangular houses around the perimeter of the enclosed area might hint at an early religious settlement on top of the Iron Age defensive structure. None of the ‘houses’ has been clearly dated, and we have no clear view of the potential function of these structures.

- **Place name survey within the National Park area.**

There is no reliable discussion and identification of early place-names within the National Park. This would be an essential precursor to the identification of possibly Early Medieval settlement areas

- **Upkeep of Roman road system in Early Medieval period – fate of Roman roads.**

See ‘Transport and Communications’ below.

- **Study of field systems to identify early Medieval elements**

See ‘Farming through the Ages’ above.

- **More work on the emergence of the Township and Parish systems.**

This would necessitate a detailed documentary survey for evidence relating to the development of these two phenomena within the National Park area. A good start has been made for some locations as a result of the Historic Village Atlas Project.

- **Emergence of the village settlement system.**

Again, this potential project should build upon the results of the Historic Village Atlas Project.

- **Archaeology of early Christianity from Roman period to the Anglo-Saxon conversion and beyond.**

See ‘Death and Burial’ above.
RESEARCH THEME 7: BOUNDARIES IN THE LANDSCAPE
This project should examine the whole concept of ‘boundaries’ within the National Park to enhance our understanding of a range of boundary types from Neolithic stone rows through cross-ridge dykes to sod-cast field banks and dry stone walls. Linked to this might also be a consideration of the nature of Hadrian’s Wall and the Black Dyke in relation to tribal and territorial boundaries. Research might well incorporate a consideration of the contemporary impact of the National Park Boundary itself.
RESEARCH THEME 8: BASTLES IN CONTEXT

Bastle houses are amongst the most important late/post-Medieval structures within the National Park. They have been subject to several, detailed structural surveys (see above) but little has been done to set the structures themselves and their related structures and landscapes into a broader context. A good blueprint for such a project is in existence in the form of the ‘Bastles Environments Project’ first mooted by Iain Hedley and John Nolan in the 1990s.
RESEARCH THEME 9: MEDIEVAL/POST-MEDIEVAL INDUSTRY

Relatively little work has been done on the industrial archaeology of the Northumberland National Park. The whole issue should be approached by a series of projects dealing with the various productive industries that are evidenced within the National Park; e.g., pottery production (little is known about this in Northumberland as a whole), iron mining, stone quarrying, millstone extraction.

In the first instance a detailed documentary survey could be undertaken for each relevant industry within a National Park context, including wherever possible the identification of the archaeological correlates of that documentary research.
RESEARCH THEME 10: TRANSPORT AND COMMUNICATION
We know little about prehistoric track-ways and routes across the National Park area. Roman roads are fairly well understood in terms of their orientation and rough chronology, but we could still benefit from research on medieval/post-medieval drove ways, turnpikes and even the history, development and decline of the railway system in so far as it impacted upon the National Park area.
RESEARCH THEME 11: DETAILED AREA-SPECIFIC RESEARCH PROJECTS

Within the Research Strategy there will always be scope for one off area specific research projects, especially where these might be requested by local community-based groups. The staff of the NNPA have a proven track record in developing and delivering on such projects c.f. the Breamish Valley Archaeology Project; Discovering our Hillfort Heritage Project and the recently completed Historic Village Atlas Project.

Currently there is one such project at the developmental stage (The Yeavering Project). Such area-based, multi-period landscape projects have the potential to touch on a lot of the research areas identified within the Strategy element of this document. Other areas might include North Tynedale (for which area a large scale air-photography project is planned which would tie in with the work of the Tarset Archive Group), and various potential spin-off projects arising from the Historic Village Atlas Project.