FIELDWORK RECORDS WORLD WAR TWO REMAINS

Recently recorded by fieldwork in Hambleton Plantation, prior to felling and replanting operations, has been a series of slit trenches dating from the Second World War. These were first recognised in 2010 when one was noted as having been dug alongside the prehistoric Cleave Dyke which runs through the plantation. When the area was checked on aerial photographs dating from May 1940, a series of faint marks – previously considered to be possible scratches on the old photo negatives – were recognised as revealing an extensive complex of slit trenches, apparently cut to protect the gliding field just to the south (now home of the Yorkshire Gliding Club) in case of invasion. Further slit trenches were picked up on the south side of the gliding field by the English Heritage survey of Roulston Scar hillfort (which encloses part of the gliding field) in 2001, although these were interpreted as defensive positions for firing into the gliding field in case of an enemy landing there. However, the newly discovered examples have clear banks which appear to indicate that they were to provide protection against an attack from the north, although another possibility is that they represent practice works dug to give recruits experience and help make them ready for combat.

Right – Scanned field drawing of part of slit trench complex produced by Ed Dennison Archaeological Services Ltd.

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When travelling through parts of the North York Moors it is quite common to see groups of mounds in the landscape. Many of these look, at first sight, similar to Early Bronze Age burial mounds (see previous page) but generally the size of the group, supported by information from old Ordnance Survey maps, will show these to be coal pits. Coal seams in the North York Moors are Middle Jurassic in date (about 170 million years old) and mostly extend south, in an east-west band, from the north side of Eskdale and to the west of a line between Pickering and Whitby. The seams are very variable in thickness but where worked, were generally 15-55 cms thick, at depths of between 6.5 to at least 45 metres. They were worked from vertical shafts arranged in lines to improve access and ventilation. The mounds visible on the surface represent spoil excavated from the shafts piled up in a collar around the former blocked or capped openings. It was hard, hot work in cramped conditions, with a constant risk of foul air. If the light (a candle stuck in a ball of clay) went out, that was the signal to return to the surface.

Coal mining was never a major industry in the moors but it was carried out over extensive areas and some thirty collieries existed, comprising over 1100 shafts. Moreover, the way that the industry worked has left extensive surface remains which are an important element both of the industrial archaeology and the historic landscapes of the National Park. The remains today are an important reminder of the scale and extent of the industry and beautifully illustrate the nature of human endeavour in search of marketable commodities, even in the remote areas of the North York Moors. The relatively poor quality of the coal has ensured that the early remains were not damaged by more recent intensification of mining. In addition, because it was local and therefore relatively cheap, it was important to the local economy. As well as for domestic purposes, it was used in lime burning to produce slaked lime for improving the region’s acidic soils. Without the availability of local coal, this would otherwise have proved very expensive.

Coal mining has probably been practised in the North York Moors since at least Medieval times but it is first documented in an agreement of 1715 relating to coal mining at Anknès (Slighthead Dale), permitting the opening of new shafts within an existing mining area. By 1786, in the Bransdale and Farndale area, seven collieries were operating, including Rudland Farm and Upper Rudland collieries with over 400 pits between them. The latter sites are now protected as Scheduled Monuments, representing early examples of extensive colliery industry which have preserved important evidence of the industrial processes employed. The main period of the industry appears to have been around 1770-1800 and to have declined thereafter. Records indicate that people were fined for leaving pits ‘open’ or in a dangerous state. Coal mining in Darby Manor ended about 1880 due to the arrival of the railway during the 1860s which brought the availability of better quality coal from outside the North York Moors. However, in some locations, mining continued into the early years of the twentieth century.

### Frequently Asked Questions

**What are all those mounds?**

Because of the age of the coal pits, at least 100 years but potentially much older, the way that shafts have been blocked or capped is unknown and remains should be approached with care, keeping well clear of the depression in the centre which generally marks the position of the original shaft.

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**Investigation of the hillfort**

Initial results from 2009 indicated that the ramparts and much of the interior of the hillfort had been severely truncated or entirely removed in 1961. In 2011, it was decided to open a much larger area to fully investigate: the entrance, a length of the ditch and rampart, the site of Barrow 1, evidence preserved beneath the mound of Barrow 2, and a potential area of occupation behind the ramparts.

A geophysical survey had indicated only a single entrance to the hillfort on the NE side where limited excavation took place in 2009. The 2011 investigation exposed the entrance, a length of the ditch and extended into the interior. It was immediately clear that the area inside the entrance had been very badly damaged by bulldozer tracks.

The ditch showed clearly on exposure, the centre marked by 1961 backfill surrounded by a peat halo. The level of damage was not uniform – most damage being confined to the area inside the entrance. In the NW part of the trench it first appeared that the old ground surface and turf beneath the rampart had been completely truncated. However, excavation revealed that the clean ‘natural’ ground surface exposed here was part of the rampart body that had sunk into a natural gryke in the limestone geology and been preserved.

The rampart had been up to 5m wide, fronted by a ditch at the entrance just over 3m wide and nearly 2m deep (the lower metre into the limestone bedrock), reducing to a depth of not much more than a metre away from the entrance. More importantly the rampart and ditch had been preceded by an earlier monument. This comprised a palisaded enclosure with closely-set stone-packed posts in a narrow trench (c.25cm wide and some internal earthworks. A much larger area, to the south and east, was levelled for ‘agricultural improvement’ during 1961, despite being a scheduled monument. The hillfort formerly contained at least two round barrows, one of which was also levelled in 1961.

Work in 2011 was on a much larger scale than had been possible in 2009, on account of the addition of 30 York University first year undergraduates who joined the core National Park volunteers for 14 days of excavation training.
For many people interested in archaeology, one of the most exciting stories has to be the discovery of the tomb of the Pharaoh Tutankhamun by Howard Carter in Egypt in 1922. It is reported that, as he broke through the door of the intact tomb, he was asked by Lord Carnarvon if he could see anything. “Yes,” he replied, “wonderful things.”

The wonderful things relating to the archaeology of the North York Moors are neither quite as dramatic or as valuable as those relating to Tutankhamun. In the North York Moors the relatively damp and cool conditions can still preserve some grave goods into the present day but the soils can be very acidic – which over thousands of years can even dissolve human bones. Even when the graves have been robbed, however, the environmental evidence from the old ground surfaces buried and protected beneath the mounds can provide us with a wealth of information about the surrounding landscape (for example, whether crops are being grown and of what type) and what the climatic conditions were at the time.

Associated with some of these burial mounds, specifically the round barrows and cairns of the Early Bronze Age (dating to around 4000 years ago), are strange avenues of paired pits flanked by banks on either side, known as embanked pit avenues (Fig 2). Despite their considerable age, a number of these avenues still survive as remarkably clear earthworks – pointing towards the outer edge of the burial mound, representing perhaps some form of ritual or ceremonial way associated with the burial rites.

Older still are the carved rocks – as reported in the last HE Review (www.northyorkmoors.org.uk/uploads/publication/11055.pdf) – which are thought to date up to and in excess of 5000 years old. These indicate that people (or, perhaps more likely, specific individuals) had time to carve such symbols in the surrounding rocks and outcrops and that the carvings had sufficient meaning or merit to warrant the time spent creating them. It is through such monuments and the insights they provide that we may begin to get the tiniest glimpse of the lives of our ancestors – wonderful things indeed.

The wonderful things relating to the archaeology of the North York Moors are neither quite as dramatic as the pyramids but there are mounds (Fig 1) of different shapes and sizes depending on their period of construction. Built of earth and stone, they contain the skeletons or cremated bones of our ancestors, sometimes marked out by some sort of hedge or fencing and now obviously represented by small heaps of stone (known as clearance cairns) cleared from the land to enable it to be cultivated and the lines of former boundaries, perhaps once marked out by some sort of hedge or fencing and now identified by low linear heaps of stones cleared to their bases.

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**Round barrows at Boltby**

Barrow 2 is situated just inside the eastern defences of the hillfort and still stands over 1.5m high but the mound has been re-shaped by antiquarian investigations, its profile extended and flattened by heaps of spoil. Previously excavated by Willmot in the 1930s, investigations revealed a long and complex history of both construction and robbing. This is particularly important since we often only have the opportunity to examine monuments of this type which have been damaged by agriculture. It would not be unreasonable to see the sequence revealed as representative of many of the barrows within the North York Moors, whether surviving or lost to erosion and agriculture over the last 4,000 years.

Despite the large number of robbing events, three of which could clearly be identified in plan and in section, evidence survived which allowed six potential construction phases to be identified. The story that has emerged is of a monument that developed, probably over hundreds of years, starting life in the Early Bronze Age shortly after 2000BC and continued to be used for burial until at least 1800BC.

In contrast, Barrow 1 was extensively excavated by Willmot and then completely removed when the site was levelled. Although only limited evidence survived, the excavation did expose the base of Willmot’s trenches, and the location of an excavated pit – probably from where he extracted an urn. If the latter was central, the barrow had originally been about 10 metres in diameter. A few tiny fragments of cremated bone, too small to retrieve, were observed, as well as quantities of charcoal associated with the truncated old ground surface. A very small fragment, probably from a collared urn, was recovered but no other finds relating to the use of the barrow.

**The environment at Boltby Scar**

Full results from analysis of the 2011 environmental samples are not yet available but preliminary information, together with that from the 2009 excavations, provide a basic picture of the round barrows and later hillfort.

Evidence from the buried soils and the turves used to construct the first mound of Barrow 2 (Phase 2) indicate domestic activity from the area with cereal grains and fragments of hazelnut shells. Analysis of the buried soils, sealed by the surviving mound, seem to indicate that the landscape had been used for arable agriculture which had depleted the thin and not particularly well-developed soils. A similar picture emerges from the samples extracted from beneath Barrow 1.

By the time that the hillfort was built, the area was a vast open grassland which would have provided a perfect grazing environment for stock. The droveway within which it sits was bounded to the west by cliffs and to the east by the Cleave Dyke. The latter boundary was initially constructed as a pit alignment comprising large pits cut into the limestone bedrock and flanked by banks on either side. A small-scale investigation revealed the pits as measuring roughly 2 x 2 metres in plan and c.0.8m deep with gaps of no more than a metre between them, cut into the limestone bedrock. The pits were filled with clean silty clays and contained no dateable finds. The processing of bulk samples from the lower pit fills has produced a single carbonised hazelnut shell from which a carbon date can be measured although there remains some risk that this single sample may be residual. The dyke was still clearly visible in the mid 19th century with the pits identifiable as depressions between flanking banks, but was later mostly levelled by cultivation.

As the ditch surrounding Boltby Scar hillfort filled, environmental evidence in the form of pollen trapped in the soils reveals a change in climate and vegetation – grasslands increasely giving way to heath. When precisely this happens is not entirely clear and it may be that even when the hillfort is first built climatic decline was already influencing the landscape as a consequence of increasing wetness. The most dramatic change comes after the end of the Roman period when heathland species increase greatly and the first peats start to form on top of the partly-filled ditch. The peats in the hillfort ditch from the approximate period AD600 to AD1050 reflect a number of periods of increasing wetness followed by drier phases so that by the medieval period heathlands dominate the local environment.

For further information, visit [http://www.landscaperesearchcentre.org/Boltby_Scar_2011_Interim.pdf](http://www.landscaperesearchcentre.org/Boltby_Scar_2011_Interim.pdf) to see the full interim report. Particular mention should also be made of the Boltby Blog, created by the undergraduates, covering nearly three weeks of the excavation ([http://boltbybscar.wordpress.com/](http://boltbybscar.wordpress.com/)) and of those students who continued to come digging long after their required training days were over.

**EXCAVATIONS AT BOLTY SCAR HILLFORT 2011**

**NELSON GATE**

Set in an area of open countryside, the Nelson Gate occupies a prominent location alongside the A170 between Thirsk and Helmsley, opposite the junction to Sproxton village. Built in 1806 as a War Memorial to commemorate Lord Nelson’s victory at Trafalgar, it also provided Duncombe Park with a suitably imposing entrance from the south. The Gate is thought to be one of the earliest monuments to be dedicated to Nelson, built only a year after his death in 1805.

The Gate is in the form of a triumphal arch with Tuscan three-quarter columns, constructed from ashlar stone (having almost indiscernible joints between the blocks of stone) to all elevations, which is very much characteristic of the neoclassical period. The arch is built of local calcareous sandstone with wrought iron gates and side screens.

Expert analysis of the condition of the Gate undertaken in 2011 indicated that parts of the stonework, namely the columns, jambs to the arch and the plinth supporting the frieze, were extensively decayed in a manner that is characteristic of this type of stone.

Expert opinion suggested that, even if conserved, the original stonework of the Gate would continue to decay and impair its architectural character, proportion and detail. Consequently, with funding from the War Memorials Trust, the Country House Foundation, Yorkshire Gardens Trust and the National Park Authority, works to replace the decaying stonework commenced in July 2011. To date, work to the plinths and columns has largely been completed with the final work to strengthen and cap the entablature expected to be finished by the spring.

The restoration will ensure that this monument to a national naval hero will continue to make a significant contribution to the scenic quality of the landscape on the southern approach to Helmsley.
The secrets of a gruesome discovery from the Ryedale Windy pits was revealed in the second series of the BBC’s History Cold Case (HCC) programme. The story of a number of human skeletons found in Slip Gill Windy pit was pieced together by a team of forensic anthropologists from the University of Dundee, following on from important (but unacknowledged) doctoral research by Stephany Leach. The programme aired on BBC2 at the end of June 2011.

The Ryedale Windy pits are a series of underground geological limestone fissure cavities on the southern edge of the North York Moors. Their name comes from the fact that under the right weather conditions, air (and sometimes water vapour) can be seen (from waving vegetation) and felt issuing from them. This was dramatically illustrated when filming but the footage was, unfortunately, not used in the final programme – the air issuing from Slip Gill that day was at a balmy 6°C, compared to -2°C for the surroundings, instantly steaming up the glasses of all spectacle wearers who got too close! (Fig 1) The windy pits were created by a process which occurs when a strong caprock – in this case oolitic limestone – overlies a much weaker geological layer, such as clay. Where this flexes (as occurs at the top edge of a valley side) deep cracks are produced.

Recent scientific research, by means of uranium series dating of the calcite flowstone down the sides of Antofts windy pit, has shown that the length of time the windy pits have been open is approximately 200,000 years.

Due to their geological significance, several of the windypits are designated as Sites of Special Scientific Interest and they are also nationally important swarming and roosting sites for bats. A small number of the windypits near Helmsley contain important archaeological deposits – including human skeletons – which show that the fissures have been used by people from the Earliest Bronze Age period (about 4,500 years ago) until the late Romano-British period (the 4th and 5th centuries AD). This information was acquired from a series of radiocarbon dates which were commissioned by the National Park Authority to support Dr Leach’s research, whose PhD was awarded in 2006.

The remains from various past investigations carried out at Slip Gill Windy pit were re-examined by the HCC team using modern forensic techniques to try to enable a more complete story to be told. Recovered by investigations in the 1950s, the bones were interpreted as belonging to an adult male, an adult female and at least two teenagers. As such, it was suggested that the remains could represent a family group and were recently dated to the end of the last century BC through to the early 2nd century AD.

Previous forensic examination had revealed fractures to both the adult male and females thigh bones – possibly resulting from the deep drop into the windypit, although this HCC team did speculate that these injuries could have been caused earlier to incapacitate the individuals. Evidence of sharp force trauma was also revealed in the form of a clear triangular cut into the lower mandible of one of the teenagers, close to the site of the facial artery, suggested to have been made by a thick bladed instrument such as a knife or the edge of an axe. (Fig 2) The broad cut mark narrowed to a point from which fractures radiated. Like the fractures to the thigh bones, there was no evidence of healing and therefore the injuries appear to be related to the time of death.

Additional research by the HCC team focused on DNA and teeth from the skeletons. Analysis of DNA from bone collagen by the University of London unfortunately proved inconclusive due to contamination. However, strontium isotope analysis of the teeth suggested that the individuals were of local origin and showed a grain-based diet with no marine component.

The most interesting new information, however, was only discovered when the team were setting out the remains to display the results to an invited audience of local people in Helmsley. On one of the skull fragments used to provide the facial reconstruction, interpreted by the HCC team as belonging to the adult male but previously identified by Dr Leach as more likely to belong to one of the teenagers, several sets of intersecting parallel grooves / scrape marks were noted. From their location on the skull, these suggested that the individual had been scalped.

There are very few parallels known for this – a teenager from a 2nd century AD pit from St Albans belongs to approximately the same period, and there is also reference to a skull with cut-marks found at Worchester. The St Albans example appears to have been defleshed as part of a head cult during the Roman period, and the Slip Gill example may be another example of the same.

Little is known about the origins of the skeletons found in the windypits and how they came to be there. Trauma to the skeletons would indicate that some of these ‘buried’ in these fissures met with violent deaths, but as to who these people were and why they came to such ends is likely never to be revealed. However, having the results from the HCC team has given us a greater understanding of part of the story.

Since the previous report the National Park Authority (NPA) has been continuing its partnership project with English Heritage to improve the management and condition of Scheduled Monuments, the region’s most important protected archaeological sites. The NPA has been directly involved in work on 18 Scheduled Monuments over the course of the last year, with remedial works on two others planned for completion by April 2012.

The range of work undertaken has included bracken control (which requires follow-up work in subsequent years), large-scale gorse clearance (on part of a medieval deer park boundary near Hutton Mulgrave), and the re-erection of Wade’s Stone, near East Barnby. The latter, a large prehistoric standing stone, toppled over several years ago but, with the approval of the landowner, the National Park Authority commissioned an investigation of the original socket hole (little of which survived) which was then deepened to provide an adequate trench into which to re-erect the stone.

Larger scale projects have included major conservation works on three scheduled barrows affected by foot and mountain bike erosion on Howl Moor / Two Howes Rigg, and are also due to begin shortly at Lilla Howe. At time of writing (February 2012) the works on Two Howes and Simon Howes have been completed, although remoteness of access has meant that the erosion protection proposals have been unable to be fully implemented. Work there has included narrowing and repairing some of the access routes which have developed over the years and the removal and tidying up of walker’s cairns. These had been causing damage due to people robbing stones from the actual fabric of the Scheduled Monuments to add to existing piles of previously robbed material. At Simon’s Howe, one of the fallen standing stones in the adjacent stone alignment has also been carefully re-erected.

Additional projects taking place this winter include graffiti removal and scrub / regenerating tree control at Whornton Castle, near Swainby, plus the re-erection of a fallen standing stone at Newgate Foot, near Saltersgate.

The current Scheme was originally due to end in the summer of 2011, but has since been extended until the end of March 2012. In addition, a recent application to English Heritage to extend the partnership and develop the scheme has been successful. This has secured a further grant of £100,000 from English Heritage to enable the Scheme to continue until 2015. This will support a project officer post for two days a week and provide a budget for site management works.
As introduced in the last newsletter, the North York Moors National Park Authority and LEADER** have jointly developed this scheme to assist rural communities with the delivery of small-scale community projects that cost less than £7,500 and are focused on the themes of village renewal and development, and conservation and upgrading of the rural heritage. If your community, parish council or local interest group has any small-scale village or environmental plans, or plans relating to heritage features, then this Scheme may provide an opportunity to help implement your ideas. Please contact the Small Scale Enhancements Scheme Co-ordinator at the North York Moors National Park Authority, The Old Vicarage, Bondgate, Helmsley, York, Y062 5BP or email ssscheme@northyorkmoors-npa.gov.uk.

Pockley Church
St John the Baptist Church is a Grade II Listed Building dating from the 1870s with interior fittings by both George Gilbert Scott and Temple Moore. An architecturally prominent building lying at the heart of the village, the church has an unusual system of heating, known as a hypocaust system, which is currently disused.

Interestingly, access to the boiler house is via a small brick-lined tunnel with barrel arch which curves round to a chamber beneath the vestry. A miniature railway runs along the tunnel floor, presumably to allow coke/coal to be delivered on the railway to the boiler chamber, located under the centre of the church. Heat was then dispersed through metal vents along the church floor to heat the building. This original hot air heating system was abandoned due to the failure of the boiler in the 1950s, but is remembered to have been very effective. Since then, electricity, and presently gas, have been used in an attempt to heat the church but these have not proved very successful and, in turn, are causing damage to the internal fabric.

The objective is to restore the concept of the original design, using hot air from a multi-fuel boiler, allowing the stonework to warm and the church to breathe as was originally designed. The use of the railway track, thought to be unique, means no fuels or waste enters the main body of the church. By bringing the original heating design up-to-date and by designing a method to separate the chancel from the nave, perhaps by using curtains, it is thought that the latter could become a community hall, opening up other secular uses for the church. This could enable the church to become a focal point for village life, since it is the only facility from the nave, perhaps by using curtains, it is thought that the latter could become a community hall, opening up other secular uses for the church. This could enable the church to become a focal point for village life, since it is the only facility

Industrial Archaeology

Ironstone, Grosmont and Stephenson’s Whitby to Pickering railway

To increase awareness of the importance of the National Park’s industrial heritage, a large-scale industrial archaeology project, under the provisional title of ‘This Exploited Land’, is now being actively modified by subsequent changes but a short section of the original course of the 1836 railway still survives to the north of Beck Hole. It was previously thought that most of this 500 metre length of 1836 trackbed had been lost or damaged due to a number of different factors. Towards the southern end it has been built over for the site of a row of miner’s cottages and was thought to have been lost at the northern end due to a landslip. Closer examination of the latter

The latter was required to replace the Beck Hole-Goathland incline so that steam trains could manage the entire route to Pickering uninterrupted and was opened in 1865. Part of the deviation route runs through a deep cutting in the hillside up above the 1836 track alignment and would have produced hundreds of tons of spoil which needed to be disposed of as locally as possible. A survey is still required to check which interpretation the noted remains fully support, including to look for features which could link it directly with the deviation route cutting. However, most importantly, the buried remains at the northern end of the 1836 trackbed have the potential to preserve information concerning the original railway construction which might not survive elsewhere - a valuable resource to provide further details of Stephenson’s original design.

Trod Restoration

Three projects have been progressed by the Scheme to restore lines of ancient trods across the North York Moors. While such work could be limitless due to the number of trods we have in the Park, in these cases the justification for support was based on their current condition or due to their location such as at Sunnyside Farm, Fylingdales, where the trod forms a public right of way through part of a historical early farm complex.

Osmotherley Pinfold
The Scheme funded the full restoration of this eighteenth century Grade II Listed pinfold and removed it from the Authority’s Buildings at Risk Register.

Although the semi-natural character of the pinfold was charming, unfortunately the climbing plants were damaging the structure causing areas of walling to topple.

Unlike many other pinfolds across the North York Moors, this pinfold is larger in size and square, rather than circular. It is constructed of a good quality tooled and coursed sandstone.

Osmotherley pinfold before and after restoration.

Entrance to hypocaust.

 styling tunnel showing oil tracks.
UNLOCKING THE SECRETS OF THE WINDYPITS

The secrets of a gruesome discovery from the Ryedale Windypits was revealed in the second series of the BBC's History Cold Case (HCC) programme. The story of a number of human skeletons found in Slip Gill Windypit was pieced together by a team of forensic anthropologists from the University of Dundee, following on from important (but unacknowledged) doctoral research by Stephany Leach. The programme aired on BBC2 at the end of June 2011.

The Ryedale Windypits are a series of underground geological limestone fissure caves on the southern edge of the North York Moors. Their name comes from the fact that under the right weather conditions, air (and sometimes water vapour) can be seen (from waving vegetation) and felt issuing from them. This was dramatically illustrated when filming but the footage was, unfortunately, not used in the final programme – the air issuing from Slip Gill that day was at a balmy 9o C, compared to -2o for the unacknowledged doctoral research by Stephany Leach. The programme aired on BBC2 at the end of June 2011.

Due to their geological significance, several of the windypits are designated as Sites of Special Scientific Interest and they are also nationally important swarming and roosting sites for bats. A number of the calcite flowstone down the sides of Antofts windypit, has been designated as Sites of Special Scientific Interest and they are also nationally important swarming and roosting sites for bats.

Recent scientific research, by means of uranium series dating of the calcite flowstone down the sides of Antofts windypit, has shown that the length of time the wind pits have been open is approximately 200,000 years.

Due to their geological significance, several of the windypits are designated as Sites of Special Scientific interest and they are also nationally important swarming and roosting sites for bats. A small number of the windypits near Helmsley contain important archaeological deposits – including human skeletons – which show that the fissures have been used by people from the Earliest British period (the 4th and 5th centuries AD). This information was acquired from a series of radiocarbon dates which were commissioned by the National Park Authority to support Dr Leach’s research, whose PhD was awarded in 2006.

The remains from various past investigations carried out at Slip Gill Windypit were re-examined by the HCC team using modern forensic techniques to try to enable a more complete story to be told. Recovered by investigations in the 1950s, the bones were interpreted as belonging to an adult male, an adult female and at least two teenagers. As such, it was suggested that the remains could represent a family group and were recently dated to the end of the last century BC through to the early 2nd century AD.

Previous forensic examination had revealed fractures to both the adult male and females thigh bones – possibly resulting from the deep deep into the windypit, although the HCC team did speculate that these injuries could have been caused earlier to incapacitate the individuals. Evidence of sharp force trauma was also revealed in the form of a clear triangular cut into the lower mandible of one of the teenagers, close to the site of the facial artery, suggested to have been made by a thick bladed instrument such as a knife or the edge of an axe. (Fig 3) The broad cut mark of a line, contributed to from which fractures radiated. Like the fractures to the thigh bones, there was no evidence of healing and therefore the injuries appear to have been related to the time of death.

Additional research by the HCC team focused on DNA and teeth from the skeletons. Analysis of DNA from bone collagen by the University of London unfortunately proved inconclusive due to contamination. However, strontium isotope analysis of the teeth suggested that the individuals were of local origin and showed a grain-based diet with no marine component.

The most interesting new information, however, was only discovered when the team were setting out the remains to display the results to an invited audience of local people in Helmsley. On one of the skull fragments used to provide the facial reconstruction, interpreted by the HCC team as belonging to the adult male but previously identified by Dr Leach as more likely to belong to one of the teenagers, several sets of intersecting parallel grooves / scrape marks were noted. From their location on the skull, these suggested that the individual had been scalped. There are very few parallels known for this – a teenager from a 2nd century AD pit from St Albans belongs to approximately the same period, and there is also reference to a skull with cut marks found at Wroxeter. The St Albans example appears to have been defleshed as part of a head cult during the Roman period, and the Slip Gill example may be another example of the same.

Little is known about the origins of the skeletons found in the windypits and how they came to be there. Trauma to the skeletons would indicate that some of these ‘buried’ in these fissures met with violent deaths, but as to who these people were and why they came to such ends is likely never to be revealed. However, having the results from the HCC team has given us a greater understanding of part of the story.

MONUMENT MANAGEMENT SCHEME 2011-12

Since the previous report the National Park Authority (NPA) has been continuing its partnership project with English Heritage to improve the management and condition of Scheduled Monuments, the region’s most important protected archaeological sites. The NPA has been directly involved in work on 18 Scheduled Monuments over the course of the last year, with remedial works on two others planned for completion by April 2012.

The range of work undertaken has included bracken control (which requires follow-up work in subsequent years), large-scale gorse clearance (on part of a medieval deer park boundary near Hutton Mulgrave), and the re-erection of Wade’s Stone, near East Barnby. The latter, a large prehistoric standing stone, toppled over several years ago but, with the approval of the landowner, the National Park Authority commissioned an investigation of the original socket hole (little of which survived) which was then deepened to provide an adequate trench into which to re-erect the stone.

Larger scale projects have included major conservation works on three scheduled barrows affected by foot and mountain bike erosion on Howel Moor; Two Howes Rigg, and are also due to begin shortly at Lilla Howe. At time of writing (February 2012) the works on Two Howes and Simon Howes have been completed, although remoteness of access has meant that the erosion protection proposals have been unable to be fully implemented. Work there has included narrowing and repairing some of the access routes which have developed over the years and the removal and tidying up of walker’s cairns. These had been causing damage due to people robbing stones from the actual fabric of the Scheduled Monuments to add to existing piles of previously robbed material. At Simon’s Howe, one of the fallen standing stones in the adjacent stone alignment has also been carefully re-erected.

Additional projects taking place this winter include graffiti removal and scrub / regenerating tree control at Whorlton Castle, near Swainby, plus the re-erection of a fallen standing stone at Newgate Foot, near Saltersgate. The current Scheme was originally due to end in the summer of 2011, but has since been extended until the end of March 2012. In addition, a recent application to English Heritage to extend the partnership and develop the scheme has been successful. This has secured a further grant of £100,000 from English Heritage to enable the Scheme to continue until 2015. This will support a project officer post for two days a week and provide a budget for site management works.

Fig 1. Taking the temperature at Slip Gill

Fig 2. Jawbone of adolescent from Slip Gill showing impact site of bladed weapon and radiating fracture. (S. Leach)

Fig 3. Reconstruction of head, interpreted by the HCC team as belonging to the adult male (S. Leach)
Round barrows at Boltby

Barrow 2 is situated just inside the eastern defences of the hillfort and still stands over 1.5m high but the mound has been re-erected by antiquarian investigations, its profile extended and flattened by heaps of spoil. Previously excavated by Willmot in the 1930s, investigations revealed a long and complex history of both construction and robbing. This is particularly important since we often only have the opportunity to examine monuments of this type which have been damaged by agriculture. It would not be unreasonable to see the sequence revealed as representative of many of the barrows within the North York Moors, whether surviving or lost to erosion and agriculture over the last 4,000 years.

Despite the large number of robbing events, three of which could clearly be identified in plan and in section, evidence survived which allowed six potential construction phases to be identified. The story that has emerged is of a monument that developed, probably over hundreds of years, starting life in the Early Bronze Age shortly after 2000BC and continued to be used for burial until at least 1800BC.

In contrast, Barrow 1 was extensively excavated by Willmot and then completely removed when the site was levelled. Although only limited evidence survived, the excavation did expose the base of Willmot’s trenches, and the location of an excavated pit – probably from where he extracted an urn. If the latter was central, the barrow had originally been about 10 metres in diameter. A few tiny fragments of cremated bone, too small to retrieve, were observed, as well as quantities of charcoal associated with fragments of cremated bone, too small to retrieve, were observed. The small-scale investigation revealed the pits as measuring roughly 2 x 2 metres in plan and 0.8m deep with gaps of no more than a metre between them, cut into the limestone bedrock. The pits were filled with clean silt and clays and contained no dateable finds. The processing of bulk samples from the lower pit fills has produced a single carbonised hazelnut shell dateable finds. The processing of bulk samples from the lower pit fills has produced a single carbonised hazelnut shell from which a carbon date can be measured although there remains some risk that this single sample may be residual. A similar picture emerges from the samples extracted from hypothetically Barrow 1.

By the time that the hillfort was built, the area was a vast open grassland which would have provided a perfect grazing environment for stock. The droweway within which it sits was bounded to the west by cliffs and to the east by the Cleave Dyke. The latter boundary was initially constructed as a pit alignment comprising large pits cut into the limestone bedrock and flanked by banks on either side. A small-scale investigation revealed the pits as measuring roughly 2 x 2 metres in plan and 0.8m deep with gaps of no more than a metre between them, cut into the limestone bedrock. The pits were filled with clean silt and clays and contained no dateable finds. The processing of bulk samples from the lower pit fills has produced a single carbonised hazelnut shell from which a carbon date can be measured although there remains some risk that this single sample may be residual. A similar picture emerges from the samples extracted from beneath Barrow 1.

The environment at Boltby Scar

Full results from analysis of the 2011 environmental samples are not yet available but preliminary information, together with that from the 2009 excavations, provides a basic picture of the round barrows and later hillfort. Evidence from the buried soils and the turves used to construct the first mound of Barrow 2 (Phase 2) indicate domestic activity from the area with cereal grains and fragments of hazelnut shells. Analysis of the buried soils, sealed by the surviving mound, seem to indicate that the landscape had been used for arable agriculture which had depleted the thin and not particularly well-developed soils. A similar picture emerges from the samples extracted from beneath Barrow 1.

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For many people interested in archaeology, one of the most exciting stories has to be the discovery of the tomb of the Pharaoh Tutankhamun by Howard Carter in Egypt in 1922. It is reported that, as he broke through the door of the intact tomb, he was asked by Lord Carnarvon if he could see anything. “Yes”, he replied, “wonderful things”.

The wonderful things relating to the archaeology of the North York Moors are rather more subtle but no less wonderful to those interested in the history and archaeology of our region, and many are of far greater antiquity. Tutankhamun lived between about 1341–1328BC, which falls within the period of our Middle Bronze Age. By this date large areas of the upland landscape of the National Park were covered by fields cultivated by the local prehistoric farmers. Because of the changes brought about to these uplands by what was effectively poor land management, associated with changing climatic conditions, our present day moorlands started to develop and the subsequent limited re-use of these areas has resulted in the extensive survival of remains of these early field systems across the moors. The evidence for prehistoric cultivation and land management is most obviously represented by small heaps of stone (known as clearance cairns) cleared from the land to enable it to be cultivated and the lines of former boundaries, perhaps once marked out by some sort of hedge or fencing and now identified by low linear heaps of stones cleared to their bases.

The funerary monuments to our ancestors aren’t quite as dramatic as the pyramids but there are mounds (Fig 1) of different shapes and sizes depending on their period of construction. Built of earth and stone, they contain the remains of individuals and the remains of artefacts used during the journey into the afterlife – customs and beliefs which varied with generations over hundreds of years. In this way the journey into the afterlife – customs and beliefs which varied with grave goods for what we interpret as the departed’s belongings and the remains of their habitat. The remains of the occupants of the graves have been robbed, which suggests that people (or, perhaps more likely, specific individuals) had time to carve such symbols in the surrounding rocks and outcrops and that the carvings had sufficient meaning or merit to warrant the time spent creating them. It is through such monuments and the insights they provide that we may begin to get the tiniest glimpse of the lives of our ancestors – wonderful things indeed.

Below Fig 1. Bronze Age Round Barrow
Above Fig 2. Embanked pit avenue on Easington High Moor. The associated burial mound in this case appears to have been levelled by tracks associated with WW2 tank training. Image by Blaise Vyner.

WONDERFUL THINGS

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Above Fig 2. Embanked pit avenue on Easington High Moor. The associated burial mound in this case appears to have been levelled by tracks associated with WW2 tank training. Image by Blaise Vyner.
Excavations at Boltby Scar Hillfort 2011

Further to the report in the previous HE Review, a second season of excavation took place between May – June 2011 directed by Professor Dominic Powlesland of the Landscape Research Centre, within the Heritage Lottery Fund/English Heritage/National Park Authority funded Lime and Ice Project.

Boltby Scar hillfort sits on a west-facing promontory near the western edge of the National Park. The site is divided in two by a field wall. To the west, above cliffs which define the promontory’s edge, a narrow strip of heathland preserves part of the rampart, ditch and some internal earthworks. A much larger area, to the south and east, was levelled for ‘agricultural improvement’ during 1961, despite being a scheduled monument. The hillfort formerly contained at least two round barrows, one of which was also levelled in 1961. Work in 2011 was on a much larger scale than had been possible in 2009, on account of the addition of 30 York University first year undergraduates who joined the core National Park volunteers for 14 days of excavation training.

Investigation of the hillfort

Initial results from 2009 indicated that the ramparts and much of the interior of the hillfort had been severely truncated or entirely removed in 1961. In 2011, it was decided to open a much larger area to fully investigate: the entrance, a length of the ditch and rampart, the site of Barrow 1, evidence preserved beneath the mound of Barrow 2, and a potential area of occupation behind the ramparts.

A geophysical survey had indicated only a single entrance to the hillfort on the NE side where limited excavation took place in 2009. The 2011 investigation exposed the entrance, a length of the ditch and extended into the interior. It was immediately clear that the area inside the entrance had been very badly damaged by bulldozer tracks.

The ditch showed clearly on exposure, the centre marked by 1961 backfill surrounded by a peat halo. The level of damage was not uniform – most damage being confined to the area inside the entrance. In the NW part of the trench it first appeared that the old ground surface and turf beneath the rampart had been completely truncated. However, excavation revealed that the clean ‘natural’ ground surface exposed here was part of the rampart body that had sunk into a natural gryke in the limestone geology and been preserved.

The rampart had been up to 5m wide, fronted by a ditch at the entrance just over 3m wide and nearly 2m deep (the lower metre into the limestone bedrock), reducing to a depth of not much more than a metre away from the entrance. More importantly the rampart and ditch had been preceded by an earlier monument. This comprised a palisaded enclosure with closely-set stone-packed posts in a narrow trench (c.25cm wide and

FAQ

What are all those mounds?

When travelling through parts of the North York Moors it is quite common to see groups of mounds in the landscape. Many of these look, at first sight, similar to Early Bronze Age burial mounds (see previous page) but generally the size of the group, supported by information from old Ordnance Survey maps, will show these to be coal pits.

Coal seams in the North York Moors are Middle Jurassic in date (about 170 million years old) and mostly extend south, in an east-west band, from the north side of Eskdale and to the west of a line between Pickering and Whitby. The seams are very variable in thickness but, where worked, were generally 15-55 cms thick, at depths of between 6.5 to at least 45 metres. They were worked from vertical shafts arranged in lines to improve access and ventilation. The mounds visible on the surface represent spoil excavated from the shafts piled up in a collar around the former blocked or capped openings*. It was hard, hot work in cramped conditions, with a constant risk of foul air. If the light (a candle stuck in a ball of clay) went out, that was the signal to return to the surface.

Coal mining was never a major industry in the moors but it was carried out over extensive areas and some thirty collieries existed, comprising over 1,000 shafts. Moreover, the way that the industry worked has left extensive surface remains which are an important element both of the industrial archaeology and the historic landscapes of the National Park. The remains today are an important reminder of the scale and extent of the industry and beautifully illustrate the nature of human endeavour in search of marketable commodities, even in the remote areas of the North York Moors.

The relatively poor quality of the coal has ensured that the early remains were not damaged by more recent intensification of mining. In addition, because it was local and thus relatively cheap, it was important to the local economy. As well as for domestic purposes, it was used in lime burning to produce slaked lime for improving the region’s acidic soils. Without the availability of local coal, this would otherwise have proved very expensive.

Coal mining has probably been practised in the North York Moors since at least Medieval times but it is first documented in an agreement of 1715 relating to coal mining at Askness (Sleightholme Dale), permitting the opening of new shafts within an existing mining area. By 1786, in the Bransdale and Farndale area, seven collieries were operating, including Rudland Farm and Upper Rudland collieries with over 400 pits between them. The latter sites are now protected as Scheduled Monuments, representing early examples of extensive colliery industry which have preserved important evidence of the industrial processes employed.

The main period of the industry appears to have been around 1770-1800 and to have declined thereafter. Records indicate that people were fined for leaving pits ‘open’ or in a dangerous state.

Coal mining in Danby Manor ended about 1880 due to the arrival of the railway during the 1860s which brought the availability of better quality coal from outside the North York Moors. However, in some locations, mining continued into the early years of the twentieth century.

* Because of the age of the coal pits, at least 100 years but potentially much older, the way that shafts have been blocked or capped is unknown and remains should be approached with care, keeping well clear of the depression in the centre which generally marks the position of the original shaft.
Recently recorded by fieldwork in Hambleton Plantation, prior to felling and replanting operations, has been a series of slit trenches dating from the Second World War. These were first recognised in 2010 when one was noted as having been dug alongside the prehistoric Cleave Dyke which runs through the plantation. When the area was checked on aerial photographs dating from May 1940, a series of faint marks – previously considered to be possible scratches on the old photo negatives – were recognised as revealing an extensive complex of slit trenches, apparently cut to protect the gliding field just to the south (now home of the Yorkshire Gliding Club) in case of invasion. Further slit trenches were picked up on the south side of the gliding field by the English Heritage survey of Roulston Scar hillfort (which encloses the main part of the gliding field) in 2001, although these were interpreted as defensive positions for firing into the gliding field in case of an enemy landing there. However, the newly discovered examples have clear banks which appear to indicate that they were to provide protection against an attack from the north, although another possibility is that they represent practice works dug to give recruits experience and help make them ready for combat.

Below – Scanned field drawing of part of slit trench complex produced by Ed Dennison Archaeological Services Ltd.

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