A photograph showing two people engaged in archaeological work. In the foreground, a person wearing a red sweater and a purple headband is using a red-handled tool to work on a rock surface. In the background, another person in a blue jacket and grey beanie is kneeling and observing. The rock surface has some faint markings or impressions. The background is a grassy field with some ferns.

Archaeology in Northumberland

NORTHUMBERLAND
Northumberland County Council

Volume 20

Contents

Foreword	1
Breaking News	1
Archaeology in Northumberland Friends	2
What is a QR code?	2
Twizel Bridge: Flodden 1513.com.	3
The RAMP Project: Rock Art goes Mobile	4
Heiferlaw, Alnwick: Zero Station	6
Northumberland Coast AONB Lime Kiln Survey.	8
Ecology and the Heritage Asset: Bats in the Belfry	11
Surveying Steel Rigg	12
Marygate, Berwick-upon-Tweed: Kilns, Sewerage and Gardening	14
Debdon, Rothbury: Cairnfield.	16
Northumberland's Drove Roads.	17
Barmoor Castle	18
Excavations at High Rochester: Bremenium Roman Fort	20
Ford Parish: a New Saxon Cemetery	22
Duddo Stones	24
Flodden 1513: Excavations at Flodden Hill	26
Berwick-upon-Tweed: New Homes for CAAG	28
Remapping Hadrian's Wall	29
What is an Ecomuseum?	30
Frankham Farm, Newbrough: building survey record	32
Spittal Point: Berwick-upon-Tweed's Military and Industrial Past	34
Portable Antiquities in Northumberland 2010	36
Berwick-upon-Tweed: Year 1 Historic Area Improvement Scheme.	38
Dues Hill Farm: flint finds	39
The Till, Milfield and Tweed Valley: the Culley's Water Meadows.	40
Flodden 1513: England's first ecomuseum	42
Low Hauxley: Druridge Bay – Footprints in the Peat	44
Obituary: Bill Ford	45
Melkridge Farm, Haltwhistle.	46
Council for British Archaeology (North)	47
Till Valley Archaeological Society	47
Bedlington Ironworks: online access	48
Dry Burn, Holystone: earthwork survey	50
The Battlefields Trust – North East Region	51
Heritage At Risk.	52
Bamburgh Royal Observer Corps Bunker	54
A Golden Age of Discovery?: Lidar, Aerial and Analytical Survey on Hadrian's Wall	56
Northumberland Conservation	57
Shittleheugh Bastle and its Landscape, Otterburn.	58
Preston Smithy, Ellingham.	60
Holy Island Partnership	61
Northumberland National Park Heritage at Risk	62
Bamburgh Castle – 9th century industry	62
Seaton Delaval.	64
Northumberland Coast AONB: military remains survey	66
Dueshill Farm: unusual hollow ways	67
Barowburn: A Mill on the Coquet	68
Assessing the Past	69
Flodden 500: Artefacts Road Show	72

*Front cover: Surveying the 'Horseshoe' rock
at Lordenshaws as part of the RAMP Project
(see page 4)*

*This page: Plan of the landscape
surrounding Shittleheugh Bastle (see page
58)*

Foreword



Welcome to the 2011 edition of Archaeology in Northumberland. It's a great pleasure for me to be providing my first Foreword for this long running community report, now in its 20th year.

This year's edition charts the strength and breadth of interest and support for Northumberland's Heritage with a wide and varied range of projects from the contribution of Berwick Middle School to the Townscape Heritage Initiative in Berwick Town Centre (page 38) through the various developments at Flodden in the run up to the 500th Anniversary of the Battle in 2013 (pages 26, 42 and 72) to the community-led excavations being carried out by Coquetdale Community Archaeology at the site of the medieval fulling mill at Barrowburn (page 68).

2010 and 2011 have been times of big change at Northumberland County Council and while Northumberland Conservation has had to take a good hard look at its budgets and restructure its staff to ensure it is providing the most efficient service to the communities it serves, it has developed into a stronger team which now includes within its portfolio management of the Northumberland Coast AONB and representing Northumberland County Council on the partnership of the North Pennines AONB. I hope these changes will continue to strengthen the service delivered by Northumberland Conservation (see page 57).

Finally I would like to thank the Friends of Archaeology in Northumberland for their continued support of this annual report of heritage issues in the County and, like Friends members, welcome the return of Friends walks and site visits (see page 2).

Cllr Tom Brechany

Archaeology in Northumberland reaches its 20th Edition this year and has received a face lift for its 20th birthday. Despite the downturn in investment in development which had reduced the amount of development led archaeology in Northumberland we still have a full edition of reports to offer here.

This year has been a bumper year for non-developer initiated research in Northumberland by community groups and other bodies, such as the Northumberland Coast AONB who have in the last 12 months commissioned external assessments of both military architecture (page 66) and also lime kilns (page 8).

This year has also seen big steps forward in the preparations for the commemoration of the 500th Anniversary of the Battle of Flodden in two years time. While the community archaeology project at Flodden Hill has carried out a second year of excavation and field walking (pages 26 and 72) the Flodden 500 committee has also completed its first phase of fundraising and has delivered the development of England's first Eco-Museum and the UK's first cross-border Eco-Museum as a result.

Eco-Museum is a concept that most people will not have come across before. While it has been in development world wide for over 50 years there is only one other example in the UK on the Isle of Skye. These projects are community led and managed and offer a new means by which we can contribute to the successful conservation of the County's heritage joining a world wide club that includes Eco-Museums in France, Sweden, Italy Norway, Spain, Iran, Canada and Japan to name but a few. We are very lucky in Northumberland in that one of the world's foremost experts

Stop Press * Stop Press * Stop Press * Stop Press

Though completed too late to report in this year's Archaeology in Northumberland we can report that the Coquetdale Community Archaeology excavations at Barrowburn Mill have been an outstanding success (see opposite).

Time Team made a programme at Beadnell in July and we hope to have a report about their dig in issue 21.

Finally we have heard that the Holy Island HLF Landscape Partnership Phase 1 has been successful - we will certainly hear more in A in N 21.

on the eco-museum concept, Professor Peter Davis, is a member of staff at Newcastle University and has been extremely supportive in his provision of advice to the project (see page 30 and 42).

This year has also seen the completion of a number of projects including RAMP, which moves the interpretation of Rock Art on to a new level providing, initially at least, digital access to interpretive materials for three sites in Northumberland (see page 4). We also have interesting reports on several underground bunkers that have been photographically surveyed in the last 12 months. One from WW2 is a very rare survival (see page 6) and the other is a fine example of the Royal Observer Corps bunkers built across the UK during the Cold War (see page 54).

Finally you will find that the community groups in the Coquet Valley have continued to be prolifically active in the last 12 months over a wide range of sites. We have reports from Coquetdale Community Archaeology on the Bronze Age Cairn Field they have surveyed at Debdon Burn (see page 16) and the remains of a 12th century mill they have identified and commenced excavations on during this summer at Barrowburn (see page 68 and below). At the same time the Archaeology and History group at Holystone have been working gradually towards an excavation of an interesting newly identified earthwork near Holystone Grange and have included a report on their initial survey of the site (see page 50).

Finally we would like to thank Friends of Archaeology in Northumberland for their continued support - we hope to see many of you over the coming months at the renewed Friends Events (see page 2).

CB/SR



FRIENDS of Archaeology in Northumberland

Since April 2009 the *Friends of Archaeology in Northumberland* events have been in abeyance, partly due to the work involved in Local Government Reorganisation (see page 57) and partly due to new requirements for Health and Safety and First Aid provisions. We however recognise that the continued publishing of *Archaeology in Northumberland*, now in its 20th year, still relies very heavily on the support of all who subscribe to the *Friends* group, we could not manage without your contributions.

In the coming year we will again be running events exclusively for *Friends of Archaeology in Northumberland*. These will include six walks (three in 2011 and three in 2012), the dates for which have already been set (see below). In addition we also hope to host a new *Friends* event - a conference, at County Hall in Morpeth, probably on a Friday during December 2011. The aim of this event is not only to provide something indoors during the inclement weather of winter months, but also to provide an opportunity for FAN members to meet and hear from some of the archaeologists about the projects they have reported on in this current issue of *Archaeology in*

Northumberland (Volume 20). Specifically we will be asking contributors to speak about sites that otherwise could not be visited, due either to their location or because they have been backfilled or covered over by development. We also hope to have some poster displays at this event from the various volunteer groups from around Northumberland.

Finally there will also be an opportunity to try archaeological field work with the Flodden 500 Project (see page 26). FAN members are welcome to come and dig with the project in September or take part in metal detecting and field walking that occurs throughout the year.

Events will be announced either by email or letter (as per your stated preference) and can be booked in the usual manner by contacting Liz Williams (01670 534060 - archaeology@northumberland.gov.uk)

Those interested in trying out fieldwork with the Flodden Project should contact Chris Burgess (Flodden500@gmail.com) no previous experience is necessary and you can come for as long or a short as period as suits you.

Friends Programme (2011-2012)

August 7th 2011 - 2nd World War structures in the Northumberland Coast AONB (see page 66) and wildlife highlights in the same area - Chris Burgess and Iain Robson

October 23rd 2011 - Barrowburn Mill and Slymfoot. (See page 68) - David Jones of Coquetdale Community Archaeology.

December 2011- FAN Conference details to be confirmed

March 2012 - Seaton Delaval Hall (see page 64) - Harry Beamish, National Trust Archaeologist. Date to be confirmed

April 14th 2012 - Shittleheugh Bastle and Landscape (see page 58) - Matt Town of North Pennines Archaeology.

May 19th 2012 - Flodden Ecomuseum (see page 42) - Chris Burgess

June 2012 (date to be confirmed) - Lime Kilns in the Northumberland Coast AONB (see page 8) - Richard Carlton of the Archaeological Practice

What is a QR Code?

A new idea we are trialling for Volume 20 of *Archaeology in Northumberland* is the use of QR codes. QR stands for 'quick response' and refers to rectangular boxes of seemingly random dots that you will find on some pages of this year's magazine. Also known as 2D bar codes, these QR codes can



be used to link your smart phone directly to some of the webpages mentioned in the articles (apologies to those of you who do not have a smart phone - time to turn the page!).

To access the QR codes you will find in this year's *Archaeology in Northumberland* you will need to add a QR Code reader to your phone. These are generally available free for download from sites such as

the Apps Store (for Apple iPhone). Once you have your reader installed start it and it should in turn activate your phone's camera. Take a picture of the QR code you are interested in and once it has read the code embedded in the image it should offer to take you directly to page in question, loading it automatically in your phone's internet browser.

Good luck, enjoy, we hope you find it useful (and if you do not have a smart phone - not too distracting). Let us know how you get on.

Twizel Bridge: Flodden1513.com 500 Years Young

Built in 1511, just two years before the Battle of Flodden, Twizel Bridge offered the only dry crossing point of the River Till between the south bank of the Tweed and Ford 10 miles to the south. At the time of its construction it was the largest single-span bridge anywhere in Britain (90ft from bank to bank) and is typical of early 16th century single-span bridges with a comparatively narrow deck spanning between wider bridge abutments and with four close-set chamfered ribs under the arch helping to form and support the structure. Unusually, however, it remained largely unmodified between the time of its construction in 1511 until it was closed to road traffic when the new bridge was opened in 1983.

This fine and unspoilt example of medieval bridge building is likely to have seen action at least two times during the Scottish 'Flodden' campaign of 1513. The Scottish Army is said to have crossed the Tweed somewhere in the vicinity of Coldstream (between Wark Castle and Lennel) before moving along the south shore of the River Tweed

towards Norham. James IV and elements of his army are likely to have used this bridge to cross the River Till before advancing on Norham and turning south towards the castles at Etal and Ford (both also on the east bank of the Till). James IV is also said to have held his last 'parliament' at 'Twizel Haugh' which was located in the grounds of Twizel Castle, between it and the Tweed.

Perhaps two weeks later, on the morning of the 9th September 1513, parts of the English Army also used the bridge, this time to cross from east to west on their way from their camp at Barmoor to the battle. The Lord Admiral, Thomas Surrey, is said to have led the English Vanguard (the forward or leading unit), including the English guns in a march via Twizel to outflank the Scottish forces at Branxton.

Of course, in both the Scots and English cases, it is unlikely that the whole of either force crossed over the bridge, which is too narrow to have supported the speedy transit of

thousands of men, beasts and carts. The bridge itself would presumably have been used only by the heavier items of equipment (guns and wagons) along with those important personages who preferred not to ford the deeper waters of the river on either side of the bridge, the route likely to have been taken by the vast majorities of their armies.

What is unrecorded is whether the Scottish Army left any garrison to defend Twizel Bridge from a possible use by the English. However, having taken care to seize Wark, Norham, Etal and Ford to secure both his retreat/lines of supply and to protect his flank it is hard to believe that James IV would leave the major strategic crossing point in his flank unguarded. Whether this Scottish force was easily overwhelmed, simply decided to retreat in the face of a superior English force or did not exist remains a mystery.

Twizel Bridge is a Grade 1 Listed Building and a Scheduled Ancient Monument.

CB

From www.Flodden1513.com



Northumberland is home to a rich collection of ancient rock art, or cup and ring markings, with over 1000 known examples. This enigmatic and strangely beguiling part of Northumberland's archaeological heritage is, however, sadly often difficult to find and devoid of any on-site visitor interpretation.

Researchers at Newcastle University have been working on an innovative project to make a selection of these carvings more accessible by developing a website designed for access in situ on mobile phones. Three sites in Northumberland (Lordenshaw, near Rothbury, and Weetwood Moor and Dod Law, both near Wooler) have been selected for the project following consultation with local heritage agencies and with regard to both their current state of conservation and potential future threats. The mobile experience encourages visitors to explore the archaeological landscape at these sites, highlighting key points of interest through a range of images, text, and audio.

The twelve-month Rock Art Mobile Project (RAMP), funded by the Arts and Humanities Research Council, builds on existing work collected by digitisation of the Beckensall Archive <http://rockart.ncl.ac.uk>, and the Northumberland and Durham Rock Art Pilot (NADRAP) – now available on-line on England's Rock Art website <http://archaeologydataservice.ac.uk/era/> RAMP was keen to translate some of the core data from these resources into a format friendly to both mobile phones and the rock art novice.

Workshops were held in Rothbury and Wooler with members of the public who had an interest in the countryside and/or rock art. We wanted to discover how people experience and use the rock art landscape, and to explore which types of material would be most appropriate for the audience and mobile phone deployment. The workshops, which involved visiting rock art panels, were enthusiastically attended and



Weetwood



The RAMP Project Rock Art goes

observations and comments directly influenced our design. We heard about the frustrations of not being able to find rock art and saw how participants enjoyed conversations around rock art, especially speculative discussions on the meaning and social context of rock art, despite, or perhaps due to, the lack of definitive answers. The insights gained during the workshops have influenced the final design by the incorporation of dialogue and interactivity, along with clear and

accurate directions to locate the rock art panels. This digital navigation will be aided by the addition of limited signage, which will be mostly added to existing waymarker posts at the sites.



Lordenshaws

Naturally, the rural environment impacted the design too. Rock art's remote locations can be challenging for mobile technology thanks to varying network availability and the even more variable weather – strong winds, driving rain and brilliant sunshine, often all in the same day!



es Mobile



As RAMP was keen to make the mobile experience available to as many people as possible, we decided to create a mobile website rather than developing a platform-specific app, e.g. for an iPhone. Along with enjoying a larger user base, this approach should provide increased longevity in comparison to an app – a key consideration in the rapidly evolving field of mobile technology. Comprehensive testing of signal strength for the five major mobile providers confirmed that a mobile website is viable at all three targeted rock art sites, i.e. if a phone is

capable of accessing the Internet, then visitors will be able to access the RAMP content whilst on site.



Dod Law

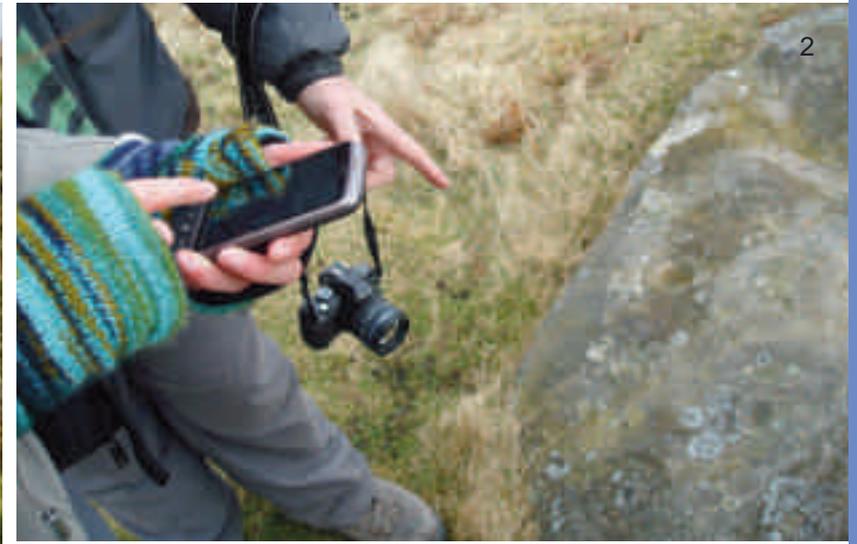
Visitors will be able to discover the carved panels, perhaps opportunistically, and, through the mobile experience, engage with the panels and landscape, developing a greater understanding and awareness of the rock art landscape.

Rock Art on Mobile Phones will be launching in early July 2011, so if you are visiting rock art in the North East this summer, be sure to take your phone and look out for the RAMP logo! Until then you can follow progress and get involved via the RAMP Blog at <http://rockartmobile.wordpress.com> or send your thoughts via Twitter to [@RockArtMobile](https://twitter.com/RockArtMobile).

Photographs

1. Workshop participants engaging with rock art at Lordenshaw.
2. Testing out the RAMP prototype at Horseshoe Rock, Lordenshaw.

**Debbie Maxwell, Aron Mazel, Areti Galani and Kate Sharpe
Newcastle University**



2



An unusual and rare survival from World War Two was recorded in 2010 at Heiferlaw, near Alnwick by Colin Anderson and Ian Hall with permission of the Northumberland Estates. Following research on general World War Two structures in the county, they have more recently turned their attention to Auxiliary Unit Operational Bases. These were secret underground bunkers that would have been used by small,



specialized units of soldiers in the event of a successful invasion of the United Kingdom in 1940.

You can read more about the Auxiliary Unit and their bases in WW2 at:

www.parhamairfieldmuseum.co.uk

In Northumberland there are about 15 or so of these bases and although most are in a very poor state of survival, the 70-year Auxiliary Unit (Special Duties) Zero Station at Heiferlaw remains in very good condition. The base is on private land and not accessible to the public. The survey was carried out with gas monitoring equipment to ensure the atmosphere was safe.

Historically, there were two discrete branches of the Auxiliary Units: the first was established to carry out sabotage behind the advancing enemy lines, and the second was the Special Duties section. In the event of

an invasion, this branch would have been responsible for gaining and communicating intelligence about the deployment of the enemy forces. The Special Duties section recruited people whose work allowed them relatively free movement, such as doctors, district nurses and vicars. They would prepare simple intelligence reports based on what they had seen, which would be left in concealed 'letter boxes' (under rocks, in holes in trees etc). These reports were then collected by the next level of operatives, who would have access to a secret radio transmitter, known as an out-station. The transmitted reports would be collated by a local control station who would then relay them to the main military headquarters. This control station or 'zero station' would be constructed in an underground hide. Each zero station would have a radius of operation of about 30 miles.

The Heiferlaw base was one of these zero stations and would have been used to coordinate the activities of other bases in the vicinity. As such Heiferlaw is relatively large, has an aerial still surviving in a tree nearby (Figure 6) and has tubes which would have been used by locals to pass messages of enemy positions to the people inside the base.

The hide consists of an underground building with three interlinked rooms, built of concrete blocks and mostly plastered and painted white (Figure 4). All that is visible on the surface is the outline of the underground

Heiferlaw 'Zero S

elements where the earth has settled. The vertical entrance shaft (Figure 1) opens into the entrance room, which leads to the central room and then to the escape room and a 14-metre escape tunnel (Figure 3) which exits



Alnwick Station'

into another vertical shaft (Figure 2). The floor was covered with concrete paving slabs. All the walls show signs of where items such as shelving had been secured. The doorways all had spaces where lintels would have been



but these are now missing or in a very rotten condition.

In the entrance room there are two metal tubes, which are connected to a larger underground glazed pipe system that may have been a means of getting messages into the underground hide. In the central, or main, room there are high and low ventilation holes which are connected via two large concrete type tubes in the escape room to an unknown point outside the hide. There are also signs of a lot of equipment having been mounted on the wall next to the escape room. The escape room has the escape tunnel leading from it, which is formed from 750mm diameter concrete drainage pipes (Figure 3). There are also a number of small pipes (Figure 5) leading from this room to an unknown location (possibly outside the hide). These may be related to the generator that was probably installed in the hide to recharge the radio batteries.

The roof of the whole structure was made from corrugated iron sheeting, in a circular cross-section, similar to the traditional air raid shelter. The iron sheeting shows signs of having been painted a white colour, but most of this paint has fallen away and the exposed iron sheeting is corroded.

Taking into account the radius of operation, it is likely that the Heiferlaw Zero Station would have been the only one of its kind in Northumberland.

Photographs

1. The entrance shaft
2. The escape exit with the entrance shaft in the background
3. The escape tunnel and its internal steel door
4. The main underground 'room'
5. Pipes that once fed services to the surface
6. The remains of an aerial strung in a nearby tree.

**EW from a report
by Colin Anderson and Ian Hall**



5



6



A survey of lime kilns in the Northumberland Coast Area of Outstanding Natural Beauty (AONB) was undertaken in spring 2010 with the aim to better understand the surviving lime kilns within the AONB and facilitate the proper targeting of any future conservation and refurbishment works.

The Northumberland Coast Area of Outstanding Natural Beauty runs for 39 miles from Scremerston, a little to the south of the mouth of the River Tweed, to the estuary of the River Coquet at Amble and contains some of the most dramatic and memorable coastal scenery in the British Isles, including soft eroding limestone cliffs around Scremerston and broad sandy beaches, such as those at Cocklawburn, Cheswick, Embleton and further south at Warkworth where they are backed by extensive sand dunes. The whole length of the AONB is underlain with rocks of the Carboniferous age, forming repetitive and deep successions of the lower, middle and upper limestone groups, making limestone easily accessible along much of the coast.

Lime kilns and their associated remains are prominent landscape features of the Northumberland Coast AONB. A number are very well known: the kilns on Beadnell Harbour and on Castle Point at Holy Island, for instance, appear in many iconic images of the coast. Others, though less well known, may have equally scenic backdrops and are just as impressive structurally. All of the kilns have now been long abandoned, but still have the potential to tell a story of the human development of the coast and of the utilisation of its resources.

The survey was concerned mainly with the surviving lime kilns in the AONB, but attempts were also made to place them in their historic context by describing the principal uses of lime and the ways in which the location and scale of its manufacture reflected changing patterns of demand and

Northumberland Lime Kilns

advances in technology. Initial work involved the identification of surviving lime kilns in and around the AONB from the Historic Environment Record (HER) and by reviewing historic Ordnance Survey maps, current aerial photographic sources, previous surveys and other published material. The gazetteer included kilns within a one kilometre buffer zone of the AONB on its landward side, in order to account for kiln sites which may straddle the border of the AONB, as well as those which are clearly visible from, or in economic or other close association with, adjacent parts of the AONB. Some 26 kilns survive; each was visited and a basic condition survey prepared.

Most of the kilns identified in the gazetteer sit alongside associated features, ranging from relatively minor evidence of quarrying to extensive lime working complexes, such as can be found at Littlemill and at the Kennedy limeworks on Holy Island.

As well as describing the nature of the lime industry along the Northumberland coast and each of the known kiln sites, surviving kilns and adjacent remains as inspected, the report also includes a prioritisation exercise designed to produce a league table of the kiln sites ranked according to their structural survival, perceived threats to their continued survival and public accessibility. This process has resulted in the identification of ten sites perceived as 'high-priority' sites which, whilst requiring consolidation works, are structurally substantial and accessible to the public. Suggestions are also provided for the interpretation of the kilns in order to enhance public appreciation of them as structures of interest and beauty in the coastal landscape. It is suggested that interpretation should take account not only of the kilns themselves,



nd Coast AONB n Survey

but of associated features such as quarries and transport links, and should also take into account the wider setting of the sites and their ecological importance.

All but one of the lime kilns surviving within the AONB belong to the late 18th or 19th centuries, but there is considerable evidence for lime production in earlier times. Lime burning was certainly practiced in the region by the Romans and a late 15th or early 16th century lime kiln, revealed by winter storms and excavated in 1995 (Williams and Williams 1996, 109-17), lies on Beadnell Point, to the east of the harbour and its much later and better known kilns. Medieval accounts from Lindisfarne Priory also indicate that the monks there burnt their own lime. Although lime was probably used for a variety of purposes in Roman and medieval periods, by the 18th and 19th centuries its principal use was for soil improvement; one aspect of the systematic development of farming techniques over the 18th and the 19th centuries.

Descriptions of lime kilns and the methods of their operation in 18th and 19th century Northumberland are contained in several contemporary accounts.

In 1788, William Marshall described Northumberland lime kilns as follows:

the materials are either limestone entirely of limestone lined with bricks, and no other airholes are made than the eyes at which they are kindled. The form of the cavity is an irregular cone inverted. At the bottom are generally two eyes opposite to each other, the cavity being here contracted to a narrow trough, the width of the eyes. The proportion between the depths and the diameters of these kilns is that of the

depth being generally about one and a half diameter of the top. The size varies from six to 40 chaldrons (quoted in Atkinson 1974, 103). [N.B. 1 chaldron = 50 cwt].

Something of their mode of operation is contained in the slightly later account of the great agricultural reformers, Bailey and Culley:

The mode of burning lime in this county, is mostly in draw-kilns, of the form of an inverted cone, with two or three eyes or mouths for drawing out the lime, and admitting air: These kilns are kept burning and drawing perpetually. Some of the large sale kilns will afford 40 or 50 cart loads a day: A cart load of coal is reckoned to burn two cart loads of lime (Bailey and Culley 1797).

The descriptions above outline the basic technology used in all the lime kilns surviving along the Northumberland coast, the operation of which was determined by the same basic chemistry and by similar economic principles involving the costs of raw materials, transport and labour.

The design and character of kilns used in the coastal zone is rather varied, but all the remaining upstanding kilns are draw kilns, some of which are amalgamated into rectangular blocks or batteries, as at Littlemill, Holy Island and Seahouses, wherein each kiln pot was associated with three or four draw arches, but the principles of both construction and operation remained the same. Such kilns are stone-built structures, often square or oblong in plan, but sometimes rather amorphous where they have been extended or adapted, often widening towards the bottom but usually partially submerged in a sea of accumulated kiln waste, or built into a hillside. The smaller farm or estate kilns have a single pot, circular or oval in plan and tapering, funnel-like in cross-section, towards the bottom.

Pots are lined with stone or brick –

often fire bricks made from clay found in coal measures, in order to protect their surfaces from the erosive impact of both heat and thermal shock. Such linings often themselves become lined with an accretion of slag or glaze produced as a consequence of chemical reactions between stone/brick, fuel and heat. Two, three or four draw arches – always round on the Northumberland coast but more often pointed in the interior uplands, usually stone-built but sometimes brick-lined, define recesses or porches around the openings, or ‘eyes’. The eyes supplied and, with the draw arches, regulated the necessary draught, as well as yielding the burnt lime, which descended to the bottom of the kiln continuously once the kiln was in full operation. Above the eye there may be a poking hole, through which an iron poker was pushed to riddle or stir the burning lime.

Many kilns, particularly freestanding ones such as Littlemill, are buttressed. The other essential component of all kilns is the ramp up which the raw materials, invariably coal and limestone, ascended to the opening of the pot. Such ramps sometimes used the natural topography – as at the Castle Point kilns on Holy Island where the kilns are built on the beach and the kiln pots are reached from the cliff top – particularly where kilns were built into quarries. In other cases ramps were deliberately constructed, reinforced and widened over time with the aggregation of quarry and kiln waste materials. In some cases the kiln ramps were supplied with waggonways – the remains of which survive at Littlemill, but in most cases horse and man power were used to transport raw and processed materials up to and out of the pot. (Continues on Page 10)

Photographs

- 1, 2 and 3. Beadnell Harbour
4. Beadnell Windmill, Hillstead Quarry
5. Budle
6. Cocklaw Dunes
7. Kennedy Lime Kilns, Holy Island
- 8, 9 and 10. Littlemill
11. Littlemill (Interior)
12. Cocklaw Dunes

10



11



12



13



14



15



16



17



18



19



20



number of these sites would make consolidation and restoration both feasible and attractive.

Finally, it is noted that many of the kilns would benefit from interpretive strategies, either through on-site notice boards or remotely, through web-based projects. They also lend themselves to community-based survey and restoration projects.

References

- Atkinson, F, 1974. *The Industrial Archaeology of North-East England*, 1, London.
- Bailey, J and Culley, G, 1797. *General view of the agriculture of the county of Northumberland with observations on the means of its improvement.*
- Bainbridge, J W, 1991, 'Lime kilns of north Northumberland' in *History of the Berwickshire Naturalist's Club*, 45 (111-137).
- Jermey, R C, 1992. *Lindisfarne's limestone past: quarries, tramways and kilns.*
- Northumberland County Library.
- Linsley, S, 1992, 'Eighteenth century to nineteenth century agrarian transformation and industrial revolution' in Pevsner et al. *The Buildings of England: Northumberland*, London.
- Trueman, M, 1990, 'A Lime Burning Revolution' in *Association for Industrial Archaeology Bulletin* 17, 2 unpag.
- Williams, A. and Williams, E, 1996, 'Excavation of a late medieval lime kiln on Beadnell Point, Northumberland' in *Archaeologia Aeliana* 5th series. XXIV.
- Williams, R., 2004, *Limekilns and lime burning.* Shire Publications Ltd.

Photographs

13. *Holy Island, Castle Point*
14. *Holy Island, Castle Point, Pots*
15. *Seahouses Harbour*
- 16 and 17. *Spindlestone*
18. *Cargie's Kiln, Scremerston*
19. *Dunstan Hill Quarry, Windmill*
20. *Dunstan Square*
21. *Easington Grange*

Richard Carlton,
The Archaeological Practice Ltd
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21



Conclusions

The surviving lime kilns within the Northumberland Coast AONB are attractive historic and architectural features of the area. They are reminders of a distinct part of the human development of the coast and of other areas supplied by the lime kilns and also of its geological background. Some of the kilns have statutory protection and a few are actively maintained by the National Trust. Others are not protected by any designation, their disuse exposing them to increasingly rapid degradation. Some of the kilns lie within the remains of larger limeworks and have associated earthworks and structures around them. All the surviving kilns and many of the surrounding earthworks and structures would benefit from detailed field archaeological survey, in a number of cases to enhance work carried out by Stafford Linsley and students of the former Department of Lifelong Learning at Newcastle University.

The story of the lime industry in the area touches upon a number of other historic themes and potential areas of research, including: the 18th and 19th century revolution in agriculture in Northumberland and areas of Scotland supplied by the coastal kilns; developments in sea transport over the same period including the improvement or introduction of harbours and jetties along the coast, on occasion specifically to facilitate the coastwise movement of lime; and the revolution in land transport which came about with the introduction of railways in the mid 19th century which allowed the wider terrestrial movement of lime. Because of these links interpretation of the kilns would benefit from a broad, multi-thematic approach.

All the surviving kilns, other than those in the care of the National Trust, are in a state of active and sometimes speedy decay. All are worthy of retention, but some survive more substantially than others and could be consolidated at manageable cost. Public access to a

Ecology and the Heritage Asset *Bats in the Belfry...*

...Pele Tower, Bastle, Castle, Listed Building, Monument, Hall?

Most of Britain's 17 species of bats can and do use a range of our traditional and historic buildings to roost, hibernate and raise a family, as well as the surrounding landscapes for their larder. Sadly, almost every one of the 10 species found in Northumberland have suffered widespread and significant declines over the last few decades as a result of persecution, loss of roost sites and loss of feeding habitat. As a result of this all species of bats and their roosts (whether they are in use or not) are fully protected by both European (Conservation of Species and Habitats Regulations 2010) and UK (Wildlife & Countryside Act 1981 as amended) law, including against deliberate or reckless destruction and disturbance of bats themselves and their roost, hibernation or breeding sites.

The presence of bats is a 'material factor' as far as planning permission is concerned and that includes those in historic or traditional buildings. The starting point has to be to assume that bats are present but the only way to be certain is to engage a specialist to survey the building. It is, however, rare for the presence of bats to be a 'show stopper' as far as changes and repairs to buildings are concerned. In the vast majority of cases works can still be carried out as long as consideration is given to the bats, the timing of the works and awareness of the needs of bats in a way that will allow them to remain and flourish in their roost sites.

If works to a traditional or historic building are required then as far as bats are concerned planning ahead is the key to allowing a sustainable future for both bats and buildings. The earlier a specialist bat survey is undertaken the better so that any issues are known well before any works commence and potentially expensive delays or unintentional breaches of the law can be avoided. If possible be proactive for bats. Include bat surveys as part of any

periodic building condition surveys so a picture of bat use over months or years can be built up. Specific surveys will, however, be required as part of any build up to works to parts of the building (roofs, walls, cladding, tunnels, basements or even outbuildings) where bats might be likely to live. If bats or their roosts might be destroyed or disturbed then a special licence (a protected species development licence) is likely to be required from Natural England and time needs to be allowed for that to be issued. The project manager or person in charge of any works needs to be aware of any potential bat issues as well as the law.

The Northumberland Bat Group (NBG) holds records for the whole county and is likely to have historical records of bats in the area and may even have some for the building in question. They also have a great deal of other information and expertise so a good working relationship and early consultation with the NBG will always be useful and may help to get a good survey if or when one might be required. If a development licence is required then a detailed Method Statement describing how bats will be properly accounted for during the works will be essential. This demonstrates to the planning department and/or Natural England that the correct procedures are to be followed and that the works comply with the law.

If works to a traditional or historic building are needed then:

Always

- get some bat advice from Natural England as early in the project planning as possible
- consider any bat issues whenever contemplating works, whether it be minor (such as repairing slipped slates) or major (such as re-roofing)
- put a notice near any known bat roost entrance to warn anyone who might require access.

Never

- allow works where bats are present without making sure the law isn't being broken,
- pick up bats, especially with bare hands; anyone bitten by a bat should seek medical advice,
- assume that workers, contractors or other staff have already been told about bats or their roost.

Try to

- be proactive – organise surveys, improve the surrounding habitat and provide extra roosting sites,
- provide some bat interpretation or organise bat walks for local people and visitors.

Anyone contemplating works where bats might be an issue should bear in mind that the laws protecting bats operate independently of the planning system so even if planning permission is not required, the laws protecting bats and their roosts still apply.

More information and advice is available from:

Natural England – Bat Advice Helpline
0845 1300 228 or:
www.naturalengland.org.uk/

English Heritage at:
www.english-heritage.org.uk/publications/bats-in-traditional-buildings/

The Bat Conservation Trust at:
www.bats.org.uk

Northumberland Bat Group at:
www.northumberlandbats.org.uk

Or from the Northumberland County Council ecologists:
David Feige 01670 533153
(West Area)
Colin Marlee 01670 533907
(North & South East Areas)

An archaeological topographic survey was carried out at Steel Rigg on the north side of Hadrian's Wall on behalf of the Northumberland National Park Authority in February and March 2010, when weather and ground conditions were initially very poor due to the extended severe winter, although on occasions the low winter sun highlighted subtleties contained within the earthwork complex.

The earthwork survey examined an elongated area along the north side of the Wall bounded to the west by the C road providing access from the Military Way, to the south by the north side of the Wall and to the north by the current visitor car park (former site of Steel Rigg farm). The eastwards extent of the survey was not determined by manmade landscape features, but continued to

the point at which the Wall ditch began to run downhill, at a point roughly parallel with a turn in the Wall to the south-east. The survey included the north side of the Wall and the Wall ditch and any features clearly apparent to the north of the ditch.

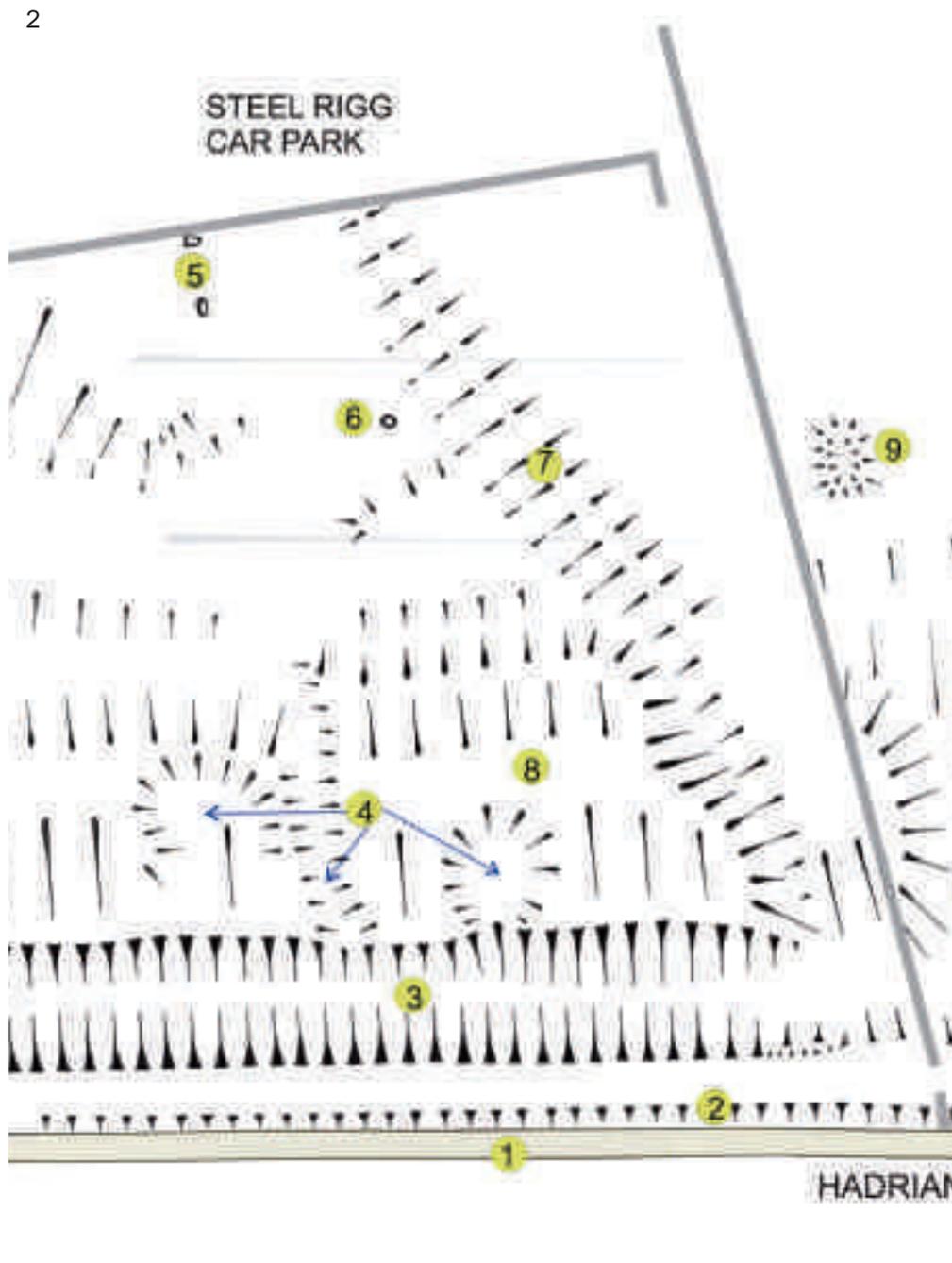
The aim of the survey was to provide information to the National Park and National Trust for the management of the site, in particular in relation to pathways and footpaths and their upgrade for all visitors, as well as provision of an information panel.

The various components documented during the survey form part of a closely interrelated, well-preserved historic landscape which would merit further investigation. The majority of features identified are

1800 years of Surveying

likely to be associated with the construction and maintenance of Hadrian's Wall from the second century AD and the subsequent use of the site for farming in the post-medieval period. Phases of wall clearance, reconstruction and continuing management have also created their own remains, notably a linear depression (2) on the north side of the wall.

However, since it is not known when the Steel Rigg farmstead was established, it is possible that farming activities have a much longer history on the site, perhaps extending into the medieval period. Features most clearly associated with the Roman period are



Hadrian's Wall Steel Rigg

1, 2, 3 and 8, but several other features could also be associated with that period. Features most likely to be associated with the later period of farming activity include 4, 5, 6, 9, 10 and 11. Features 10 and 11 may be enclosure or boundary features representing an earlier phase of farming activity, but performing the same function as, the modern field walls forming a field south of the farmstead.

Based on consideration of the above, a suggested sequence for the earthwork features surveyed at Steel Rigg is as follows:

Phase A

Wall and ditch; the ditch peters out at the east end after pulling back from the Wall line; ditch up-cast on the north edge forms a

substantial low bank, or glacis, extending across the west part of the surveyed area and for about 25m to the east of the modern field wall, where the ditch becomes a minor feature, without up-cast.

Phase B

Two hollow ways cut across the up-cast and into the Wall ditch, possibly to aid drainage of land to the north, or to demarcate 'properties' set up on the dry area of the up-cast from the ditch.

Phase C

A substantial metalled roadway was constructed with side ditches up to the Wall line (purpose unknown). A bank constructed to the east of the road tracks the road line, channelling excess drainage water from the east side of road. This bank continued along and re-cut the south side of the ephemeral Wall ditch.

Phase D

Features clearly related to modern farming.

Phase E

Features clearly related to the excavation/partial reconstruction of the curtain wall.

In order to more confidently determine a sequence of activity for the site, further fieldwork would be necessary, potentially including

geophysical survey and test-trenching, supported by a full documentary study of the site in order to access records of modern farming or other activity.

Photos and Illustrations

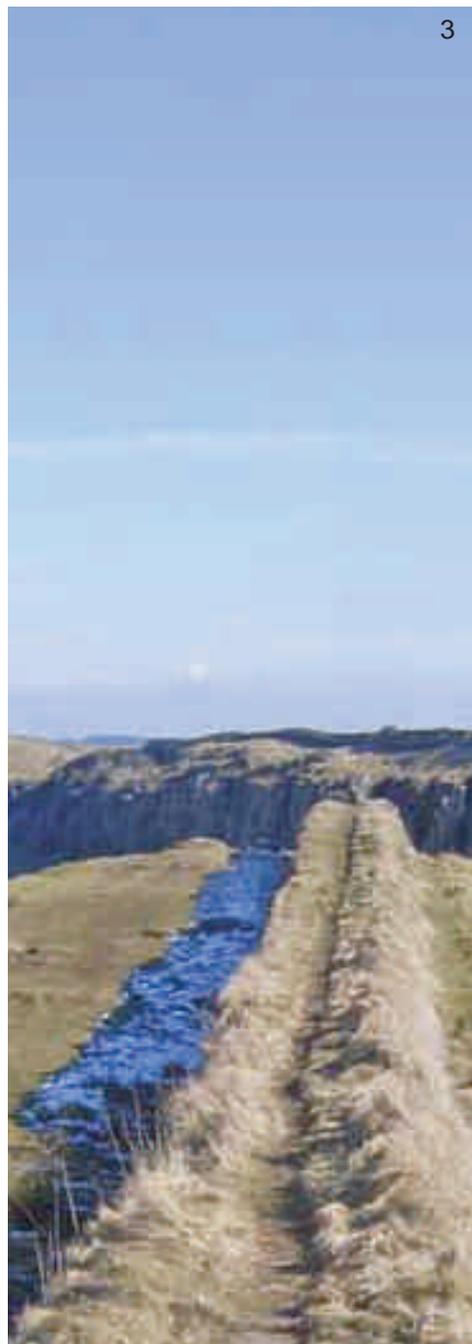
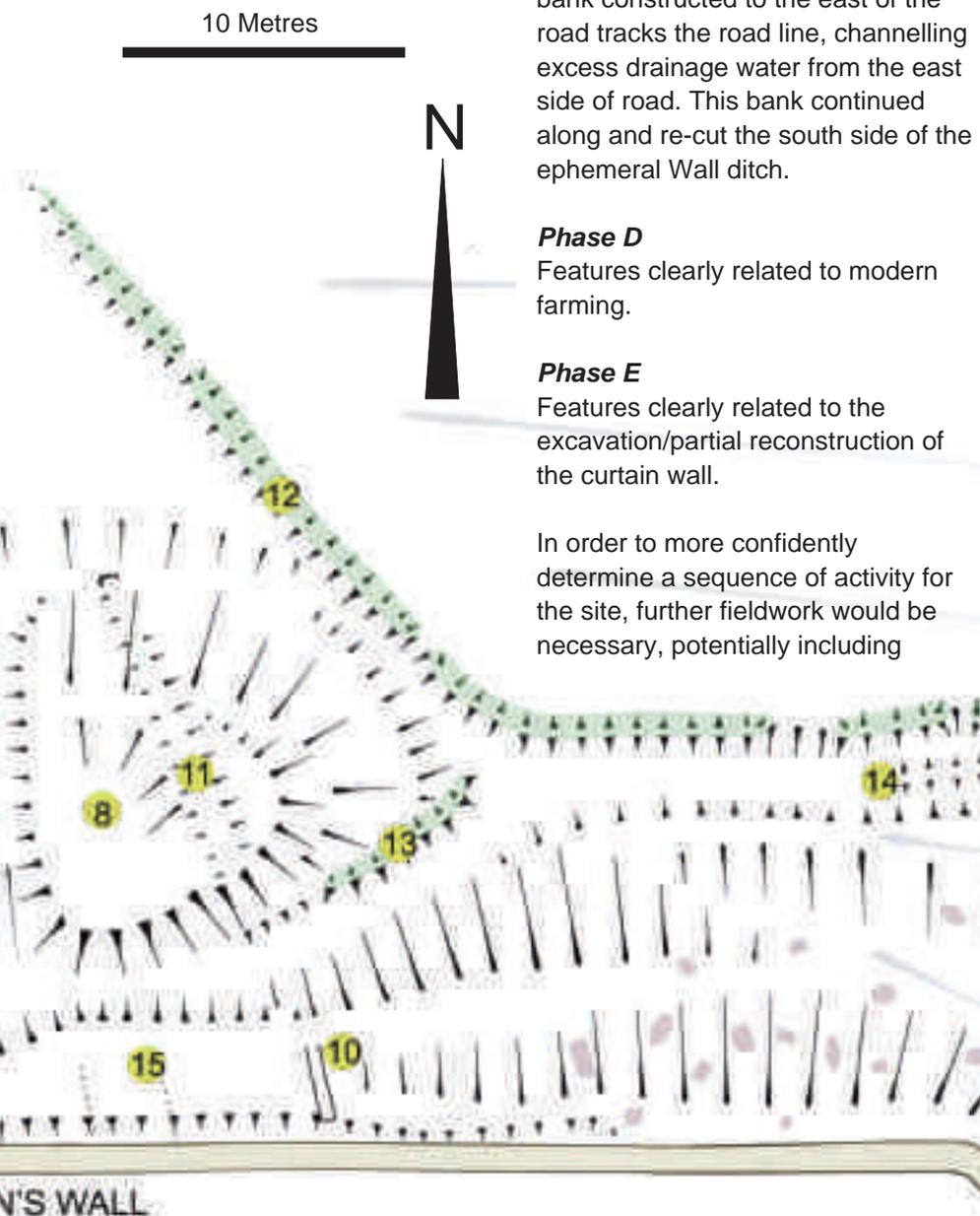
1. Surveying at Steel Rigg
2. Plan of Steel Rigg (Key - 1: Hadrian's Wall curtain wall, 2: linear depression or ditch, 3: Hadrian's Wall ditch, 4: shallow earthwork features, 5: garden or enclosure wall fragments, 6: well, 7: linear bank, 8: Wall ditch up-cast mound, 9: enclosure, 10: wall footings of pen or enclosure bank, 11: low bank and wall footings, 12: linear bank, 13: linear bank, 14: linear bank, 15: shallow runnels.)
3. The Roman Wall at Steel Rigg

Richard Carlton

The Archaeological Practice Ltd

Alan Williams

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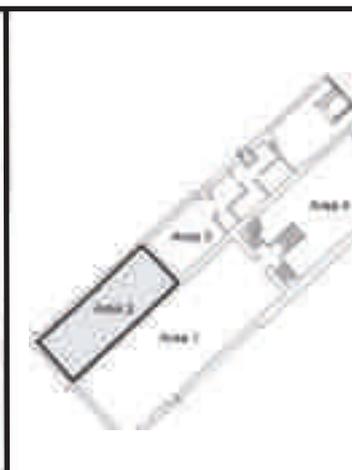
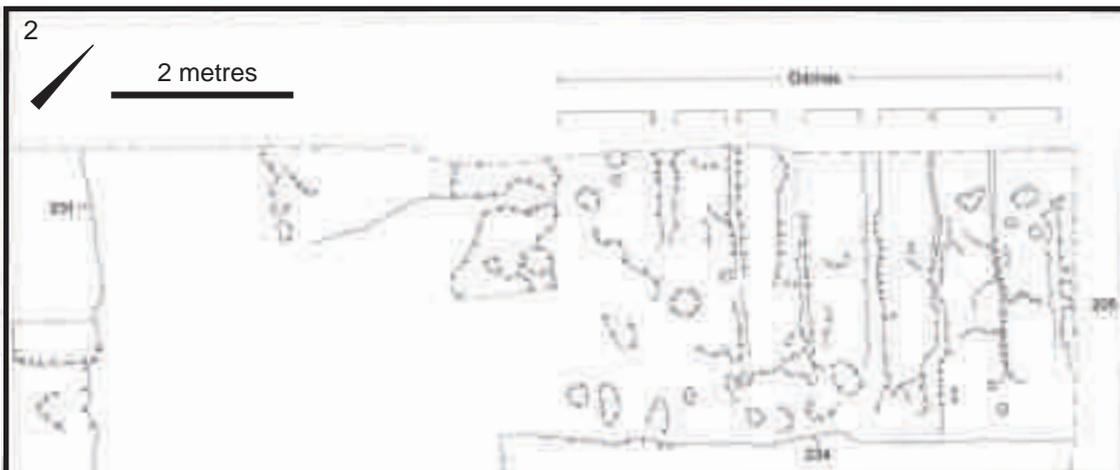
Excavations at 119-125 Marygate, Berwick-upon-Tweed (the former Paxton and Purves drapers and tailors shop) in 2007 have revealed a sequence of activity from the 13th century through to the present day and recovered a large assemblage of archaeological material, including ceramics, animal bone and carbonised macroplant remains.

Levelling of the ground at the front of the building in the 19th century had removed all evidence for structures relating to the medieval street frontage but early activity was preserved towards the rear of the plot where midden deposits had been dumped and possibly used to level the slope down towards the river Tweed. Sometime in the 13th century three oven-like structures, which are thought to be corn driers, were constructed on the plot. Large amounts of charred oat grains found in a pit and other deposits suggest grain processing on a semi-industrial scale. Pottery found in the demolition debris in and over the ovens suggests that this activity had ceased by the mid 14th century, possibly due to the Border conflicts and the reduced size of the population.

For the next few centuries the rear of the plot was used only for agricultural or horticultural purposes, evidenced by the dumping of midden material and the build up of a garden soil. This reflects the situation illustrated on a map of 1570 on which it is possible to approximately locate the site. This shows a row of buildings fronting on to Marygate with enclosed gardens or yards behind.

During the 16th century the building on the street frontage begins to

Marygate: Berwick-upon-Tweed Kilns, Sewerage



ick-upon-Tweed e and Gardening



expand back into the yard or garden, with the construction of a building containing a cobbled surface and stone lined gully, possibly a stable. The rear half of the plot continues in use as a garden. A series of wide, shallow ditch-like features had been cut in parallel to each other into the garden soil. These are very similar to features that can be seen on the 1570 map, although not within the properties surrounding the excavation area, and it seems most likely that they relate to horticultural or agricultural activity. They may have been created by the cultivation of crops such as raspberries with the depressions caused by walking between the rows of canes.

Development over the rear of the plot continued throughout the 18th and 19th centuries, presumably reflecting the growing prosperity of the owners and the town itself. There are three successive expansions of the building's footprint out into the back land and onto the remaining area of garden, culminating in the standing building that we see today. One interesting development was the construction of what appears to be an early septic tank. This took the form of a large stone-built subterranean chamber with niches in its walls, which had subsequently been split in two by the construction of a brick wall and capped with a sprung brick roof. It is possible that this feature originally began life as a cess pit which was later modified by the addition of the brick wall to form

two connected chambers, the primary requisite of a septic tank. The structure reflects improvement in civic hygiene and suggests that Berwick may have been ahead of its time. Septic tanks were first patented in France by John Louis Mouras in 1881 and first introduced to England after 1895. However, pottery dating from the late 18th to the mid 19th century, which can only have been deposited after the conversion of the tank, highlights the possibility that primitive septic tanks were in use in England from a much earlier date and that Mouras was only developing an already established sewage treatment system.

The excavations have revealed evidence for the development of the site from at least the 13th century through to the 19th century, developments which reflect in microcosm those of the town itself, from establishment and consolidation during the 13th and 14th centuries, stagnation during the Border wars, expansion as security returns to the town following the English conquest in the 16th century, and finally increasing prosperity throughout the 18th and 19th centuries.

The archaeological work was undertaken by AOC Archaeology Group and funded by Bowcliff LLP to a written specification agreed with Northumberland Conservation.

Photographs and Illustrations

1. One of the 14th century ovens.
2. Plan of 16th century garden features in Area 2
3. Brick sprung roof of the septic tank.

**Erlend Hindmarch
AOC Archaeology Group**



Debdon: Rothbury Cairnfield Landscape

In April 2010, members of Coquetdale Community Archaeology surveyed the cairnfield at Debdon – a moorland area above Rothbury centred at NU 0567 0300.

According to English Heritage the field consists of some 30 Bronze Age clearance cairns ranging from 4m to 10m in diameter and up to a height of 1.5m. There are also three standing stones, but none of them is in the location marked on the Ordnance Survey map. Finally, there is a rock with cup marks and a basin. It is hard to tell if these are natural, or originally manmade and eroded; what isn't natural, however, is the name 'FIONA' hacked across the rock.

We identified and photographed every cairn and measured the size of each and its orientation. In all, we found 43 cairns, together with traces of field boundaries and the remains of a (probably) later rectangular structure. We mapped the cairns on an aerial photograph, and added in contours. It is obvious that the cairns are on higher ground around a lower area, but it is not clear if they represent a

major clearance of the lower ground, or a more sporadic clearance of the higher ground with agriculture between them. Some 31 of the cairns have a detectable alignment (the rest are almost circular). Analysis hints at an east/west alignment for some but this is not statistically significant and there is no associated physical grouping on the ground. There is also a fairly consistent distribution of size, although tumble makes accurate analysis difficult.

Two of the cairns are noticeably different from the rest: they are similar to the kerb cairns documented by Lynch and Ritchie, who describe them as looking like a petrified charlotte russe. Such cairns are found at several locations in Scotland and as far afield as the Isle of Lewis and are frequently associated with cremations. The ones at Debdon appear to have been disturbed and probably robbed.

So although the English Heritage description is not complete, its basic propositions are fairly accurate. Our next steps are to investigate the

surrounding woods, and plot field boundaries.

Photographs

1. One of the kerbed cairns
2. One of the standing stone

David Jones
Coquetdale Community
Archaeology



2



1

Northumberland's Drove Roads

In August 2010 The History Press published the book, *Drove Roads of Northumberland*, which grew out of a study of the historical and

archaeological background to stock droving activities in the area of what is now the Northumberland National Park, but has been expanded to deal with droving activities throughout the whole of the county. Its subject range has also been expanded to include more discussion of short-distance droving in the 20th century, much of it derived from the personal recollections of local people, and a section on the physical remains of droving

The term 'droving', in its commonly accepted sense, denotes the practice of moving cattle over very great distances from northern Britain and Ireland to the growing towns of England, continuing as far south as London and adjoining counties, a practice which reached its zenith between the late 17th and mid 19th century. More generally, however, droving might be defined as any practice which involved the driving of livestock over significant distances. Droving of this kind has been integral to pastoralist activity in the Northumbrian uplands for millennia, being an integral component of various kinds of seasonal transhumance and other agricultural customs pursued by communities in the Northumbrian uplands during the medieval and early modern periods and probably also throughout much of later prehistory.

The modern long-distance cattle droving trade from Scotland to England began in earnest at the beginning of the 18th century after Anglo-Scottish economic relations had been placed on a permanently stable and peaceful footing, developing to meet the growing demand for meat from the expanding urban centres of England, most notably London itself. As a result of this growth, by the end of the 18th century, 100,000 cattle were being driven south across the border each year.

A multiplicity of routes through the Northumbrian hills were used for this traffic, but the pattern of usage shifted over time, as the progress of turnpiking and enclosure restricted movement and access to pasture and increased the costs of droving along some of the routes. Particularly important were the routes down the North Tyne valley and the Great Drift Road, which ran along the Coquet/Rede watershed from the border at Brownhart Law, via Featherwood and Dudlees to Elsdon, whence it headed south to Stagshaw Bank. The crucial hubs in the network were annual fairs held at

places like Elsdon, Haltwhistle, Newcastle and, most important of all, Stagshaw Bank north of Corbridge, where all manner of livestock exchange took place. From the end of the 18th century sheep assumed greater prominence in the droving trade, a change reflected in the local economy, as landowners amalgamated several holdings to form larger, more viable tenancies, resulting in the creation of huge sheep farms in Redesdale, North Tynedale and upper Coquetdale.

By the mid 19th century the long-distance, cross-border droving was being supplanted by the growth of the railways, which provided a more economic service and delivered livestock to their destination in better condition, whilst the historic fairs were gradually replaced by auction marts located beside railway stations. The drovers now became intermediaries between railhead, auction mart and fair, little diminished in numbers but employed in very different patterns of work and, increasingly, in an urban rather than rural setting. Droving still occurred in the countryside, mainly from farm to railhead, but this was carried out by the farmers, their families and employees, not professional drovers. From the 1920s or 1930s road haulage gradually began to replace rail transport, although the latter remained important right up until the closure of Northumberland's rural branch lines to freight traffic in the 1950s and 60s. The motor lorry, with its great flexibility, finally put an end to droving over all but the very shortest distances and even this aspect of stock movement has been abandoned in the face of new Defra regulations introduced since the last outbreak of Foot and Mouth disease in 2004.

The commercial and social importance of droving is not matched by the scale and permanence of monuments associated with it in the landscape, which means that

it is easily overlooked. Closer attention, however, reveals that in addition to the songs and stories of droving preserved in folk memory, as well as place-names such as 'Clickemin' (at Elsdon, Ponteland, for example), numerous physical traces of droving can be seen within the county.

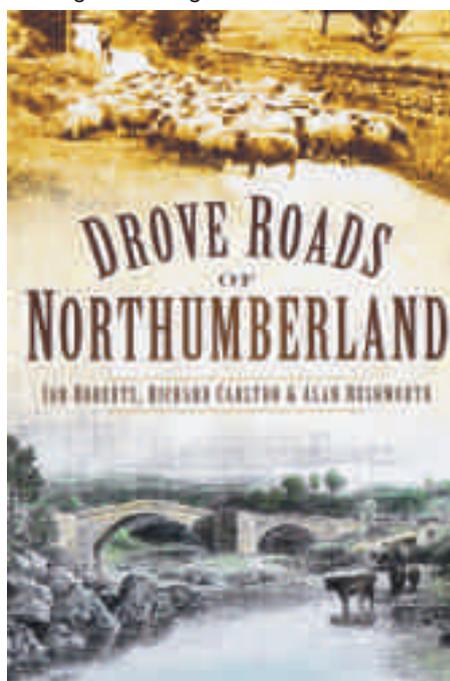
Such traces include the roads themselves, often bounded by linear boundary features such as walls and ditches. The droveways crossed rivers and streams principally by means of fords, but bridges were provided on some of the major routes into market centres and over major rivers such as the lower Tyne, and more were constructed in the later period of droving. Important crossing points on the droving routes sometimes acted as foci for the

establishment of trading posts, with inns and fairgrounds and the development of permanent settlements. Amongst a range of smaller or more ephemeral structures often associated with droveways, but also existing independently, are the remains of ponds and troughs for watering stock, smithies for shoeing cattle before they reached metalled roads in the lowlands, and field systems linked to

inns and other (semi-) permanent settlements. Compounds such as stells, often used to house stray animals as well as to gather sheep for shearing and lambing are a common sight on the fells, and at Elsdon one survives in a village location.

Thanks are offered in the book to Individuals who provided oral testimony or comment for Chapter 4 including Laurence Dagg, James Johnson, Bill Robson, Willie Robson, Mrs D Bell, W Bolton, W Brown, A Cowen, G Fenton, L I Hedley, A D McCracken, H Robinson, Mrs M Walton and Mr G W M Sewell, while Tim Gates and Peter Ryder provided additional material. Institutions which provided records or allowed the reproduction of images include Beamish Regional Resource Centre, Bellingham Heritage Centre, the Collection of the Duke of Northumberland, the Society of Antiquaries of Newcastle upon Tyne and Tasset Archive Group.

**Richard Carlton, Ian Roberts
and Alan Rushworth**



Preparations are being made for a phased programme of repairs and conservation of Barmoor Castle. Designed in 1801 for Francis Sitwell (later MP for Berwick) by John Patterson of Edinburgh, who had been a pupil and partner of the Adam Brothers and developed his own "Castle" style of Country House, Sitwell clearly had an idea that the Castle should make some reference to the medieval conflicts of the Border. After all Barmoor is well recorded as the camp and headquarters of the English Forces gathering under the leadership of the Earl of Surrey on the eve of the Battle of Flodden in September 1513 and there appears to have been a tower on the site of the present building, some evidence of which may be incorporated in it.

The Castle itself is Listed Grade II* and is entered in English Heritage Buildings at Risk Register for 2009/10, its condition noted as "Very Bad, Category A, at immediate risk of further rapid deterioration or loss of fabric with no solution found".

Reading the annals of the Barmoor Estate and the Sitwell family, researched by John and Ann Ferguson, one can see the inexorable decline in their fortunes

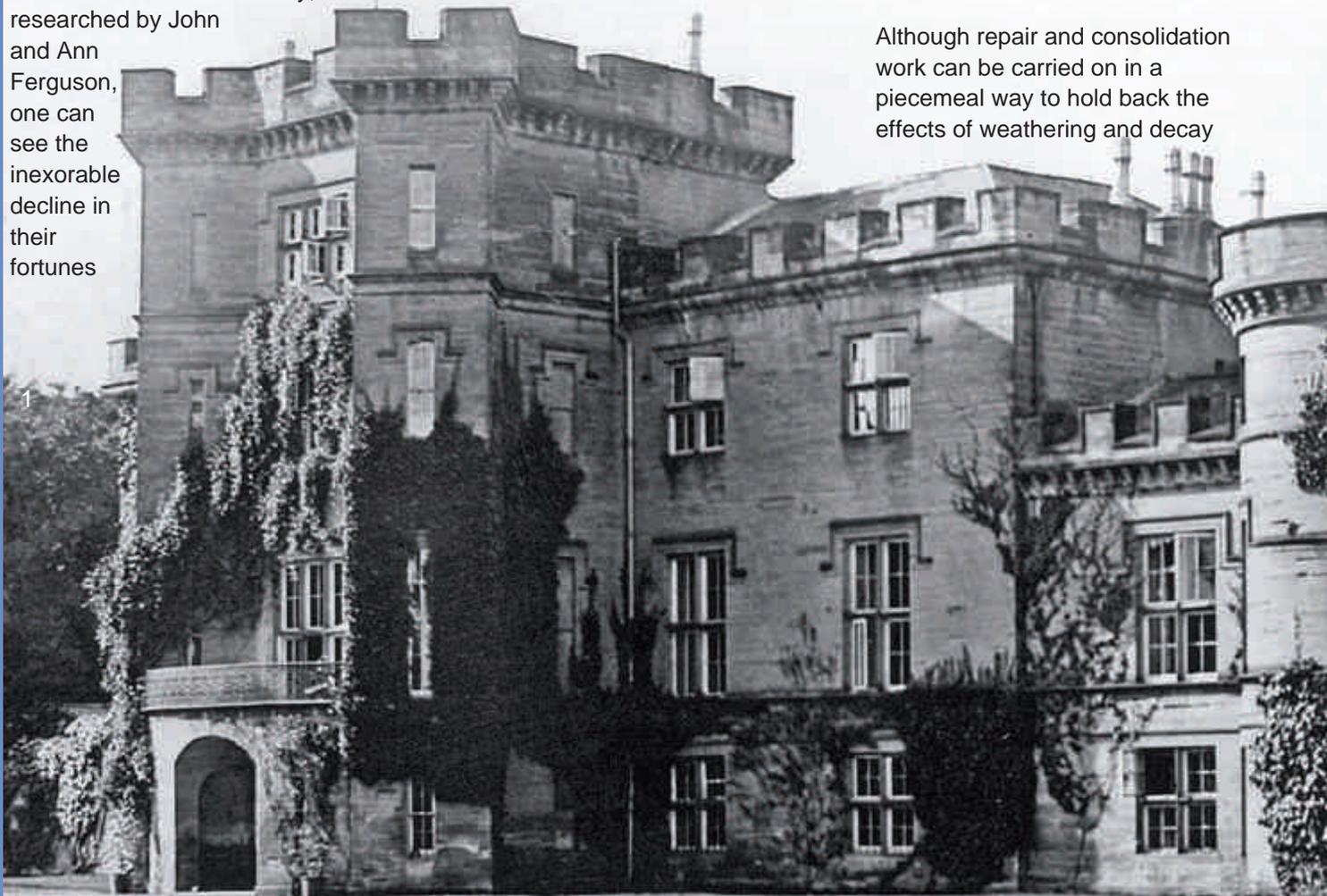
through mismanagement and distraction, and by the 1960s they were talking of clearance, demolition and sale. Demolition was avoided but after dry rot was found in the North Wing the process of withdrawal was inevitable. The contents were sold and the Castle and the small area of land remaining around it were bought in 1979 by the present owners Mr and Mrs Lamb. The focus of their effort has been the development of Barmoor Castle Country Park with chalets and permanent caravan pitches spaciouly set out in the curtilage of the Castle.

In 1987 substantial repairs were carried out to the roofs with grant aid from English Heritage but otherwise the Castle has stood patiently awaiting reinvention for a new use. In just the last two years a sense of optimism is emerging that the future of the Castle might be shaped by participation in the Flodden 1513 Ecomuseum (see page 42), now



enthusiastically supported by other owners in the vicinity connected by threads of built, natural and cultural heritage that are part of the Flodden story. The Castle will be used to display archaeological finds from the area, for education and interpretation purposes and as a cultural resource both for tourists and the local community.

Although repair and consolidation work can be carried on in a piecemeal way to hold back the effects of weathering and decay



Conservation Plan Repair and Reuse



- recognise how proposals for repair and alteration for new use can impact on the significance.
- Develop policies to protect the significance and guide repair and conservation work.

The Conservation Plan will need to be as widely aired as possible to be supported by statutory authorities and consultees, funding bodies and the local community. It is only a beginning, but there is a whiff of a new enthusiasm to breathe life back into this fine building.

Photographs

1. *Barmoor Castle from the north-east taken when the castle was still occupied in the 1950s*
2. *In contrast to the Gothic exterior the interior contains late Adam-style doors and pediments*
3. *The ravages of time on the roofless North Wing.*
4. *Palm leaf decorations to the grand stairs with cantilevered stone steps and landings*
5. *The East Tower today, with the main entrance below (Photo: Norman MacKillop)*

there is now a need for a more strategic approach to manage resources and to assess the opportunities for new uses and the impact they might have, both on the process of conservation and the character of the building after the work is completed.

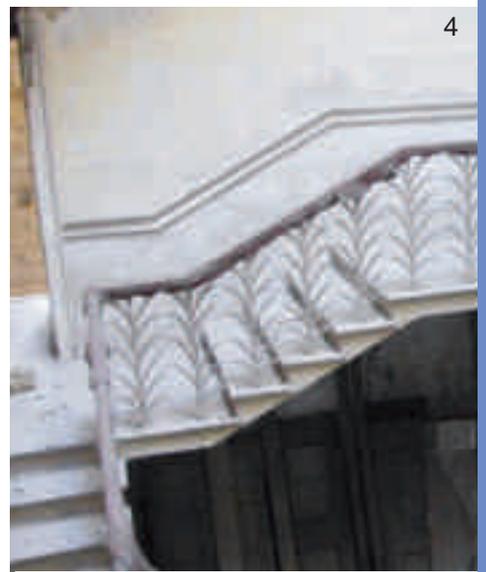
A Conservation Plan would aim to:

- Enhance understanding of the building and its context.
- Assess its significance.
- Identify conservation issues and

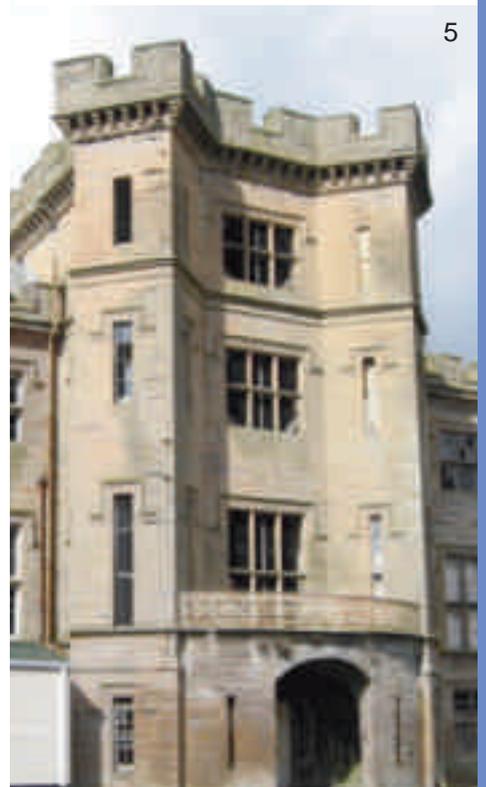
**Robin Dower
Spence and Dower**



3



4



5

A series of archaeological excavations were carried out at Bremenium Roman fort, High Rochester (NY 832 986) in July 2010, which resulted in the investigation of over 50 square metres of the south-west part of the fort interior. The works were carried out ahead of proposals to develop and extend a stone barn.

Most of what was previously known about the fort at High Rochester has been derived from finds of inscribed stonework recovered from the site by antiquarians, the first accounts of which date to the beginning of the 17th century, culminating in excavations carried out there in the mid-19th century, subsequently enhanced by additional targeted investigations by Richmond in 1935. Later excavations, notably by Crow in the 1990s, together with continuing episodes of geophysical prospection provided less spectacular results, but have enhanced understanding of the fort and its layout, adding particularly to knowledge of associated extra-mural features.

It is known that Bremenium long played an important role as an outpost fort beside Dere Street, the easterly Roman route into Scotland, and had a large mixed garrison usually consisting of a military equitate cohort and a unit of scouts. The base was occupied during the Flavian period (AD85-90) and from the Antonine period onwards (AD142-62), with rebuilding phases in the early third century and at the beginning of the fourth century. Military withdrawal from the site

Excavations at High Rochester Bremenium Roman Fort

seems to have taken place in the early fourth century, perhaps under Constantine (Casey & Savage 1980), although there are some intriguing contradictions in this respect between the evidence provided by coins, pottery and structural modifications (Crow 2004, 222-3).

Trench 1

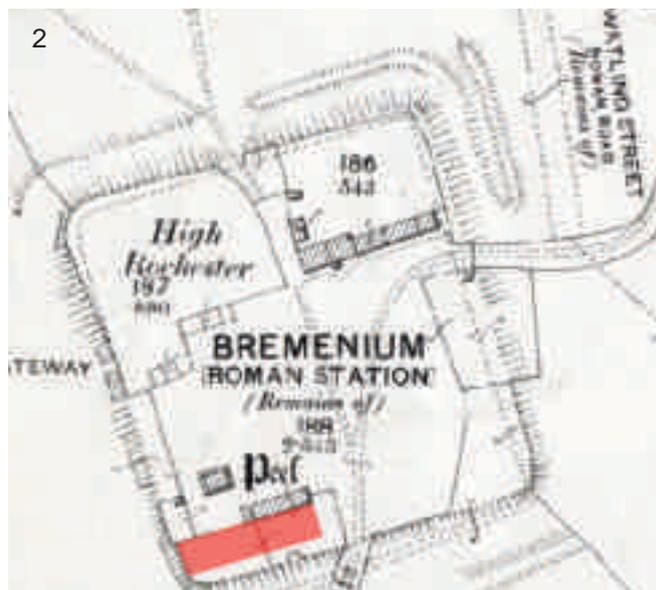
Trench 1, placed within gardens close to the north-west corner of the fort, uncovered the remains of substantial walls of Roman origin at very shallow depths. The interpretation of the character of these building remains was constrained by the limited size of the area exposed, but indicates a substantial east-west wall with a possible internal dividing wall and likely stair platform within the angle formed by their intersection. Burnt material piled against the north face of the wall suggests the deposition of waste from a domestic fire or heated baths, perhaps connected with a burnt feature lined with *opus signinum*, the top of which was exposed at the foot of the trench on the north side of the stone building. Three test-pits opened adjacent to Trench 1 also provided evidence for archaeological remains of indeterminate character and function at shallow depths.

Trench 2

Trench 2, in the enclosed area south of the bastle, revealed a complex of

Roman walls, floors, drains and other features, some at very shallow depths. The most substantial of the structures were along the north side of the trench and in its north-west corner. Remains of several walls of particularly high-quality, clay-bonded masonry, surviving up to eight courses high, were recorded in the trench sections and seem to be the side walls of buildings extending to the west and north. Their function is unclear, but a gap in the west-facing wall is suggestive of gaps in the lower courses of granaries, or of vents associated with baths and under floor heating. A range of other east-west walls appear less substantial and are probably later in origin.

Within the area of walling in the north-west corner of the trench were deposits of silty ash, the products of activities involving burning, upon sparsely flagged surfaces. East of this surface in the north-west corner was a dense deposit of clay and stones, the removal of which revealed further remains of walls, two of which formed the long side walls of an apparent pit or trough in which was found, at an oblique angle, two pieces of a flat stone which had been carved to give a scalloped appearance. The arrangement of this stone, which appeared from its position to have collapsed into the pit, together with the 'bench' on the north side and existence immediately to the east of another section of stone drain,



High Rochester Roman Fort

apparently associated with the pit, suggested the remains of a latrine, although this interpretation was not supported by palaeoenvironmental evidence.

The southern two thirds of the trench area was largely devoid of walls, the greater being flagged, with the greater, western area of flagging separated from the eastern fragment by a linear arrangement of stones and a stone drain set in puddled clay. Examination of the wider context suggests that the line of stones lines up with the west side of the blocked fort entrance to the south and may represent the west side of a roadway running northwards into the fort from the south entrance gate.

The south-west corner of the trench provides some evidence for late building activity in the presence of a crudely-constructed stone-built platform sitting upon high-quality flagging, suggesting that the plan for this area as originally conceived was abandoned at some point, probably late in the history of the fort. Interestingly, a similar arrangement of stones was visible in the east-facing trench section, and also appears to be the remains of a crude wall, but stratigraphically distinct from the definably Roman remains, suggesting the possibility of very late Roman or early post-Roman activity. The greater part of a mortarium of local fabric, found with amphora body sherds under the flags, gives a second

century date for the flagging in this area, consistent with its establishment at an early stage in the occupation of the fort.

Finds of pottery, tile and worked stone confirmed the Roman origins of the structural remains but did not provide secure evidence for either very early occupation or activity later than that previously suggested (ie late third/early fourth century). The pottery finds, including amphora, samian and other fine-wares, mortaria and coarse wares has been dated to between the second and late third centuries AD, while finds of glass, including several fine sherds of window glass, and other objects also appear to fall within this date range.

The complex remains uncovered and recorded at Bremenium in 2010 form part of substantial, previously undisturbed Roman remains in a part of the fort which, though previously suspected as archaeologically sterile, must now be regarded as displaying considerable additional archaeological potential. Only the upper surfaces of Roman deposits and structural surfaces were investigated, leaving substantial but unknown depths of remains unexplored.

References

BRUCE, J C, 1858, An account of the excavations of 1852, in *Memoirs illustrative of the History and Antiquities of Northumberland: Proceedings of the Archaeological Institute, Newcastle Meeting, 1852, Vol 1, 135-149.*
CHARLTON, D B, 1987, *Upper North Tynedale: A Northumbrian Valley and its People.* Northumbrian Water, Newcastle upon Tyne.

CROW J, 2004a, Survey and excavation at Bremenium Roman fort, High Rochester 1992-98, in P Frodsham (ed.) *Archaeology in Northumberland National Park.* Council for British Archaeology Research Report 136; York, 213-23.
HODGSON, J, 1827, *History of Northumberland, part 2, vol. I: Containing the History of the franchise of Redesdale, and of the Umfreville Family; Also, of the Parishes of Elsden* Newcastle upon Tyne.
RICHMOND, I A, 1936, 'Excavations at High Rochester and Risingham, 1935' *Archaeologia Aeliana* 4 Ser 13, 170-198
RICHMOND, I A, 1940, 'The Romans in Redesdale' in Hope Dodds, M. (ed) *A History of Northumberland XV: 63-154.* Northumberland County History Committee; Newcastle upon Tyne.
RUSHWORTH, A, 1996, *High Rochester Fort: A Documentary Assessment of Post-Roman Occupation* (unpublished report; commissioned by The Northumberland National Park Authority). The Archaeological Practice, University of Newcastle upon Tyne.

Learn more about Bremenium and the Romans in Upper Tynedale at:

www.Roman-Britain.org



Photos and Maps

1. Trench 1 seen from the south
2. OS 2nd Ed map showing the trench location.
3. The west end of Trench 2
4. Trench 2 seen from the south

Richard Carlton
The Archaeological Practice Ltd



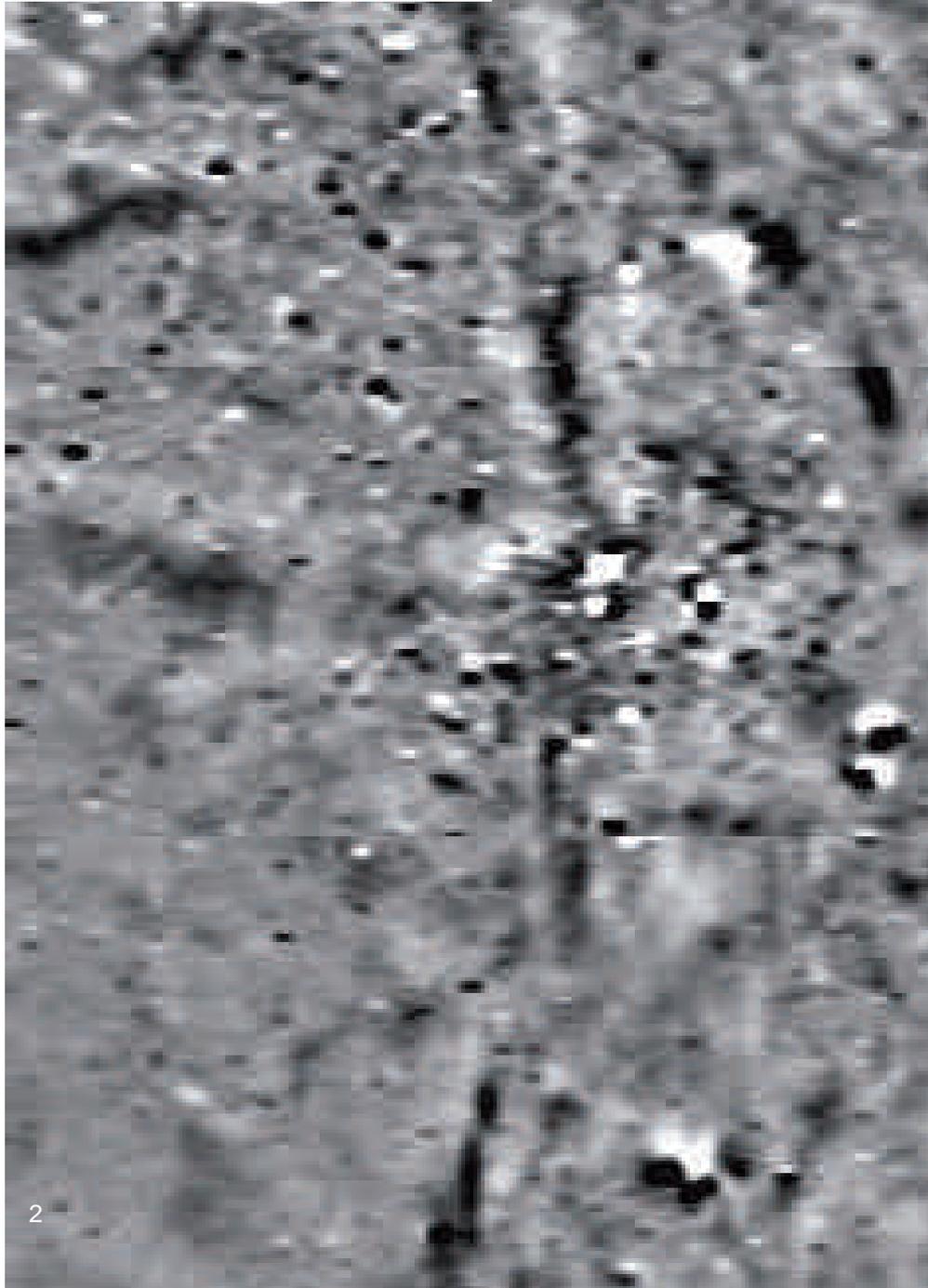
Over a 10-year period, metal detectorists have recovered five bronze and gilded iron brooches, from a field in Ford parish (Figure 3). The detectorists reported the brooch discoveries to the Portable Antiquities Scheme, who confirmed that they were Saxon (A in N 19 p 18-19). Although the field had been scanned for many years, the brooches first started to come to light after a potato crop had disturbed soils to a greater depth than previous crop regimes. The brooches indicated the likely presence of a Saxon cemetery; however, since they were found over a relatively large area its exact location remained unknown. In order to try to locate the cemetery Archaeological Services conducted a geophysical survey over approximately 2.1 hectares in September 2010 (Figure 1).

It was anticipated that soil-filled features such as ditches, graves or pits might be present on the site, and that other detectable targets might include grave-goods, trackways, wall foundations and fired structures (for example ovens and hearths). Although individual inhumations and cremations are notoriously difficult to detect using geophysics, it is still sometimes possible to infer cemeteries either by their boundaries, if they have any, or by concentrations of small, often weak anomalies.

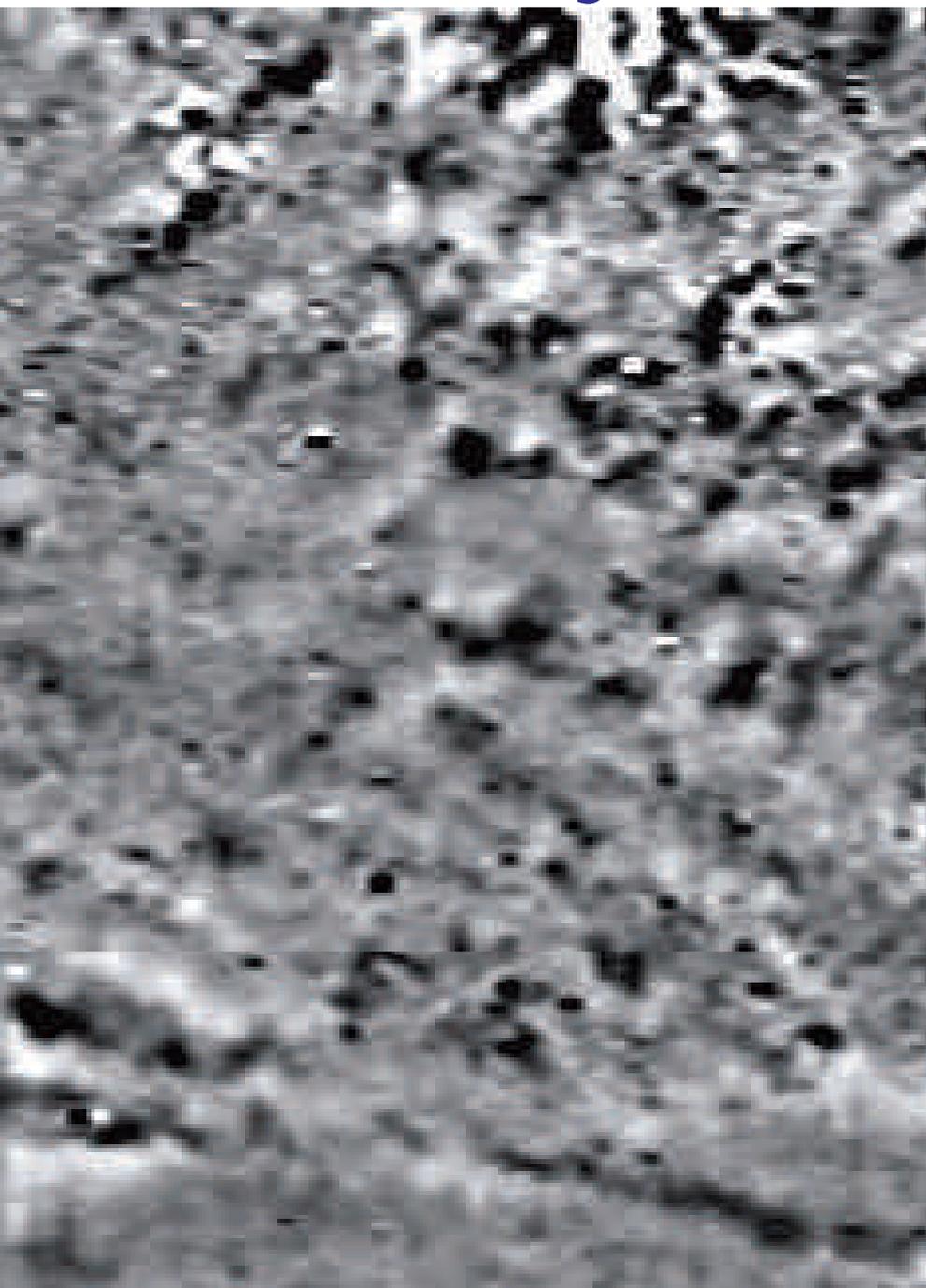
Given the anticipated nature and depth of targets, and the non-igneous geological environment of the study area, a geomagnetic technique (fluxgate gradiometry) was considered appropriate here. In the greyscale image (Figure 2), positive magnetic anomalies are displayed as dark grey and negative magnetic anomalies as light grey. Positive magnetic anomalies are taken to reflect relatively high magnetic susceptibility materials, typically sediments in cut archaeological features (such as ditches, graves or pits) whose magnetic susceptibility has been enhanced by decomposed organic matter or by burning. Several such anomalies were detected in the survey.

Two probable ditches may represent a double-ditched trackway aligned

Recent discoveries A New Saxon



ies in Ford Parish n Cemetery?



east-west. At its western end the track appears to meet an oval enclosure, which may correspond to a shallow topographic hollow noted in the field. A further curvilinear ditch, aligned broadly north-south, appears to pass through the middle of the possible oval enclosure. These features might reflect different phases of activity at the site.

A very weak anomaly in the south-east quarter of the survey probably also reflects the remains of a soil-filled ditch, which may continue westwards across the enclosure. Further possible soil-filled features at the western limit of the survey are more diffuse and irregular; these anomalies could reflect ditch remains but could also be associated with the badger activity, which is concentrated along the field boundaries.

Many small, discrete dipolar magnetic anomalies have been detected in the survey. These almost certainly reflect items of near-surface ferrous and/or fired debris, such as tractor parts, horseshoes and brick fragments. Metal detectorists have noted a relatively high concentration of metalwork in this general area. A particular concentration of small dipolar anomalies has, however, been detected within the apparent oval enclosure. Given the circumstances of this project, these anomalies could reflect ferrous items within graves in an enclosed cemetery. Although the metal detectorists have usually discriminated against ferrous objects in previous sweeps of the field, it is understood that some of the brooches recovered from here are gilded iron, and several other classes of Saxon grave goods are also typically made of iron.



Photographs and Illustrations

1. Ed Davies collecting geomagnetic data
2. Geomagnetic survey results (greyscale range: white $-8nT$ to black $+8nT$)
3. One of the five cruciform Saxon brooches recovered from the site.

Duncan Hale
Archaeological Services
Durham University

Duddo Stone Circle lies at a height of 70m OD on a sand and gravel knoll marking a watershed between the Tweed and Till valleys (NT9305 4370; see AinN Vol. 15, 2005, 23). Five of originally seven sandstone monoliths remain erect, describing a circle about 8.5 metres in diameter. The last excavation of a Northumbrian stone circle before the present work was carried out here, in the 1880s, when the position of the missing stones, together with evidence for a central cremation was found. Excavation sought to recover information as to the nature and date of activities carried out at the site, and how this resonated with our understanding of the wider archaeological landscape, and in particular that of the adjacent Milfield Basin with its richly textured interplay of settlement and ritual monuments during the late Neolithic and Early Bronze Age. Excavation was also designed to provide the landowners and English Heritage with information as to the condition of the monument below ground-level that might inform them in developing a future Management Strategy for the site. A geophysical survey of the site using a Fluxgate Gradiometer preceded excavation and showed two areas of interest that subsequently proved to be geological in origin, as did a linear feature passing east-west through the circle. Consequently the only trench described here is that centred on the monument itself. The report on the excavation is forthcoming in *Proceedings of the Prehistoric Society*, vol. 77, 2011. What follows summarises our interpretation of the information presented there in greater detail.

War Memorial or Prehistoric Duddo Stones

The Stone Circle

At sometime around 2200-1900BC (SUERC 22557 & 22558) a burning episode on the knoll was followed by the excavation of seven pits set to form a circle and to hold the bases of large sandstone slabs quarried from an outcrop only a few hundred metres east of the knoll. Some dressing of their surfaces appears to have taken place at the quarry, including some rough square-dressing of their bases. The fluting which appears on the



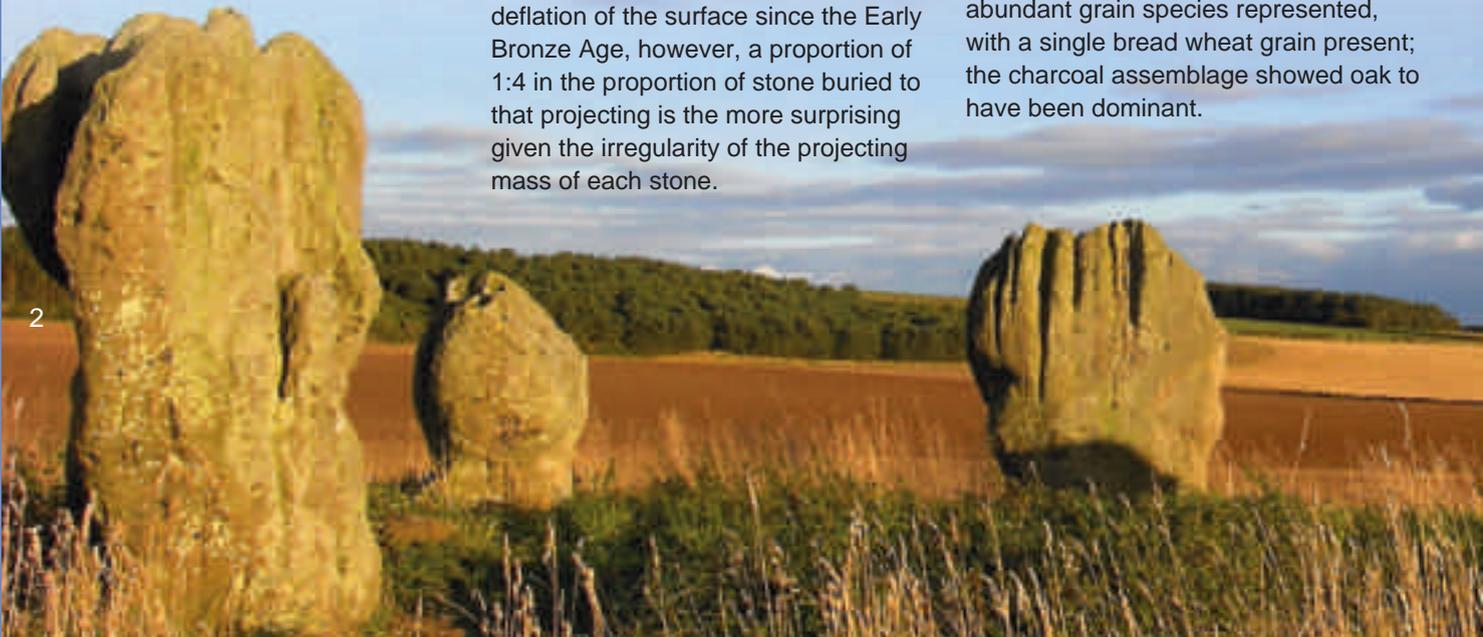
"Duddo Stones" (1896)
Commemorative of a victory over the Scots in 1222

stones today however, is an entirely natural phenomenon arising from wind and water erosion, known as 'rillenkarren'. Excavation of the socket-holes of stones 1 and 2, which stood above ground to heights of 2.17m and 1.79m respectively, were surprisingly lightly founded to depths of only 0.6m and 0.7m respectively. A distinctive 'waist' between the squared base and more spatulate head just above the present surface indicates some deflation of the surface since the Early Bronze Age, however, a proportion of 1:4 in the proportion of stone buried to that projecting is the more surprising given the irregularity of the projecting mass of each stone.

Whatever its original purpose, burial does not appear to have been part of its primary function. However, sometime between 1770 and 1610 BC (SUERC-21366) a pit was dug near the centre of the circle to contain cremated remains, evidence for which was almost, though fortunately not, entirely destroyed by several pits that attest antiquarian excavations. One of these is recorded to have taken place around 1890.

Between 1882 and 1931 one stone (Stone 5) was removed to allow ploughing across the interior, and ploughing right up to the base of the stones thereafter, and particularly across the western arc of the circle where two of the seven stones had long been absent has resulted in pronounced 'lynchets' defining the present Scheduled Area and we can be certain that all but the deepest prehistoric features have been destroyed.

The excavation produced few stratified finds; a flint point and some possibly worked stones, including one bearing a cup-shaped depression. Most of the finds were of 19th or 20th century date, with a high proportion, such as semi-precious stones (some polished) 'buried' coins, and a unique clay stamp bearing monogrammed initials, all pointing to a modern belief in the circle's efficacy. Soil sampling of the earlier features demonstrated the presence of barley (*Hordeum sp. naked*) as the most abundant grain species represented, with a single bread wheat grain present; the charcoal assemblage showed oak to have been dominant.



Stone Circle? : 2008

The excavation at Duddo has contributed to our understanding of the monument insofar as it has provided some dates that indicate when it is likely to have been constructed and for later use for burial. It has also provided some illuminating early environmental information. Given the heterogeneity in form and function within this category of monument the relationship of Duddo to the other stone circles in both the immediate and wider region remains unclear. Still more opaque is its relationship to other categories of broadly contemporary monuments, such as the henges in the Milfield basin. While contemporary offerings from the sites cast some interesting sidelights upon modern attitudes towards the monument, excavation only underlines how little remains known, and as a result, will hopefully revive an active interest in this category of monument within the region. (We are grateful to the Border Archaeological Society and Northumberland Archaeological for their work on site.)

Photographs and Illustrations

1. *Illustration of Duddo the war memorial, by TM. Richardson 1847*
2. *Duddo sStones from the north-west*
3. *Excavations at Duddo Stones (Photo: A. Anderson)*
4. *The 2008 excavation area from above*
5. *Stone 3, showing the spatulate head, waist and how little is buried. (Photo: A. Anderson)*

**Benjamin Edwards,
Rosie Bishop
and Roger Miket**



3



4



5

Excavations on Flodden Hill, started in 2009 (see Archaeology in Northumberland 19 p20-22) continued during September of 2010. For the second season of work being carried out by the Flodden 500 archaeological project the focus of interest moved from the upstanding earthworks at the summit of Flodden Hill (Site 1) to an apparently empty arable field lying just below the north facing crest of the ridge that links Flodden Hill to the adjacent Kings Chair Hill.

In this field lies the remains of a rectangular enclosure (Site 2) first spotted during a flight made by Roger Miket in 2007 when he was searching for previously unseen 'cropmark' sites around the Milfield Plain. Though initially identified as a possible Iron Age settlement, its form and location, combined with the presence of a parallel site identified in 2009 from RAF aerial photographs immediately to the south on the south facing side of the same ridge, suggested to the Flodden 500 team that this feature might have formed part of the defences developed on Flodden Hill by the forces of James IV of Scotland during his ten day occupation of the site in early September 1513.

To better understand the form of the remains the Centre for Battlefield Archaeology (Glasgow University) were asked to carry out a geophysical resistivity survey of the site and while this work was being carried out the team opened a long narrow trench along the fence to the east of the main enclosure with the aim of finding and characterising three 'ditches' that could be clearly seen on the aerial photographs. However, it rapidly became clear that the excavations were not going to be easy as the very dry summer of 2010 had made the ground

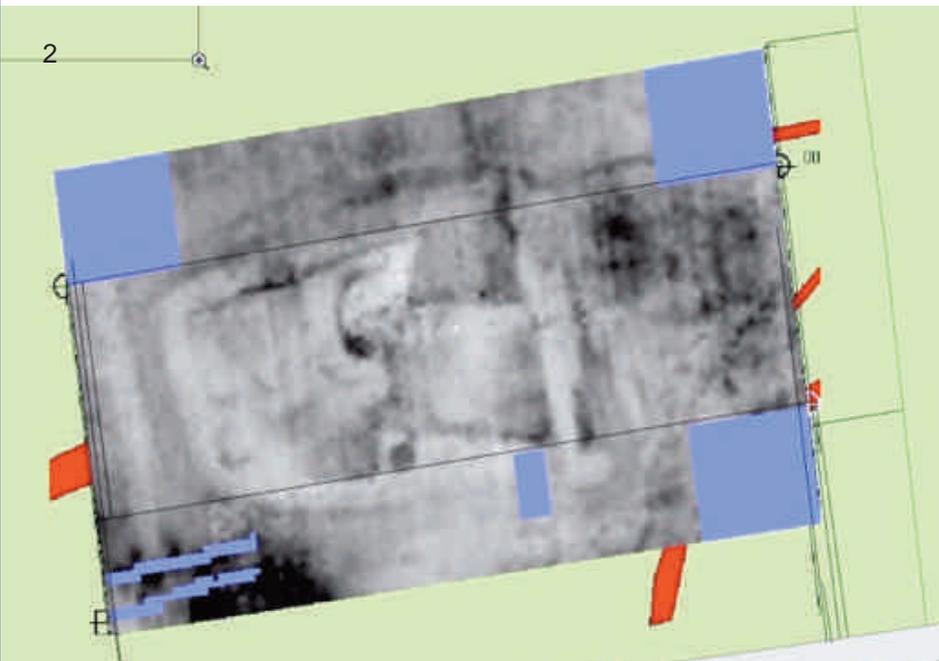
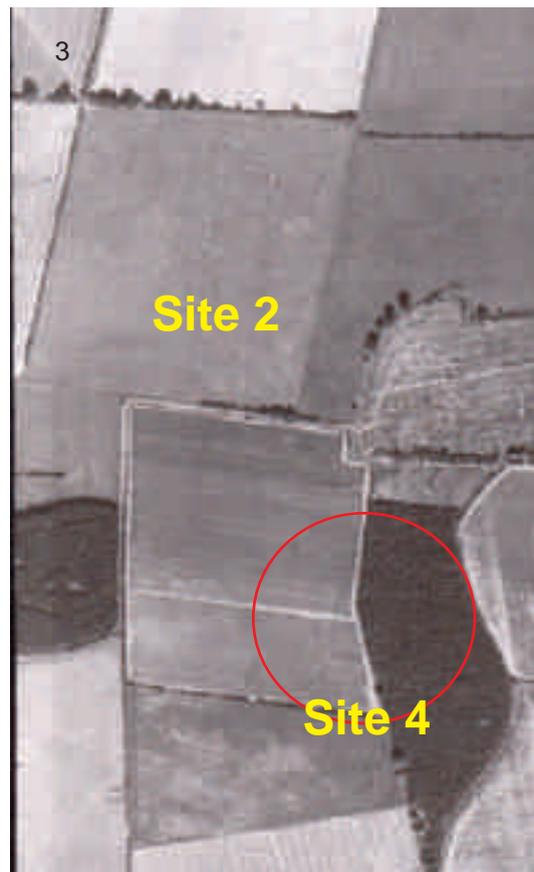
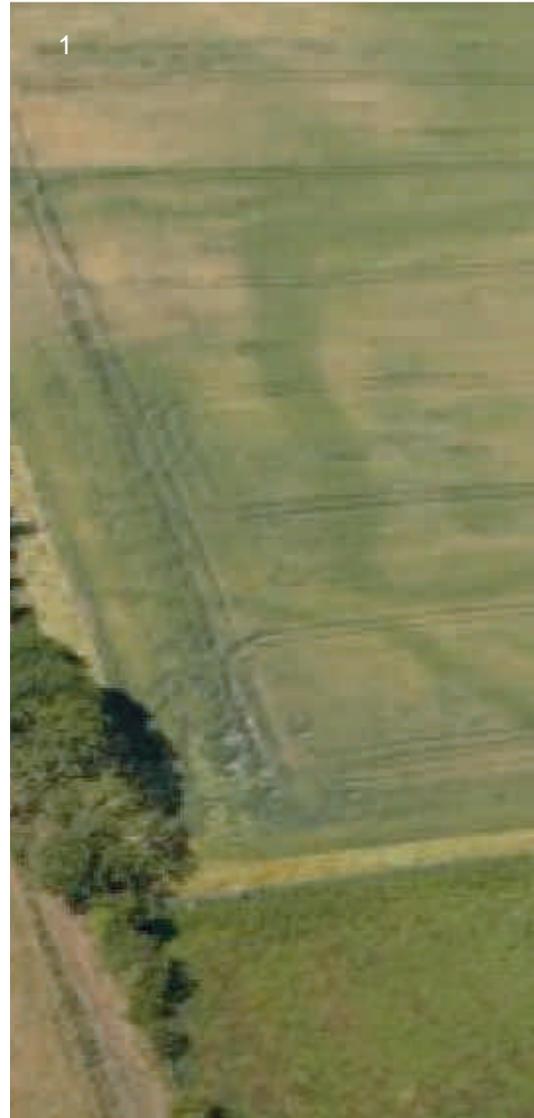
hard and very difficult to see changes in soil colour. Despite this it soon became apparent that the main ditch targeted in this long trench was actually a 'pit alignment' a series of large pits that elsewhere are typically taken to mark late Bronze Age and early Iron Age land boundaries. It is these features that later develop into boundary ditches and eventually hedgerows.

The three pits uncovered by the team were unusual in that each had a hearth in their top surface, a feature not usually associated with pit alignments. As excavations progressed these features proved to have been inserted into the top of each of the pits, with the burned remains of stakes found alongside at least one of the hearths pointing to the presence of 'structures' possibly of the kind that would have supported a pan or vessel over a fire. Digging through these hearths showed that each was situated in the top of a large conical pit of up to 80cm in depth and, in at least one case, Iron Age pottery was recovered from the layers below the hearths.

Completion of the geophysical survey showed more clearly the cropmark features identified in 2007. This allowed the team to target a second long trench, parallel to the first that would cut what appeared to be two 'yards' situated inside the main enclosure along with what appeared to be an entrance in the eastern side of the enclosure.

Excavations in this area quickly demonstrated that the 'yard' features were actually terraces, cut into the hillside to create flat surfaces that were cobbled with thousands of carefully laid fist-sized stones. The effect of this terracing was to create soils that in places were more than a metre deep.

Flodden 500 Flodden



Archaeology Hill 2010



They required substantial work to remove, slowing the process of excavations and meaning eventually that work in the area of the entrance had to be restricted only to cleaning the top surfaces and not as was hoped digging the features revealed there.

Excavations of the cobbled terraces revealed substantial surviving surfaces from which post medieval pottery fragments and one stone cannonball (or gun stone) were retrieved. Closer examination also revealed what appeared to be the presence of 'post pads' or larger flat stones set into the surface of the cobbles upon which small temporary post-built structures may have stood.

Excavations in 2010 have pointed to the presence of a substantial Iron Age settlement on Flodden Hill Site 2, this site then seems to have been re-used at a later date – possibly during 1513. The presence of hearths in the top of the pit alignment along with post-medieval artefacts on the cobbled surfaces inside the enclosure suggests that the forces of James IV arrived on Flodden Hill and in

this area chose to re-use or modify existing features rather than constructing new ones entirely from scratch. Ultimately carbon dating, from samples taken across the site will help to pin down the dates of the various periods of occupation. However further excavations in 2011 will also revisit the site to answer specific questions about the relationships between various features visible in the geophysics to allow better interpretation of the remains.

For more information about the excavations in 2010 and to follow the 2011 excavations (or to volunteer to help out) visit: www.iflodden.info

CB

Photographs and Plans

1. The 2007 aerial photograph of Site 2
2. The geophysical survey of Site 2
3. The 1946 RAF aerial photograph showing Site 1, Site 2 and Site 4
4. The pit alignment and Hearths
5. Iron Age pottery
6. The cobble surface inside the main enclosure
7. The stone cannonball or gun stone.



Berwick-upon-Tweed

New Homes for CAAG

In a year when Berwick, Spittal and Tweedmouth Conservation Area Advisory Group has struggled to find a home, the work of the group has gone from strength to strength as they have worked to influence the designs of prominent developments, such as that at Spittal Point and planning strategies, such as the work of the Berwick's Future (eg on Berwick Barracks and the Public Realm) throughout the three conservation areas. The work of the group was also acknowledged as setting a standard for others to aim for in the English Heritage publication *Valuing Places: Good Practice in Conservation Areas* (2011)

It has also been a year of more strategic thinking for the group which has seen work from members to prepare a series of 'design guide' leaflets which will soon be available for residents and developers in the

practice of conservation design for Berwick, Spittal and Tweedmouth addressing specific topics such as windows, doors, roofs etc in an explicit and straight forward manner summarising much of the more diverse information that has previously been spread across a wide variety of documents relating to the conservation areas.

In another new departure CAAG now has a new website where much of its work will be made public by means of publishing its minutes and reports along with the latest news relating to the conservation areas. Other key documents, such as the conservation area appraisals, are also available on the site.

With the withdrawal of the Ministry of Defence from the Berwick Barracks CAAG was uprooted from its regular home in the officer's mess last year.

Since then they have met in the County Council committee rooms and at the offices of the Berwick Community Trust, but have now found a new permanent home in the office of the Berwick Town Council.

CAAG partners include: English Heritage, Northumberland County Council, Spittal Improvement Trust, St Boisal's Residents Association, Tweedmouth, Westend Residents Association, Berwick Civic Society, Berwick Town Council, Berwick Community Trust, The Berwick Building Recording Group, Berwick Chamber of Trade and CARA.



For more information visit the website: www.c-iy.com/CAAG/Home.htm

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The screenshot shows the CAAG website interface. At the top, there is a blue header with the CAAG logo and the text "Berwick - Spittal - Tweedmouth". Below the header is a photograph of a stone bridge over a river. Underneath the photo is a navigation menu with links: Home, About Us, Partners, Maps, News, Notices, Galleries. The main content area is divided into two columns. The left column is titled "About CAAG" and contains text describing the group's history and mission. The right column is titled "Key Docs" and lists several documents available for download, including minutes from February 2011, a protocol for architectural presentations, a revised report from June 2010, and two conservation area assessments for Berwick Upon Tweed and Tweedmouth.

Remapping Hadrian's Wall '...the Final Frontier'

Last updated in the mid 1970s, the penultimate edition of the Ordnance Survey map of Hadrian's Wall was for many years an indispensable aid for archaeologists and walkers alike in tracing the Roman frontier across the landscape. Sadly, this edition has long been out of print. This, the many new discoveries made on the Wall in the last 40 years, together with exposure to rain and gales means that many copies have reached the end of their life. In 2008

National Monuments Record and English Heritage's National Mapping Programme, as well as the County Historic Environment Records and the detailed knowledge and research of many individuals. This work has enabled updated depiction not only of the Wall, Wall Ditch, Vallum, the forts and the Stanegate, but also included the great expansion in our knowledge of civilian settlements outside forts derived from geophysical survey, and of the native settlement present in

the landscape when Hadrian's Wall was constructed derived from aerial photography.

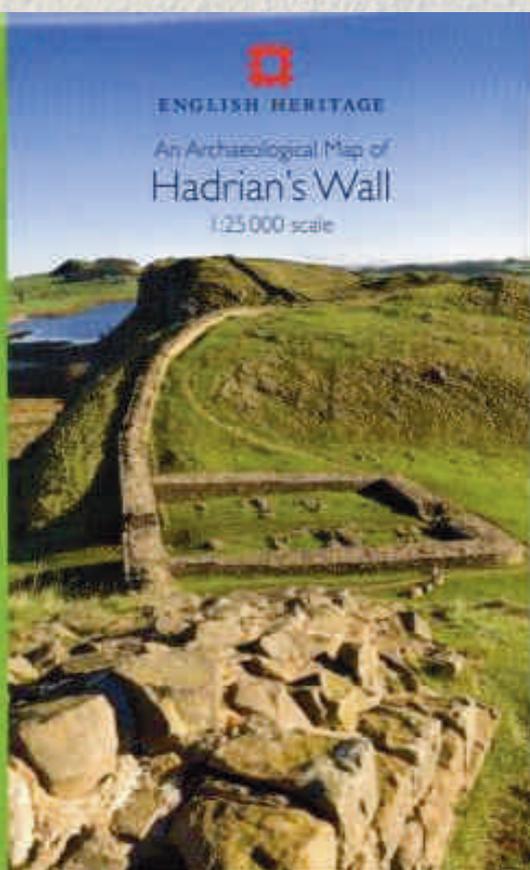
All this information was then plotted on a 1:25,000 scale map base, the ideal scale for both walkers and those wanting to go out and discover the Wall on the ground, and printed on Polyethylene (meaning that previous problems with maps disintegrating in the rain should be avoided!).

This new Archaeological Map of Hadrian's Wall represents the current state of knowledge of the Roman frontier, although even at the time of writing the discovery of a previously unrecorded Roman camp suggests that this knowledge will continue to change, and the hope is that the map will be a source for everyone interested in the Wall to get out and make discoveries

themselves.

'An Archaeological Map of Hadrian's Wall' is published by English Heritage at £7.99. We are offering readers of **Archaeology in Northumberland** the opportunity to buy this map for £7.20 plus free p&p. To take advantage of this special offer please call 0845 458 9910 or email eh@centralbooks.com and quote code AN01 - this offer closes on 31st December 2011.

Mike Collins
English Heritage



English Heritage felt that the time was right for a new archaeological map to be prepared.

Having embarked on this process, it rapidly became clear how much our understanding of the Wall zone had changed since the 1970s, and also that hard decisions needed to be made, particularly where the archaeological evidence was uncertain, about what should be depicted and how. Because of this, the new map is not a simple revision of the 1970s edition, but an entirely new map, drawing on help from the

What is an Ecomuseum?

The 'eco' prefix doesn't work very well in the English language and consequently most people assume an ecomuseum has more to do with wildlife than anything else. Yet this is not the case; an ecomuseum seeks to conserve and interpret all aspects of the natural and cultural environment of a specific locality. So we can make the comparison between the museum as a building – with associated collections, professionals and techniques, and the ecomuseum as a place – a territory with a range of tangible and intangible heritage attractions. The Norwegian museologist John Gjestrum clarified this position in 1999 when he wrote:

While the traditional museum is based on moving the heritage into a museum building – very often far away from the original owner of this heritage (and its environment) – the ecomuseum is based on the idea that the heritage within a specific community should be preserved in-situ. The heritage – landscape, buildings, moveable objects, traditions, the culture of a specific community – is given value by the ecomuseum, and at the same time the ecomuseum will be an instrument for its safeguarding and future preservation.

This comment stresses that local communities are an integral component of the ecomuseum, they are democratic institutions. The European Network of Ecomuseums emphasised this point, and the fact they are constantly adapting in response to new situations, in their definition adopted in 2004:

An ecomuseum is a dynamic way in which communities preserve, interpret, and manage their heritage for sustainable development. An ecomuseum is based on a community agreement.

So, if ecomuseums are defined by place, local communities and their heritage, what characteristics do they have?

Ecomuseum characteristics

Ecomuseums are extremely variable and of the many hundreds that exist worldwide – the idea has been adopted on every continent – no two are the same. They differ in geographical scale, focus and how they are funded and managed. However, they all demonstrate the following characters:

- They adopt a territory that is not necessarily defined by conventional political boundaries; they may be defined by, for example, dialect, a specific industry, or religious or musical traditions.
- They use a 'fragmented site' policy linked to in-situ conservation and interpretation; visitors are directed to these sites by trails and information leaflets.
- Conventional views of site

ownership are abandoned; conservation and interpretation of sites is carried out via liaison, co-operation and the development of partnerships.

- It is important that local communities are empowered and benefit; the involvement of local people in ecomuseum activities is essential and linked to the construction and celebration of their cultural identity.
- They try to tell 'the big picture' about places, linking histories, ideas and stories to demonstrate the special nature of places.
- Intangible heritage – music, festivals, stories, legends, histories, memories – are especially valued.

Ecomuseums in the UK

There is a stark contrast in the acceptance of ecomuseum ideals between those countries speaking English and those speaking, say, French, Italian, Spanish or Portuguese. In Italy there are more than 100 ecomuseums across the country; France, where the ecomuseum ideas were originally tested, has only slightly less. Yet in the UK, up until the rise of Flodden, there was just one example. It is difficult to fully explain this situation, but one



om museum?

term referred to earlier. Perhaps most UK voluntary heritage organisations see no need to adopt such a term or conform to its inclusive principles and a theoretical philosophy? Perhaps UK pragmatism rules?

In the UK, North America and Australia some of the roles of the ecomuseum are being met by other organisations; the ecomuseums of France are replicated in the UK by folk museums, open-air museums and a network of 'visitor centres' and other interpretive facilities, for example, in protected landscapes such as National Parks. Some of these organisations are ecomuseums in everything but name; they are democratic, community-led heritage projects. An excellent example is the Rural Life Museum at Tilford in Surrey – were it to be airlifted to France it would undoubtedly be named an *écomusée*.

Although many open-air museums frequently go far beyond caring for tangible material culture and care for intangible heritage, they are not ecomuseums. So the Weald and Downland Open Air Museum had sought to preserve not only traditional

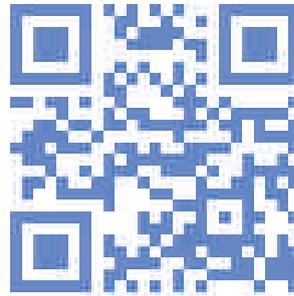
local skills and crafts such as coppice management, spar making and charcoal burning. Beamish, the North of England Open Air Museum, has similarly rescued threatened material culture, re-erected vernacular buildings and created extensive sound, photographic and documentary archives relating to past memories of the north east of England. However, neither of these latter examples are ecomuseums because they are professional bodies where local communities have no voice, playing no role in guiding their work.

Up until the creation of the Flodden 1513 ecomuseum, only one example existed in the UK, the Ceumannan Ecomuseum, on the Isle of Skye.

www.skyecomuseum.co.uk

In 2004 the Staffin Community Trust announced that it had been awarded almost £200k to develop an ecomuseum approach in north-east Skye, utilising a spectacular range of natural and cultural sites. The leader of the project recently announced that '... we believe the interpretation will open up the landscape for us all

and will allow the community to focus on its key history and culture. Our discussions have focused in many ways on how to expand this project and how we can further enhance our community infrastructure. This emphasis on 'opening up the landscape' and 'enhancing the community infrastructure' are evidently helping to build a sense of pride and a strong identity for local people, as well as providing economic benefits through low-level tourism. There is every expectation that England's first ecomuseum will achieve similar goals and draw attention to the remarkable history and heritage of Northumberland and the Borders.



Photographs

1. Ukrainian culture in Canada preserved in an Ecomuseum covering 1000s of square kms
2. Traditional hemp and rope manufacturing industries preserved in Carmagnola, Italy
3. Hirano-Cho - preserving the wooden building traditions and aural history of Osaka - Japan

Peter Davis
International Centre
For Cultural Heritage Studies
Newcastle University

HOME ECOMUSEUM MAP ECOMUSEUM SITES
WHAT'S ON FIND OUT MORE
CHILDREN'S ECOMUSEUM VISITOR BOOK
TOURIST INFORMATION CONTACT US LINKS
CLICK ON THE TITLE ABOVE AND DISCOVER THE WONDERS OF THE WORLD

WALK IN THE FOOTSTEPS OF TIME

Fälite – Welcome – Vælkomen – Benvener – Willkommen – Benvueli – Bienvenidos – Vitajte

**STAFFIN ECOMUSEUM
CEUMANNAN**

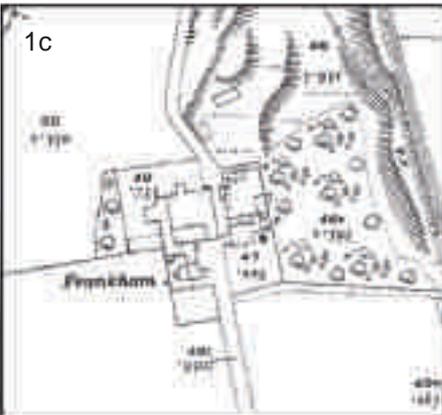
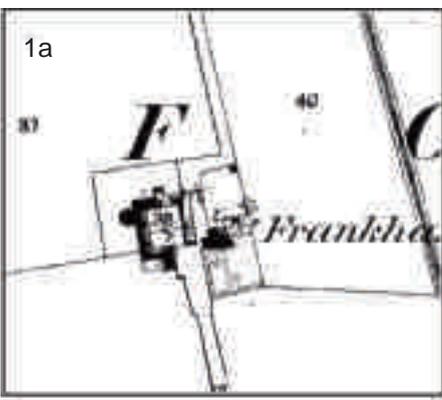
it's out there!

FRITH WELLS, A COMMUNITY-LED PROJECT IN NORTH-EAST SCOTLAND, IS THE FIRST OF ITS KIND. CEUMANNAN IS AN OPEN-AIR MUSEUM WITH NO WALLS. THERE IS NO ROOF – JUST THE SKY ABOVE IT. ALL THE EXHIBITS ARE LOCATED IN THE ENVIRONMENT, AND VISITORS ARE ASKED TO DISCOVER THEM THEMSELVES. VISIT OUR ECOMUSEUM-STYLE EXHIBITS AND DISCOVER ALL 15 OF THEM. JOIN US IN OUR WALKING LANDSCAPE VISITS TO EXPLORE THE PAST, FROM THE PAST AND OUT OF WORLDS FROM HISTORY INTO ARCHAEOLOGY AND GEOLOGY.



WHAT'S ON...

Recording a 19th Frankham Farm

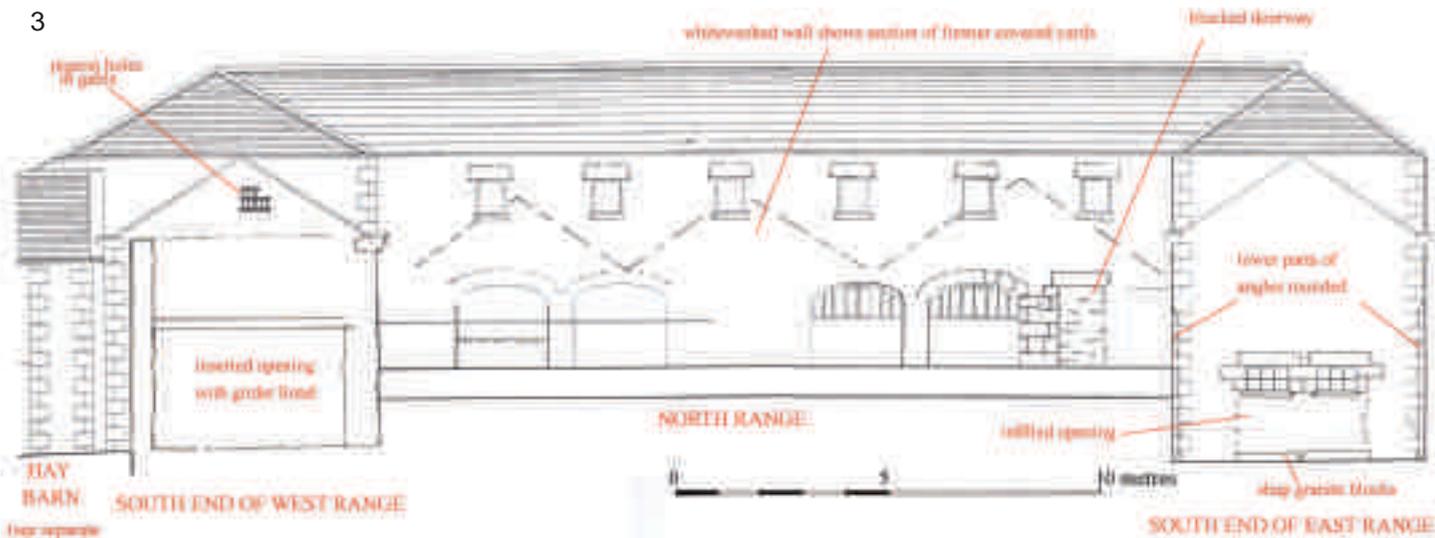


A photographic and measured survey record was carried out on farm buildings at Frankham Farm, Fourstones (NY 884 683) in July 2010, in advance of proposed redevelopment. The farm lies on rising ground on the north flank of the South Tyne valley about 0.5 km north-west of Fourstones and 1 km north-east of Newbrough. The farmhouse is a Grade II listed building, largely of early 19th century date but incorporating some older fabric; the farm buildings are not listed.

The farm is a typical early-19th century group of planned farm buildings, with ranges on three sides of an almost square yard opening to the south. The buildings have a rather puzzling mixture of fabric types which include coursed and squared tooled stone, walls of coursed roughly-squared stone that are

sometimes little more than rubble, ashlar dressings around most openings (sills and lintels to windows, alternating-block surrounds to doorways) and tooled-and-margined quoins. The roofs comprise coursed stone slates, Welsh slate, a tile ridge on the west range with two different types of ridge vent, and a red tile ridge on the hay barn. Many of the windows, especially to the upper floors, have been of the familiar part-slatted (sometimes 'hit-and-miss' type) although quite a number have been altered. Some of the architectural details – the southern gables and the neat rounding-off of the quoins at the south end of the east range – are quite refined.

Structural evidence shows that the buildings are the product of more than one phase of building, from the 18th to later 19th century. Historic maps also help to phase the farm buildings. The



Century Steading m: Newbrough

first edition Ordnance Survey 25-inch map (1860) shows other buildings on the south of the yard, the circular gingang and another building behind the north range. The second edition of about 1895 shows the hay barn added and the northern part of the main yard covered in – a relatively early example of the practice of covering cattle yards. Mid-20th century developments included the construction of new metal sheds (recently removed) and the demolition of the gingang and the small block behind the North Range. Within the last few years the superstructure of the late-19th century covered yards has been removed, and the south range largely demolished.

Photographs and Illustrations

1a Extract of OS 1st Edition 1860

1b Extract of OS 2nd Edition 1898

1c Extract of OS 3rd Edition 1920

2 South elevation in the courtyard

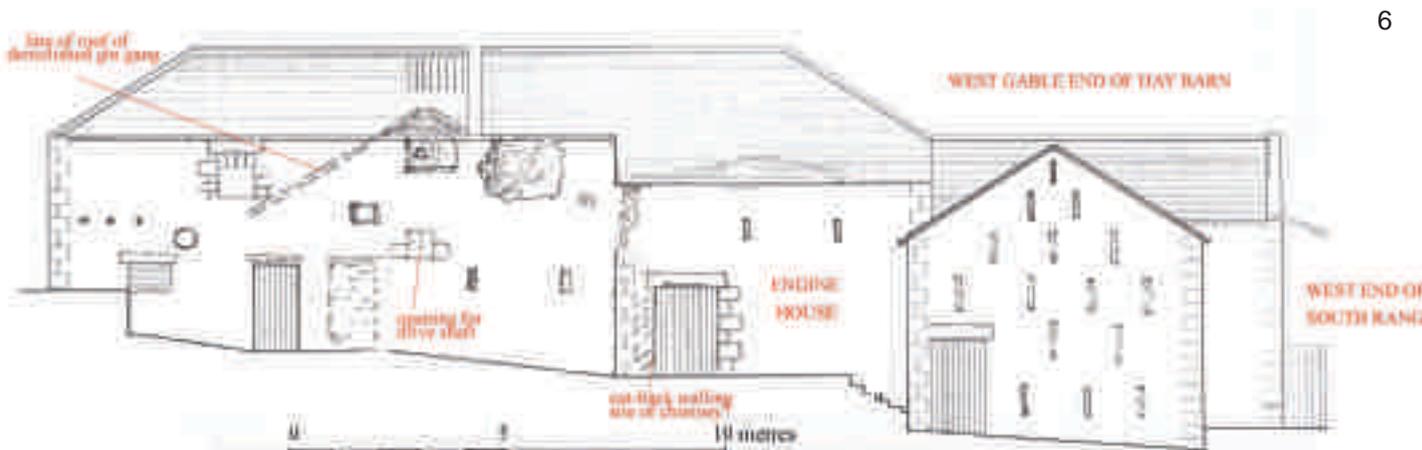
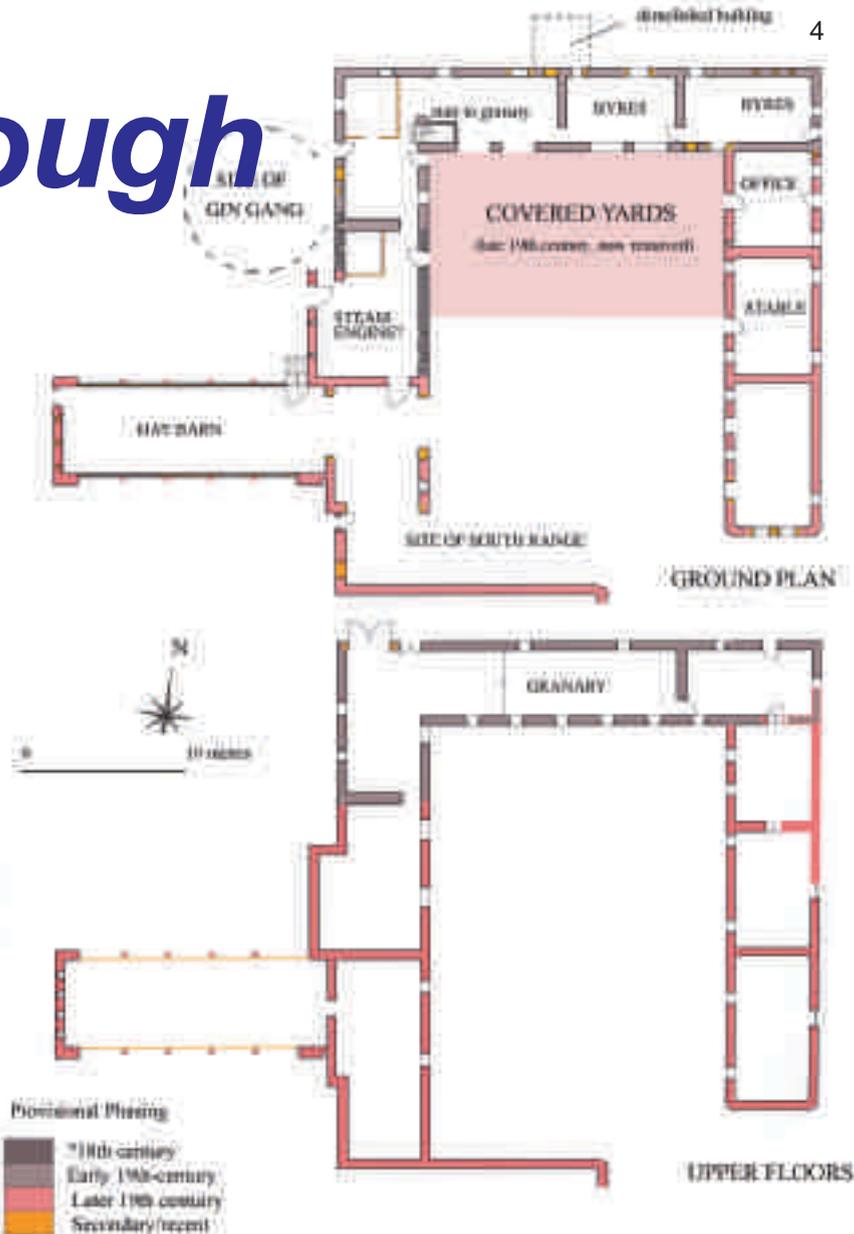
3 South elevation of north range

4 Plan of site showing phases

5 The courtyard from the south east

6 West elevation of the west range

Richard Carlton and Peter Ryder
The Archaeological Practice Ltd



Spittal Point: Berwick Military and Industrial

Now a popular local beach, with a convenient beach-front car park that gives dog walkers and surfers access immediately onto the northern end of Spittal Beach and Spittal Point, the open sites behind the shore are shortly to become the site of a development of smart new houses and apartments. The history of this site could not be more different however.

Today the only hint of the history of the site is the one surviving chimney, a square, brick built-tower that currently stands on the open gap site a last reminder of over 200 years of industrial history that has included iron foundries, fertiliser processing plants and latterly a sulphuric acid production factory.

Photos recently located in the County Council's archive files provide a record of these buildings before they were demolished, providing a reminder of what until six years ago was a familiar skyline to residents and anybody who passed through Berwick on the train. In amongst these however are a few rare snaps of some other structures, also of brick and concrete that were

demolished sometime during the 1970s (or early 1980s) when the current beachside path and car park were constructed.

These are the remains of the coastal gun battery that protected the port of Tweedmouth, the chemical factories at Spittal and the entrance to the river Tweed during the Second World War.

These buildings were demolished at a time when there was little regard to the value of WW2 remains as an important part of the built heritage of the country and as a result no formal record was made or research done before they were destroyed. The photos, recently rediscovered in old files, give a hint of what was, in some ways a typical coastal battery while in other ways it was clearly quite unique.

The two gun floors were located under what is now landscaping behind the coastal path to the south of the Spittal Point car park and seem at first glance to take the typical form of coastal batteries constructed during

1940 and 1941 with two enclosed 'gun-floors' covered with a concrete roof, supported by large steel I-beams. In Northumberland the only other surviving example is now being renovated and opened to the public at Blyth Battery.

It is here however that the similarities end. It is easy to see that these buildings are constructed not of the usual concrete, but of brick, a more time consuming, labour intensive and expensive construction method. This is unlikely however to point to shortage of the cheaper concrete which we know to have been generally available in abundance during 1940 (evidenced by the numerous pillboxes and tank blocks constructed in Northumberland, not to mention the other coastal gun batteries such as those at Goswick, Budle Bay and at Gloucester Farm). It seems more reasonable to suggest that brick was actually used as a means of camouflage so that these two low buildings would, from the perspective of a ship or submarine lying off the coast of Spittal, seem simply to be other industrial buildings within the larger Spittal Point complex.

Photos recently discovered in a private collection seem to support this as they show heavy canvas curtains



Berwick-upon-Tweed's Industrial Past



mounted on the open fronts of the batteries that would be drawn across the gun floors to complete the camouflage illusion of these buildings being nothing more than minor ancillary industrial structures.

In addition, closer inspection of the photos also reveals further evidence of how this site operated. While it was not unusual for such sites to have separate 'pill-boxes' or block houses to provide close infantry defence, at Spittal Point this function was performed by extensions physically attached to the gun floors. These can be clearly seen as smaller, curving extensions with sloping roofs at either end of the emplacement and with concrete gunloops for a rifle or light

(Bren) machine gun constructed into their north and south facing sides.

Other interesting features that are visible include shell bins on the backs of the gun floors themselves, ventilation holes (a feature seen on other WW2 gun batteries but not the 6-inch battery at Blyth) in the side walls of the gunfloors and finally the modified front faces of both gunfloors where bricks have clearly been cut away from the edge walls after construction to allow the guns a greater range of

traverse to the south towards Holy Island and to the north towards the pier at Berwick.

Yet this is still only part of the picture, and more research is clearly necessary as there is no sign in these pictures of other important ancillary structures such as the Battery Command and Observation Post or the all important magazine where shells would have been stored.

Would you be interested in taking on the task of researching the history of Spittal Point Gun Battery? If so contact us at County Hall (see back cover for email and phone details)

CB.

Thanks to Aln Elliot of Environmental Projects for the photographs.



During the course of 2010, 392 objects found in Northumberland were recorded on the Portable Antiquities Scheme database, bringing the total number of objects recorded from Northumberland to over 1,790 (as of March 2011). Most of these objects were found by metal detectorists in a number of parishes throughout the county, and the quality and date-range of these objects is astounding. These new discoveries continue to add to our knowledge of the archaeology and history of Northumberland. All the artefacts discussed below can be viewed on the Portable Antiquities database website at <http://finds.org.uk/>.



There have been 12 cases of Treasure reported in 2010, including those from archaeological excavations.

One particularly notable case is a silver brooch (NCL-609BF6) found by metal detectorist Keith Dodds (Figure 3). This brooch dates to the early Roman period and is a product of excellent craftsmanship by a metal-worker. The brooch itself, despite being made of silver and its largely complete state, is not particularly flashy or breathtaking. It is, however, a very unusual example with only one known parallel – a massive brooch of the same type found during excavations on Hadrian’s Wall at Aesica or Great Chesters. Until Keith’s discovery, the brooch from Great Chesters was unique in both its size and its type. This new brooch is a more standard size, and while it is not an exact match in detail it is clearly the same type as that from Great Chesters.



Portable Antiquities Finds Report

The form of both brooches suggests that they were made in the second century AD.

A gold solidus of Arichis II (NCL-F02EB5) was reported by Mr Terry Tait, though the coin was actually found by the late Alan Bates (Figure 1). This gold coin was minted in the kingdom of Benevento, Italy between AD 758 and 765. Arichis II was the Duke of Benevento in the mid to late eighth century, and was so successful in his rulership that he strongly resisted conquest by Charlemagne. Coins of Benevento are rare in Britain, particularly in the North, so it is particularly interesting that this coin was found in the Alnwick area. It is worth remembering, however, that in the eighth century the Northumbrian church was at the peak of its influence with clerics travelling across Europe.

A second gold coin was discovered and recorded in Northumberland this year by Ian Glendinning (Figure 2). The coin is a quarter noble of Henry V, minted between 1413 and 1422 (PUBLIC-6805B7). The coin is in excellent condition with all detail clearly visible. As a rule, gold coins tend to be very rare discoveries as the loss of a gold coin would see the upset owner retracing steps until the coin was recovered. To give some idea of the rarity of gold coins, only five gold coins of any date have been recorded in Northumberland on the PAS database compared to the more than 400 coins otherwise recorded. That is a rate of approximately 1% of all coins found minted in gold.



s in Northumberland rted in 2010



There is another coin worth noting, a silver penny of Prince Henry, Earl of Northumbria (NCL-A6C172). This coin was minted between 1136 and 1152 by Henry, son of David I of Scotland and nephew of Henry I of England (not illustrated). Coins of Prince Henry are very rare, with only a small handful recorded on the PAS database; they are also very thin and therefore very susceptible to damage. Not only is this coin complete, but it retains a considerable amount of detail.

Another intriguing discovery of 2010 is an imported mount from Ireland (Figure 4). This mount (NCL-D66725) was cast in copper alloy then gilded, and can be dated to the 8th-9th century. The raised reticulate interlace is particularly common on Irish objects of this period, and like the solidus above, indicate the international connections of the kingdom of Northumbria, with notable Irish influence in the Northumbrian church though the object itself need not be Christian.



There have been a number of other interesting objects found in the past year, for example, Bronze Age axes, Romano-British brooches, Anglo-Saxon brooches, and even Viking gaming pieces. It is impossible to display everything recorded from Northumberland in 2010, but these artefacts can all be seen on the Portable Antiquities Scheme database:

<http://finds.org.uk>

If you or someone you know has found an artefact that you would like to have identified or recorded, please contact your local Finds Liaison Officer Rob Collins

Robert.collins@ncl.ac.uk
0191 222 5076

Photographs

1. *Gold solidus of Arichis II*
2. *Gold Quarter Noble of Henry V*
3. *Roman Silver Brooch similar to that found at Great Chesters*
4. *Imported Irish 'mount' from 8th or 9th century AD*

Rob Collins
Finds Liaison Officer
North East



Berwick-upon-Tweed

Year 1: Historic Area Improvement Scheme

The four year Berwick Historic Area Improvement Scheme (HAIS) has just completed its first year of operation. With funding from English Heritage, One North East and The Heritage Lottery Fund, grants have been offered to the owners of five historic buildings in the Berwick conservation area. The first grant scheme was completed in April 2011 and works will continue throughout the summer repairing external fabric, stonework, roofs/chimneys/gutters, as well as windows and shop frontages in Bridge Street and Castlegate.

Project Conservation Officer, Annette Reeves, has been working with building owners to produce repair schedules which address a 'top down' approach in securing the multi layered fabric of Berwick's buildings and distinctive roofscape. The schemes are part of a 'heritage-led regeneration scheme' that builds on the success of the newly refurbished Dewar's Lane Granary - the YHA's latest flagship accommodation complete with grade 1 gallery exhibition space, meeting rooms and café.

Proposals are also being progressed for Bridge Street car park and Eastern Lane. Improvements to the public realm ensure the wider setting and context of the conservation is

respected and research is underway to identify a suitable palette of materials and detailed design for both these important spaces.

Help has also been given to a number of community initiatives and research for the Berwick archive. A small book of poems and photographs, capturing 'heritage, memory and home' of the once busy commercial life of the Victoria buildings and Berwick Cockle shop, has been published. Local volunteers from the Building Study Group have also completed a photographic survey and record of the historic buildings in Bridge Street.

A planning undergraduate, Elizabeth Russell, also completed her six month 'Changemaker' project. The Future Cultural Leader's Programme aims to inspire and involve young people in heritage and culture. Sponsoring a 'young advocate' the equivalent of 10 days paid work, Elizabeth worked alongside her heritage 'Champion' (in this case the Project Officer) who mentors, supports and opens doors for their young person. Elizabeth worked with Berwick Middle School taking over Year 5 Geography class (9/10 year olds) and focused on Bridge Street. Ensuring cross curriculum activities, the school designed lesson plans that

covered geography, history, art, creative writing and IT skills. The children responded positively to their 'young advocate' and started by looking at maps, past uses, trades and occupants of Bridge Street, carried out field surveys on the condition of buildings, interviewed current occupants and visitors, and undertook traffic studies before producing their own visions for the area in 10 years time.

Their project, entitled '*Past, Present, Future*', was presented as an exhibition in a scheme launch celebrating the completion of all the Year 1 initiatives in the newly opened Dewar's Lane Granary Gallery in April 2011.

Further information on the Berwick Historic Area Grant schemes can be obtained from Annette Reeves:

annette.reeves@northumberland.gov.uk

Photographs

1. and 2. Pupils from Berwick Middle School prepare their designs for the Changemaker Exhibition.
3. An example of the work presented in the Changemaker exhibition at the Dewar's Lane Granary Gallery.
4. Viewing the work in the Gallery

AR



Dueshill Farm: Coquetdale

Fabulous Flint Finds

On the 14th May 2011 a small game crop on Dueshill Farm became available for an impromptu fieldwalking exercise, after being ploughed and harrowed. Measuring 237m x 37m this plot is situated at NT 954 015 and provided a rare fieldwalking opportunity, as it is rarely ploughed. In all likelihood it has not been subjected to the plough more than five times and it is unlikely to be ploughed again for some years to come.

Examination of this and adjacent fields has revealed no sign of rig and furrow either on aerial photographs or visible on the ground suggesting it was not subject to medieval or post-medieval cultivation and it is shown on an 1855 estate map as being grazing.

This field is adjacent to one known as Canon Greenwell's field (named after the prominent antiquarian) and the next field to the west is known as the Cairn field. To the north is Holystone Common where at least 60 burial cists have been identified.

Prior to this year's study there has never been any field walking carried out at this location, nor in the immediate vicinity and so far it has proved to be a worthwhile exercise with a total of 81 flints have being recovered. A significant number come from three distinct locations within the area.

Ten pieces of burnt flint were found within a distinct area of 3 sq metres, quite separate from the two similar sized areas where many of the remaining pieces were recovered.

So far the flints have not been subject to expert analysis, but appear to cover periods from the Mesolithic to Bronze Age. They will remain at Dueshill as the property of Mrs Rachel Bogart- Kessler, the landowner, who is happy for them to be available at any time for the purposes of research.

Photographs

1. Burnt flint assemblage
2. Microliths
3. Various tools including blades and scrapers
4. A 'thumbnail' scraper
5. A barbed and tanged arrowhead and small blade found on the near-by fields at Sharperton Edge

Ian Glendinning
Holystone History and
Archaeology Group



The Till, Milfield and Tweed Valley The Culley's Water Meadows



Water management has been a struggle for farmers since the origins of settlement. Either there was too much or too little – or both occurred at different times of year on the same piece of land! As a result, hydraulic civilisations developed in many of the great river valleys where flooding was controlled by levees and irrigation achieved by either diverting water out of the river or from springs.

History and purpose

In Britain we are often preoccupied by getting rid of excess water – usually in an agricultural context to allow cultivation of the soil, but for much of eastern Britain there are two problems that recur – the late start to grass growth after winter and the cessation of growth in summer due to drought. This has led today to most grazing animals being kept in the western part of the country or in the north. In the past, before fertiliser and easy transport this was not an option – farming systems integrated livestock and crops, and manure from the animals was essential for production of the crops, so a way round the spring ‘hungry gap’ and the summer drought had to be found. Someone must have spotted that grass around springs grew earlier in the year and adapted this to flood a larger area – ‘floating’ in the vernacular of water meadows – while

the beneficial effect of water on grass growth in summer is a no-brainer.

Apart from springs though, getting water from a river onto a field can be a lot of work, especially in summer when the river level is low. Either you can lift the water with a wheel or pump, or you build a canal with a fall gentler than the river’s to raise the water over a distance to higher than the surrounding fields – this involves a lot of work. But needs must, and in the far south of England water meadows developed at an unknown, though probably medieval date. Further north, where the hungry gap in spring is worse but the summer drought less severe, the impression is given that water meadows either failed to develop or were short lived. Martins and Williamson (1999 “Inappropriate technology? The history of ‘floating’ in the North and East of England”, in H Cook, and T Williamson, (eds) *Water Management in the English Landscape*. University Press Edinburgh pp.196-209) wrote on ‘floating’ in the north and east of England but mostly refer to Leicestershire or south (the ‘Potter’s Bar and the North’ syndrome?).

Requirements

Clearly the first requirement is demand and this is based on economics and climate. In dry areas

and when prices are high – as they were during the Napoleonic Wars, then any method that improves output is advantageous. Conversely, when prices fall – as they did in latter part of the 19th century due to imports from the New World, systems may become uneconomic even after the capital investment of creating the meadow has been taken. Although Northumbria is moister in summer than the south of England, areas in the rain shadow of mountains – particularly the Tweed valley and some of the Durham Dales – can be dry.

Secondly, you need a source of water – a reliable one such as a spring or stream, and a pond could be useful as a reservoir to allow for rapid watering of a large area; a hectare of grass in summer evaporates about 30m³ of water every day (about 2700 gallons per acre per day). Also you need a large enough level area over which you can spread the water without undertaking a lot of earth moving.

Enter the Culley brothers

George and Matthew were the movers and shakers of northern farming at the end of the 18th century. They started in Durham and their empire spread from there up to north Northumberland with a base at

Tweed Valley Water Meadows



This image is an extract of the Millennium Map™, which is copyright of Getmapping PLC



2

Fenton in the Milfield Plain. Famed across the globe for developing the Border Leicester sheep from Robert Bakewell's Leicester breed, George corresponded with Robert, and HE was a water meadows enthusiast! Robert's half of the correspondence survives (H C Pawson, 1957 *Robert Bakewell: Pioneer livestock breeder*. Crosby Lockwood & Son: London) and he describes not only watering for the reasons described above but also because he could 'float' his turnips along the canals and he could use 'dirty' water from roads and the farm steading to fertilise his fields. But it was Matthew who took up these ideas most enthusiastically and Harry Rutherford from Wark was sent to Dorset to be taught the techniques (A Orde, 2006 *Matthew and George Culley: Farming Letters, 1798-1804*. The Surtees Society, vol CCX). This must have been successful for in 1801 Matthew was writing from Wark 'Our watered land has flushed our stock exceedingly, more by double than it ever did before, but indeed I think we never saw such a growing time' (Orde, 2006).

The Culleys may have been pleased with their water meadows but it was nearly 20 years before others followed them in the North (J Bailey and G Culley, 1813 *The Description of the Agriculture of Northumberland*. The

Board of Agriculture: London). What is surprising is that there are no clear examples of George's success in this book. Elsewhere, the Board of Agriculture volumes offer detail on water meadow design and use (W Pitt 1813, *General view of Agriculture of the County of Worcester*. Board of Agriculture: London).

Abandonment

The Culley brothers had both died by 1813 and the Border Leicester breed is their true memorial. Their farms would have suffered from the same agricultural depression that led to the abandonment of all the high farming in the latter part of the 19th century, and with it went the water meadows. As elsewhere, the evidence for them lies in the records, air photographs and slight variations in the ground level where later ploughing has not removed them.

The Evidence

The River Till Wetland Restoration project has been looking at grassland sites along the river Till and many of the farms tenanted by the Culleys. Based on documentary and physical evidence (D J Rowe 1971 "The Culleys, Northumberland Farmers, 1767-1813", *The Agricultural History Review*, 19) the authors are now proposing that the following farms have remnant water meadows:

Fenton/Nesbit, Thirlings, Wark, Chillingham and Way to Wooler, along with Sir William Lorrain's Kirkharle, which did not impress George Culley when he saw the work (Bailey and Culley *ibid*). All these farms have agri-environment agreements with Natural England but unfortunately none have working water meadows. One of the clearest remaining systems is at Wark on Tweed (Fig 1) where the landscaping of the wet hollow survives together with the ponds, which were later repurposed to power the water wheel in the steading. Elsewhere, aerial evidence is less clear but on the ground signs of the system of waterways and the stonework associated with them do survive (Fig 2).

Photographs

1. Ponds at Wark farm and the water meadow to the east of them. The steading lies to the north.

2. Stonework drain from the water meadow at Way to Wooler farm at NU 00151 28845. (Photo: S Pullan, Natural England)

Robert S Shiel,
School of Agriculture Food
and Rural Development,
Newcastle University
Steve Pullan,
Natural England



Commemorating The Battle of Flodden:1513 England's first

The Flodden 500 project is coordinating and supporting the commemorations of the 500th anniversary of the Battle of Flodden in 2013. Funding from Northumberland Uplands Leader to support the creation of a new cross-border ecomuseum. This is the first stage of a larger round of funding applications which will support education and community heritage and arts projects.

The development of the Flodden 1513 Ecomuseum provides a framework within which the existing attractions associated with the Battle of Flodden can be developed and managed in coming years. (For more about the concept of ecomuseum see page 30).

The first stage of the Ecomuseum links together twelve existing attractions where access is already possible and all the necessary infrastructure exists to allow visitors to experience the sites. The scheme provides common branding, which will complement existing branding (where it exists) and support rather than replace their existing interpretation.

Each site has a page on the Flodden 1513 website, signage which announces its participation in the ecomuseum and also new a leaflet that will be widely available throughout the area of the museum.

The twelve sites included in phase 1 are:

Flodden Field (1): the location of the major engagement in the Flodden campaign, where the armies of James IV of Scotland and the Earl of Surrey met on 9th September 1513. The battle occurred somewhere in the fields to the

south of Branxton on the slopes of Branxton Hill, starting late in the afternoon and lasting for three hours. By nightfall James, most of his nobles and perhaps 10000 of his countrymen lay dead.

Branxton Church (2): though extensively rebuilt in 1849 the Church of St Paul was originally constructed in the medieval period and may stand on the site of an older timber church. During the days following the Battle of Flodden it served first as a temporary mortuary and then as a burial site for some of the casualties.

Etal Castle (3): a defended manor was first established here in the 13th century by the Manners family, but was only fortified as we see it today during the 14th century. Today the castle ruins consist primarily of the gatehouse and the keep. A standing exhibition about Border Warfare and the Battle of Flodden is housed in a former chapel.

Heatherslaw Mill (4): the earliest reference to Heatherslaw mill dates to 1306 and suggests that a Mill had stood on this site at least from the 13th century. Since that time it is believed that the mill ground corn, largely uninterrupted, for over 700 years and is likely to have provided flour or meal to both English and Scottish armies during September 1513.

Twizel Bridge (5): built two years before the Battle of Flodden in 1511, provided the only dry crossing of the River Till between the Tweed and Etal. During the Scottish Campaign of 1513 it is likely that parts of both armies crossed the bridge, the Scots on the way from Coldstream to Norham in late August and the English on the morning of the battle.



Battle of Flodden: 1513

st Ecomuseum

Coldstream Museum (6): the site of the Cistercian Priory of Coldstream was founded in 1166 as a Nunnery and remained so until its dissolution in 1621. During the 1513 invasion of England the Priory's nuns would have witnessed the Scottish army crossing the Tweed and after the battle the Prioress is said to have sent wagons to retrieve the dead from the battlefield.

Norham Castle (7): was established as a motte and bailey by the Bishops of Durham in the early 12th century and within 100 years developed the stone form we see today. It was captured by James IV during the last week of August 1513 after a five day siege, and protected both the eastern end of his supply lines and the northern end of his eastern flank.

Ladykirk Church (8): is said to have been built during the last years of the 1490s on the orders of King James IV of Scotland and is now home to a bust of him.

Barmoor Castle Gates (9): were erected in 2010 to commemorate Barmoor as the site of the English Camp on the night before the Battle of Flodden. The gates, in bespoke wrought iron depict the banners of the English Army, the Tudor rose and the main English weapons of 1513.

Weetwood Bridge (10): is thought to have first been constructed as a crossing point over the Till during the early 16th Century. The bridge lies on the direct route from Wooler Haugh where Surrey's army camped on the 7th September 1513 to join the Devil's Causeway north of the River.

Fletcher Monument (Selkirk) (11): a bronze monument of an armour clad figure carrying a banner, which was erected in 1913. This statue commemorates the return to the town of the only survivor of 80 Selkirk men who joined James IV at the Battle of Flodden. Fletcher is said to have returned with a banner captured from the English and in his exhaustion and despair cast it to the ground.

The Flodden Wall (Edinburgh) (12): the remains of a town wall that surrounded the newer parts of Edinburgh spreading south from the city High Street and centred around the area of the Grassmarket. This wall is thought to have existed from perhaps as long as 70 years before the Battle of Flodden but was repaired and re-fortified in the 12 months following September 1513.

These sites mark the start of a larger project to link a wider group of sites together across the UK all with associations to the Battle of Flodden and events that surrounded it.

They may include sites that are currently uninterpreted such as Ford Moss (where coal was mined by both sides) or are inaccessible, such as Ford Castle (where James IV is said to have slept the night before the battle). It will also hopefully include existing attractions such as Edinburgh Castle and Linlithgow Palace.

The website should be live in early September:

www.Flodden1513.com

CB



8



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11



12

In December 2010 archaeologists funded by English Heritage, recorded an inter-tidal peat deposit at Low Hauxley. The deposit contained an area of human and animal footprints which are believed to date to the Late Mesolithic. The site had originally been identified by Jim Nesbitt, a local amateur archaeologist, in 2008 and initial recording work was undertaken as part of the North-East Rapid Coastal Zone Assessment (see AinN 19 p 46). The peat represents a newly identified layer, at a lower elevation and of an earlier date than the other previously known peats from Low Hauxley, and is extremely important as it also contains a wealth of evidence concerning the Late Mesolithic environment of the area. The site is located in the intertidal zone, between the low tide and high tide marks, and the erosion of this deposit takes place when the peat layer is exposed and scoured clean of overlying sand during storm events. The peat is very shallow, being a maximum of 0.15m thick, and will be removed completely in the next few years.

A programme of initial recording in late 2009 mapped the extent of the peat using a global positioning system (GPS) unit. Samples were taken of wood that appears to have been worked with stone tools, and of peat that has produced two Late Mesolithic radiocarbon dates of between 5330 - 4990 cal BC for the start of peat formation. Given the shallow depth of this peat it was clearly a short-lived sediment, and therefore the footprints, which would have had to be formed when the sediment was still very soft and wet, are likely to date to the final wet phase of peat creation. Shortly after this initial record was made the site was re-buried by the shifting sand deposits on the foreshore and was not revealed again until late December 2010.

Archaeologists braved the harsh winter weather conditions to clean and record the re-exposed footprints by planning and photographing the whole peat layer. Work started at first light and continued until the rising tide

covered the deposits in the mid-afternoon. The deposit, which was fully exposed on the first day, was covered by an increasing spread of sand over the following two days from the seaward side, although an almost complete record was made prior to it being re-buried.

Small stones, shells and sand were removed from the footprints without too much difficulty and with no removal of the surrounding peat. The footprints were generally quite smooth in appearance and had already been eroded by the sea to the extent that, in some instances, it was difficult to ascertain whether depressions were footprints, or were perhaps created when pieces of timber have eroded from the deposit. A plan was made of the whole deposit which indicates the three dimensions of each print (length, width and depth) as well as a direction of travel where apparent. It was unclear during the recording process how, exactly, most of the prints matched up into potential tracks, although there were a couple of instances where this was clear. Clear indications of human footprints, as well as animals with cloven-feet (preliminarily thought to be deer), were abundant across the deposit. Six pieces of substantial timber were noted in the surface of the deposit, although it was not clear from examination whether these had been worked or not. One is thought to most likely be a tree root/stump, given the presence of many smaller root-like timbers in the immediate area. However, other pieces of timber are considered more likely to have been worked, given their shape and alignment, although this is not definitively the case. It seems possible that a timber brushwood 'platform' may have been made on the peat which may have looked out on to a salt marsh lagoon landscape, although such detailed environmental reconstruction is yet to be tested by

Low Hauxley: Druridge Bay Footprints in the



Edge Bay The Peat



sampling analysis. A sample of twigs was taken from immediately below the surface of the deposit for radiocarbon dating.

Subsequent visits throughout January and February 2011 showed that the site had been completely re-buried by sand again to around half a metre in depth. The site will only be revealed again during, or after, storm conditions which is likely to further damage or completely remove what is left of the site. It is hoped that a full photogrammetric record will be made when it is next exposed.

The presence of the footprints and worked wood, together with the potential of the peat to contain pollen and other environmental indicators means the deposit could shed light not only on human activities, technology and woodland management, but also a rare and detailed insight into the type of vegetation and landscape setting in this area at the time the footprints were made. The dating of this layer to the Late Mesolithic indicates that it could be contemporary with the Late Mesolithic occupation site below the known Bronze Age cairn cemetery at Low Hauxley, which lies only a hundred metres or so to the north. If the two sites are contemporary, as seems possible, then the site could provide an incredibly detailed insight into Late Mesolithic coastal settlement and economic behaviour.

Photographs and Illustrations

1. *Photograph of human footprint track. Direction of travel is towards the camera (scale = 2m).*
2. *Plan of the exposed peat as it was revealed in December 2010.*
3. *Initial recording of the site in 2009. Jim Nesbitt is indicating the location of the find of worked wood.*
4. *Staff from Archaeological Research Services Ltd undertaking cleaning and recording work on what was left of the frozen deposit in December 2010.*

Ben Johnson
Archaeological Research Services

Editor's Note - though the peat and artefacts discussed in this article can be dated the footprints cannot and may therefore date to any period since the mesolithic, when the peat was formed.

Bill Ford



I am sad to report that Bill Ford passed away peacefully in his sleep on Friday 29th October 2010. Bill was born on Tyneside and started his working life with the tobacco firm Wills before being called up into the army. He landed in Normandy three days after the D-Day landings and went on to serve as a liaison officer with a US army unit in France and Germany.

After the war he rejoined the tobacco industry but soon moved into his real interest, archaeology. After taking a post-graduate degree he became county archaeologist for Warwickshire where he excavated two Saxon cemeteries, a long barrow and the medieval wall of Coventry. He then became county archaeologist for Wiltshire where among other sites he was responsible for Stonehenge.

Eventually he moved back to his native Tyneside to become Assistant Director of the newly formed Tyne and Wear Museums Service. In this capacity he supported many projects, the best known being the reconstructed Roman gateway at South Shields.

After his retirement he remained very active in archaeology and the arts and was chairman of the Bondgate Gallery for some years. He ran extramural classes in archaeology at Hexham, Morpeth, Alnwick and Berwick which carried out extensive field surveys and excavations. His teaching inspired a large group of students and led to the formation of the Borders Archaeological Society.

He was always a great supporter of people and projects and his wise council will be greatly missed.

Philip Deakin



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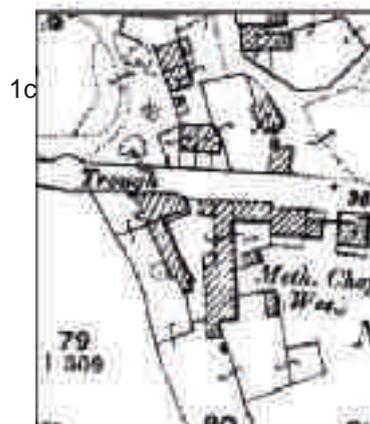
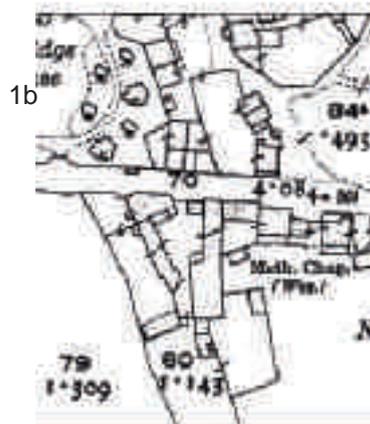
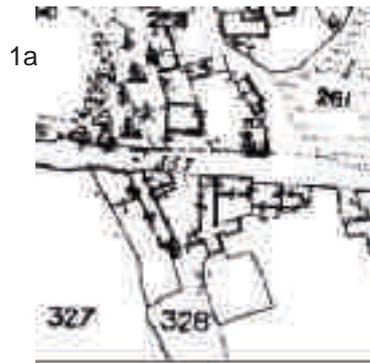
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Melkridge: Haltwhistle ...an 18th century farm?

The buildings of a farmstead with possible 18th century origins were recorded photographically in April 2010 in advance of a proposed redevelopment of part of the complex. Melkridge lies on the north bank of the River Tyne, just east of Haltwhistle, and the farm, at NY 738 638, is the westernmost group of buildings on the old Newcastle to Carlisle road.

The farm consists of ranges around a narrow triangular yard. The farmhouse stands at the north-west corner of the yard and clearly contains a number of builds; its main block has two blocked slit vents, implying that this part was once a farm building. None of the visible features and fabric appear to pre-date the 19th century, although there is a re-set lintel on the rear wing inscribed 'L R I 1741'. The oldest building appears to be a fragmentary gable end in the west range which looks to be of 18th century date and could be contemporary with the re-used '1741' lintel in the farmhouse. However, the majority of the associated farm buildings are of typical early-to-mid-19th century character.

It is difficult to reconstruct the history of the farm before the 19th century. It stands on quite a distinctive site, a



raised platform at the west end of the village street, and could be of quite early origin. The close relationship of the buildings with those of what is now Melkridge East Farm, immediately to the east, might imply that a single farm was divided in the early 19th century or earlier.

The oldest map traced to show an approximate outline plan of the buildings is the 1842 Tithe Award (Woodhorn Archive ref DT316M). It appears to show the main part of the west range and the farmhouse, but not the east range, or at any rate its northern part. The development of the farmstead can be traced on the first, second and third editions of the Ordnance Survey map, as the main parts of the west and east ranges are built (1st edition), the farmhouse is extended and the south east range and cartshed are built (2nd edition), and a circular structure which may have been a late horse engine house or gingang appears (3rd edition). Further developments took place over the course of the 20th century, including the loss of the gingang.

Photographs and Illustrations

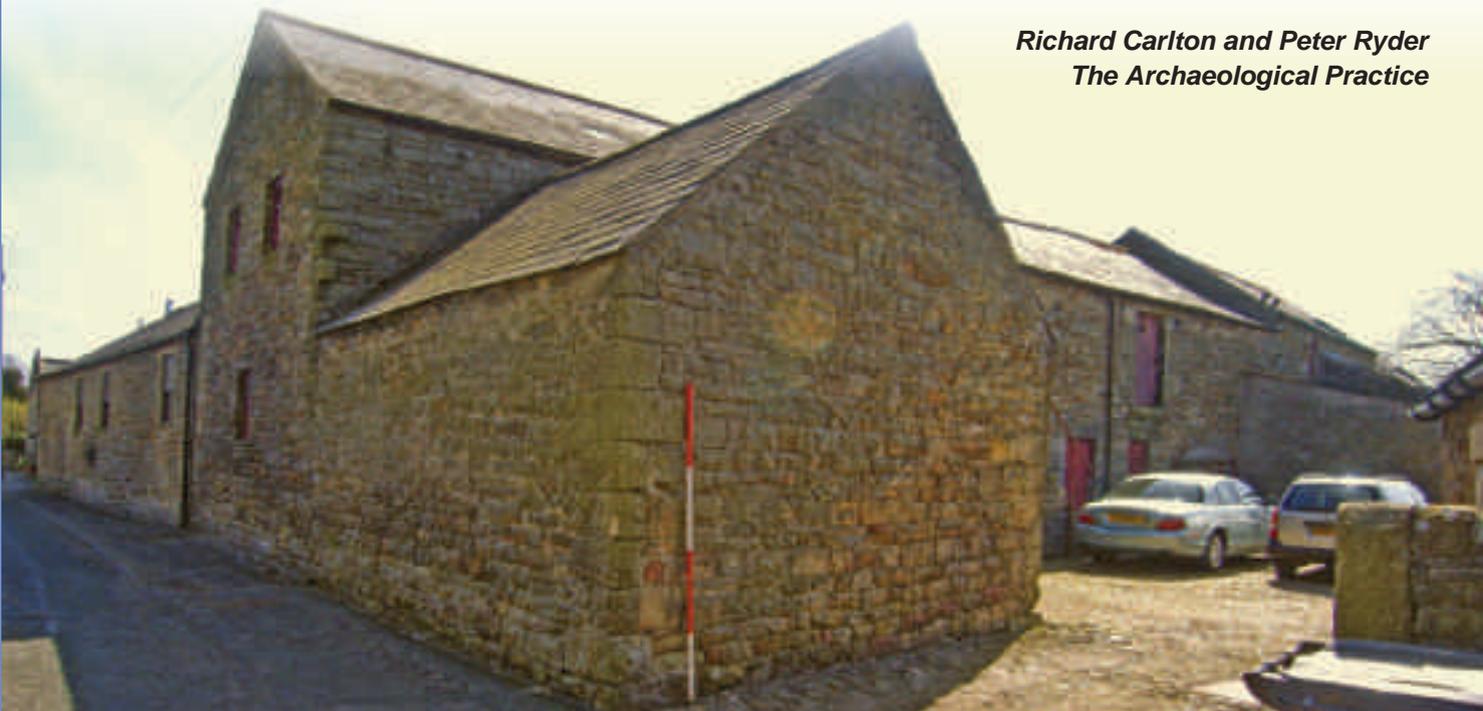
1a Extract from OS 1st Edition 1860

1b Extract from OS 2nd Edition 1898

1c Extract from OS 3rd Edition 1920

2 Melkridge Farm yard and main range

Richard Carlton and Peter Ryder
The Archaeological Practice



CBA North is the northern

regional group of CBA national. Our area is Northumberland, Durham, Tyne and Wear, Teeside and Cumbria. CBA North is the organisation which gives local CBA members the opportunity to find out more about what is happening in their region; provide opportunities to get involved; and add their voice to those ensuring that the region's archaeology and heritage continue to be in the minds of decision-makers. CBA North's motto is 'Participation, Discovery, Advocacy'.

CBA North has, over the last few years, organised a number of events for its members. In 2007 we had a guided walk around Flodden battlefield led by TV presenter of 'Two Men in a Trench', Dr Tony Pollard. We have also had guided tours of places such as the Victoria Tunnel in Newcastle, Blyth Battery in Northumberland and Carlisle Cathedral. We are a partner in the HLF funded North Pennines 'Altogether Archaeology' project which offers a whole range of fieldwork opportunities to members of the public.

We ran a joint building recording and surveying project with Architectural and Archaeological Society of Durham

Registered Charity: 1098854

CBA (North)

and Northumberland at Lammerside Castle.

Our committee comprises 13 people. Along with our Chair (Keith Merrin, Director of Woodhorn Museum), secretary, membership secretary and treasurer we also have two student liaison officers who forge strong links with the archaeology departments of Durham and Newcastle universities and those colleges which teach archaeology courses. Students can join CBA North free of charge. Our YAC liaison officer helps run the Newcastle Young Archaeologists' Club for 8-16 year olds. There are also YAC branches in Maryport, Kendal and Whitehaven. We are looking for new committee members for 2012 including a newsletter editor.

CBA North produces two glossy colour newsletters a year for our members, which includes articles on interesting local projects and advertises excavation and fieldwork opportunities alongside lectures and guided walks.

On Saturday 29 October this year we

are holding a joint meeting with CBA

NW at Kirkland Hall, Kendal in Cumbria. This will be a full day of talks

on the archaeology of the north-east and north-west which so far include Bassenthwaite Reflections, Lammerside Castle, Altogether Archaeology project. We hope to include a speaker on the famous Crosby Garrett Roman helmet. More speakers will be added. The Portable Antiquities Scheme Finds Liaison Officers will have a selection of artefacts on display and will be able to identify the objects attendees bring along. Everyone is welcome. Tickets are £10 and include tea and coffee. An optional buffet lunch will be available.

To join CBA North costs only £5 (or is free if you join CBA national). Please contact secretary Jennifer Morrison at cbanorth@britarch.ac.uk or send a cheque for £5 made payable to CBA North Region to Jennifer Morrison, Archaeology Officer, Newcastle City Council, Environment and Regeneration Directorate, Strategic Housing Planning and Transportation Directorate, Room 912, Civic Centre, Barras Bridge, Newcastle upon Tyne NE1 8PD.

**Jennifer Morrison,
CBA North Secretary**

Till Valley Archaeological Society

Till Valley Archaeological Society (or TillVAS) is a new volunteer archaeological group that have formed in the area surrounding the north Till Valley (including Wooler, Milfield, Crookham, Ford, Etal, Branxton and Cornhill).

The group has been formed by volunteers who came together initially to support the work of the Flodden 500 Archaeological Project and who have realised that their common interest in heritage and archaeology needed a more general base than just that project. The formation of such a group was one of the targets for the Capacity Building Grant with which English Heritage supported the establishment of the Flodden 500 project and as such that aim has now been achieved with TillVAS adopting the Flodden project as one of their ongoing strands of research.

TillVAS has held several meetings to form a committee and draw up a list of research interests and has settled on five themes which will form the basis of their initial research interests. Within these themes project are now being identified and members are being sought to begin work on researching these topics.

The themes are:

- Transport and Routeways,
- Settlement History,
- Battlefields and Conflict,
- Historic Buildings,
- Early settlement of the Till Valley.

From these, research is already underway on the following projects: The Battle of Flodden (Flodden 500 Archaeology Project) as part of the Battlefields and Conflict theme. There is immediate interest in taking forward research into the origins and history of the villages of Crookham,

Branxton and Heatherslaw as part of the Settlement History theme. Members are also considering research into the river crossings of the Till as part of the Transport and Routeways theme and it is hoped to arrange some building recording training that will allow the detailed assessments of Ford Westfield Farm and the buildings on Ford Moss as part of the Historic Building theme.

TillVAS already has more than 30 members and a full diary of field visits, talks and fieldwork. If you are interested in getting involved, or want to know more either about the walks and talks or the various proposed research projects contact TillVAS secretary Maureen Charlton on 01668 216091 or by email:

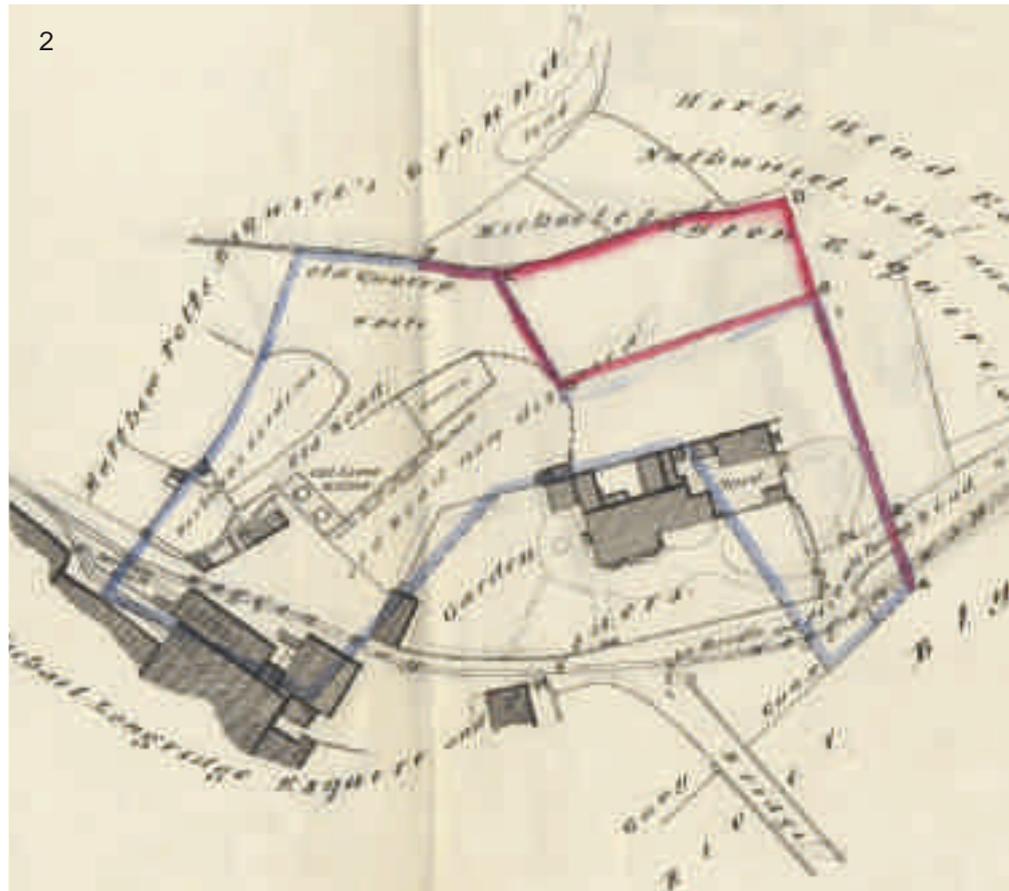
Maureencharlton910@btinternet.com

In 2010 a website was launched to publicise the results of more than a decade of investigations into the history and archaeology of Bedlington Ironworks, the site of which lies in the grassed and landscaped Dene Park within the deeply incised, heavily wooded valley of the lower River Blyth.

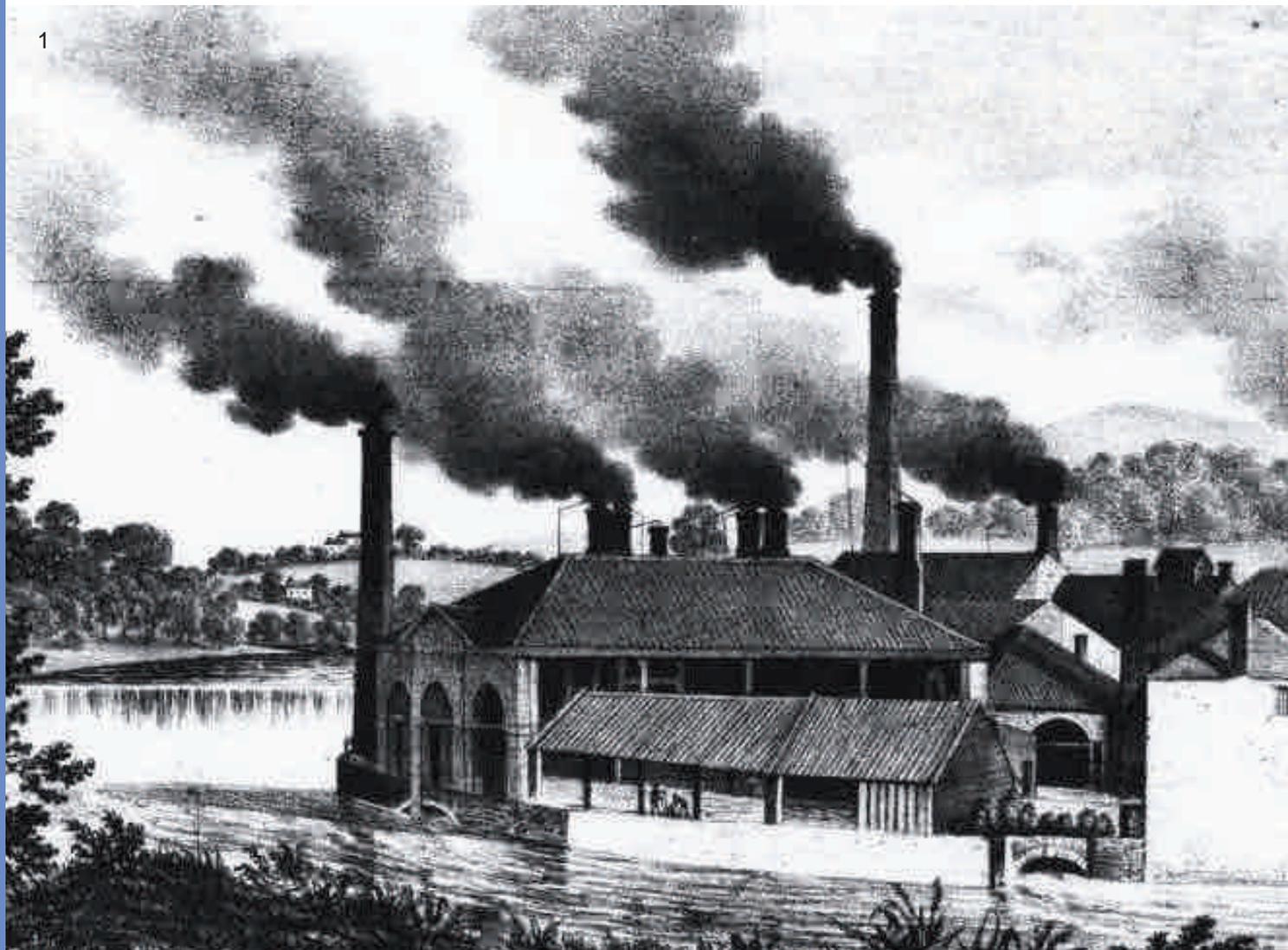
The earliest known phase of ironworking at Bedlington (originally on the Bebside bank of the Blyth), probably began in the early 18th century and used scrap imports to manufacture nails, chains and a range of other fittings, primarily for ships constructed at the Port of Blyth. The importance of the Ironworks was augmented when iron-ore smelting commenced around 1760, at which time Bedlington was the site of the only blast furnaces in Northumberland. The scale of its production and range of its products expanded until, in the 19th century, it was responsible for the development of cheap mass-produced railway lines. In 1825, it provided track for the Stockton and Darlington Railway, the world's first long-distance public line,

Interactive Site Access Bedlington

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Access, now online Ironworks

and constructed 150 locomotive engines, some of which were exported to the Continent and were the first engines to work lines in Italy and Holland.

With the development of ironworking technology, notably the introduction of steam-powered blowing engines to power forge and smelter bellows in the 19th century, Bedlington could not survive the competition of the larger scale iron industry in Durham or on Teeside. The ironworks closed in 1867 and the site was levelled in the 1950s to form the present parkland. But traces of its former history survive in the form of riverside quay walls, Furnace Bridge, the remains of a dam, tunnels and other structures.

The recently published website contains the results of archaeological assessment and fieldwork carried out under the direction of Alan Williams in 1999, which in turn drew partly on the work of the Bedlington historian, Evan Martin, as well as the work of Barry

Mead, formerly Cultural Heritage Officer for Wansbeck Council. More recently, additional material was added to the archive, including the results of limited clearance excavations carried out by Barry Mead in 2007, and a survey of standing building remains undertaken by Peter Ryder in 2009.

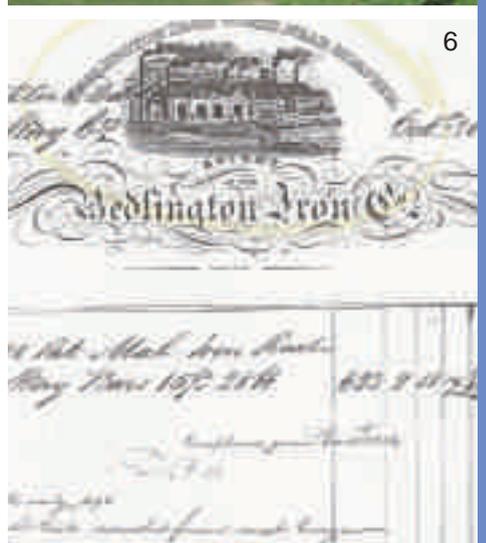
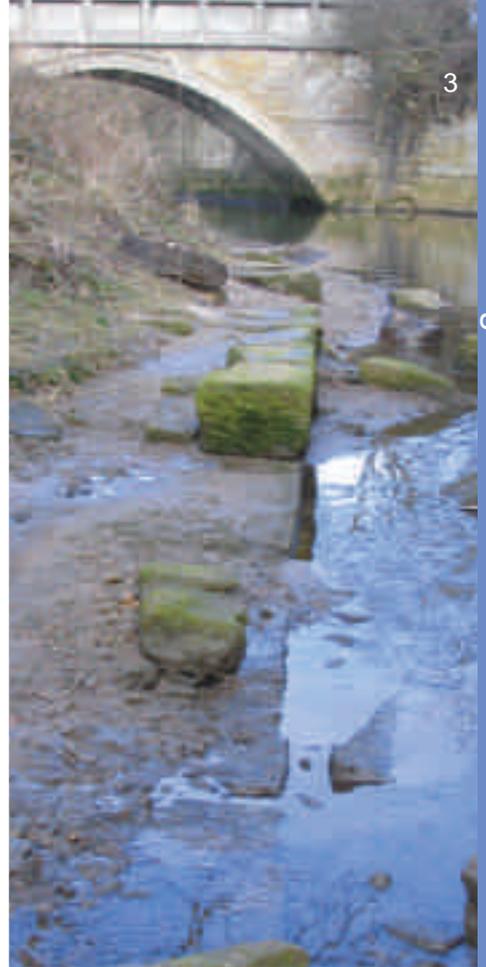
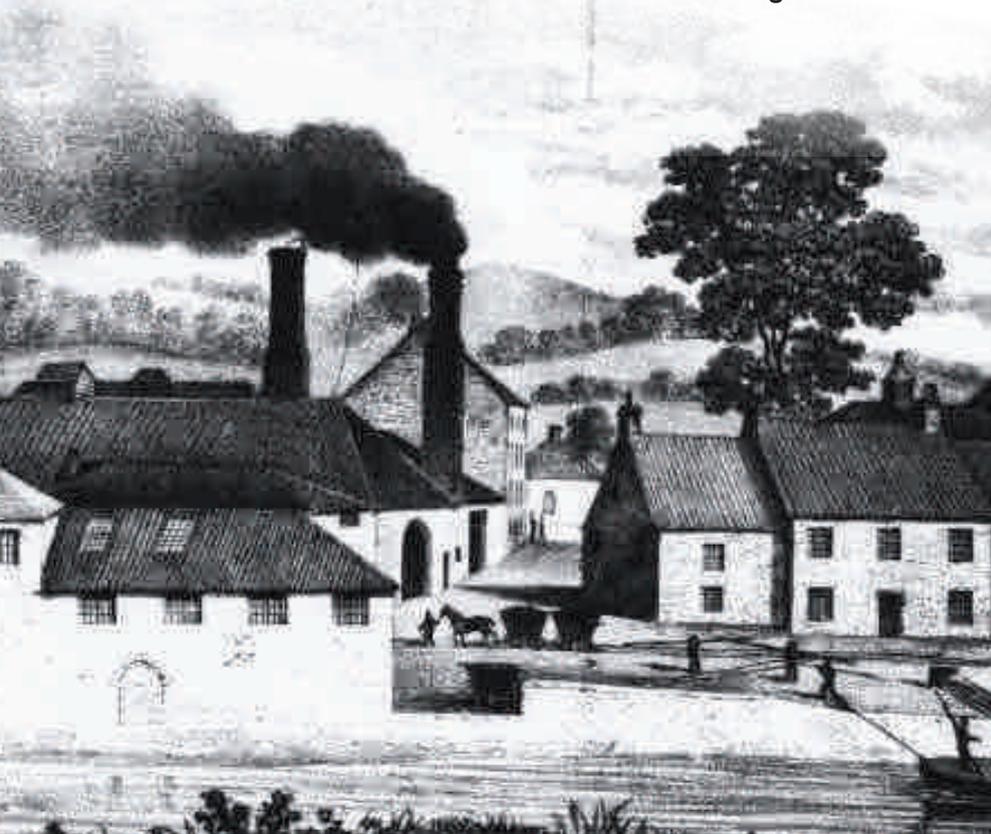
The website, designed by Marc Johnston, aims to make available much of the collected archive of information about the site:

<http://www.bedlingtonironworks.org/>

Photographs and Illustrations

1. Bedlington Ironworks engraving of 1827.
2. Site map of 1840
3. Bedlington side of the River Blyth, upstream of bridge.
4. Barry Mead inspecting the outflow of an arched culvert upstream of Furness bridge.
5. Barry Mead leading a group at Furness Bridge in 2007.
6. Bedlington Iron Company bill to the Stockton & Darlington Railway Company for railway bars, 1824.

**Richard Carlton
The Archaeological Practice Ltd**



Holystone History and Dry Burn earth

The Holystone History and Archaeology Group have taken a first step in their investigation of a previously unrecorded manmade structure in Coquetdale.

The group's chairman, Ian Glendinning, spotted the mound-like structure while walking in an area close to Holystone Grange and decided it was worth further inquiry. So, after a visit by county archaeologist Chris Burgess, who agreed that no records existed of this site and who guessed that it may well be a previously unrecorded palisaded enclosure dating from the medieval period, the group decided to survey what was visible so that some record would be available in the future.

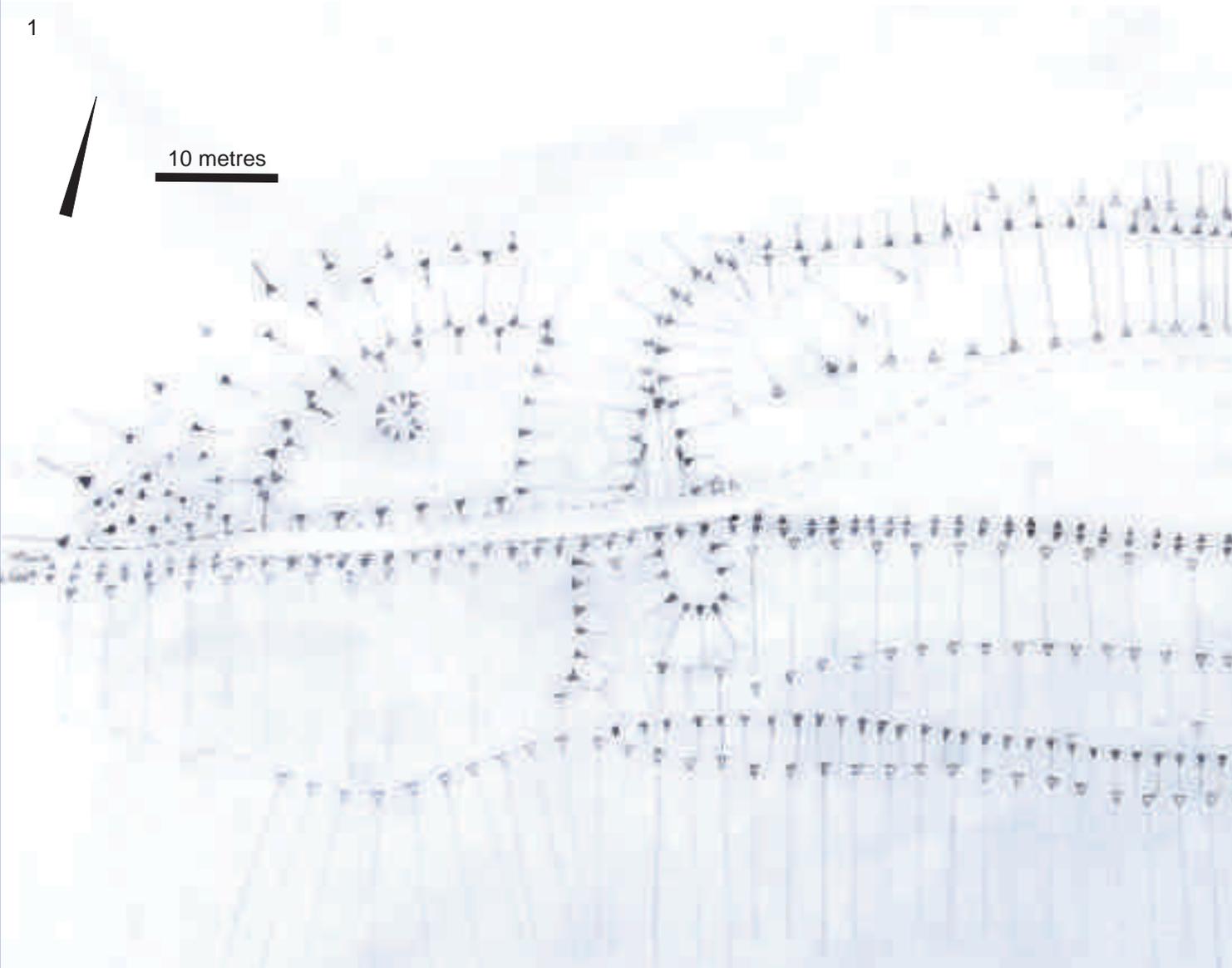
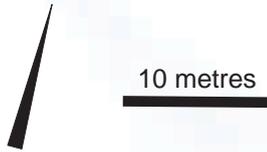
Accordingly seven group members took part in carrying out a plane table survey of the mound-site close to Dry Burn. Two tables were used by the group, under the direction of member David Robinson who had regularly

done surveying work before his retirement and who assembled the final drawing from the surveys carried out.

The feature consists of a raised oval-shaped earthwork of approximately 75m by 60m, with a deep ditch at the western end plus a circular earthwork of about 35m diameter with a large central depression. After completing the survey, it was agreed from what emerged that the dimensions and general shape are suggestive of a motte and bailey type structure. The whole is situated on a large mound which appears to be of natural origin. A terrace is visible around the entire circumference which suggests a palisade. In several places exposed stonework is visible but not in sufficient quantity to be diagnostic of



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and Archaeology Group Earthworks survey



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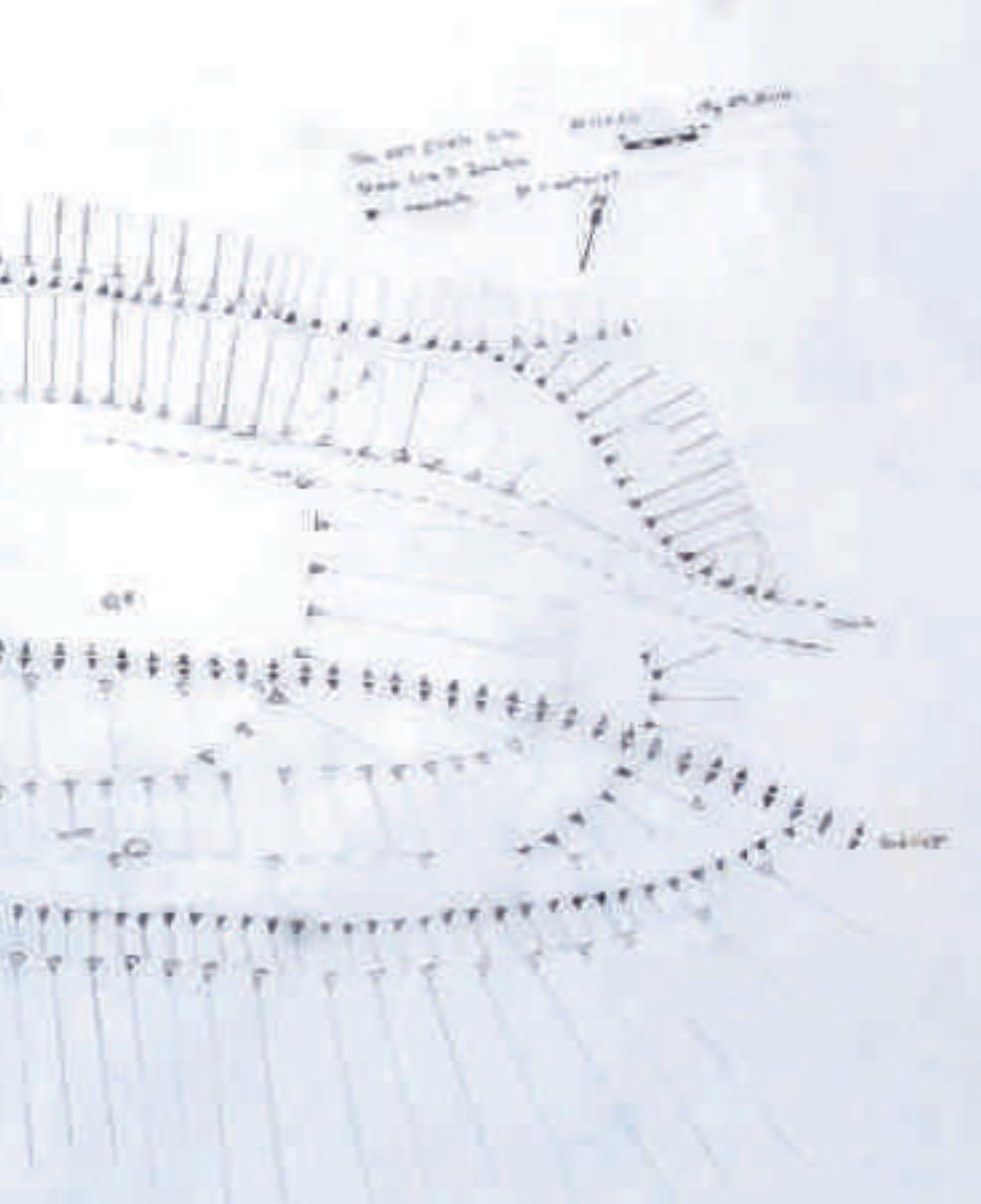
anything without creating disturbance.

The survey results have been discussed with the landowner who has agreed that further investigation work could be carried out in the future. The group hopes to progress site investigation if grant subsidy can be found to fund an excavation led by a trained archaeologist. Only further expertly-led investigation will solve the mystery of exactly what the feature is and from which period it dates.

Photograph and Illustration

1. Survey drawing of Dryburn
2. Earthworks at Dryburn

Jan Frazer
*Holystone History
and Archaeology Group*



North East Region

The Battlefields Trust is a non-political registered charity dedicated to the preservation, interpretation and presentation of battlefields as educational and historical resources. The Trust is a national organisation with a network of local groups. Activities include walks, talks, conferences and projects to investigate and present battlefields. The Trust also campaigns and lobbies to protect battlefields and works with other stakeholders to bring about better management and access.

The main threats to battlefields are from building development and from uncontrolled metal detecting. Building development can (and does) destroy vital archaeological evidence that can change our understanding of how a battle was fought. Illicit metal detecting allows important artefacts to be removed from a site before they can be properly assessed by archaeologists.

Details of the Trust membership can be found at:

www.battlefieldstrust.com



The North East & Borders Region of the Trust covers Northumberland and can be contacted at:

northeast-borders@battlefieldstrust.com

Geoffrey Carter

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Going to work on our Heritage

How do we compare the imposing coastal majesty of Bamburgh Castle against the scattered remnants of a lead mine sprawling over several acres of windswept moorland? In aesthetic terms there appears to be only one winner; yet both are integral to the story of Northumberland and, indeed, the entire North East. And, whilst the castles and country houses of the region will always remain as architectural showcases, the often more functional relics of our industrial past are fast disappearing from the landscape. That is why English Heritage has launched a national initiative to discover just how much of our industrial heritage is at risk and to prompt a debate as to what should be saved and how.

There is sound reasoning behind the initiative, as there is clear evidence to show that people value and appreciate their industrial heritage; 86% said so in a national survey conducted early in 2011 on behalf of English Heritage. The support becomes even stronger when the focus is placed purely on the North East, with the region containing the highest number of people stating a pride in their industrial heritage and the enduring link it provides to so many family histories.

Northumberland, of course, has its very own fascinating and rich vein of industrial activity running throughout its history. From Iron Age stone quarries, such as that at Brough Law, through to more modern lead and coal mining; the evidence is there to show that the people of Northumberland have always kept busy. The only thing that has changed is the scale and complexity of the operations.

Although much of the obvious evidence of the county's coal mining past

has been wiped from the landscape in the past few decades, there remains plenty of outstanding fabric to feed the imagination. Ford Colliery is a scheduled ancient monument that was worked from at least 1650 and continued to produce coal up until 1914. Extant remains include the engine house chimney and the engine house itself. Another fine example is Stublick at Langley on Tyne. Although later in date than Ford, and serving a relatively small coalfield, Stublick has probably the finest group of colliery buildings still standing, including an engine house listed at Grade II*. With ashlar dressings, Welsh slate roofs and coped gables, Stublick highlights the fact that industrial heritage does not always have to be prosaic in nature. Further proof is provided by the pithead baths at the former Lynemouth Colliery, which opened in 1927 and employed 1,823 people at its peak in 1947. The baths were built in 1938 by noted mining architect Frederick George Frizzell in the "Modern Movement" style, but now stand in less than splendid isolation, amid a partially cleared mining landscape, slowly decaying and prone to vandalism.

A different sort of mining, for lead, is another industry whose

Our Industrial Heritage at Risk

heyday is long gone but which has left a definite mark on the landscape of Northumberland, particularly those areas of the county overlapping the North Pennines. Several notable sites contain fine examples of the different components that comprise a lead mining operation. The Allenheads Lead Ore works dates back to the 19th century and was the largest single lead mine in the North Pennines, while the Langley Barony Mines are unusual in being steam-powered and still contain a wide range of features such as arched adits, buddle pits, smithy and stone-lined stream reservoirs.

Coal and lead mining would feature high up on any list of industrial activities named by people in the region and there is no doubting their legacy on our heritage is massively important. However, it is misleading to focus too much on these activities alone, for it is the sheer range of industry in Northumberland that is fascinating. All this activity has left some intriguing reminders dotted around the landscape. Take the hydraulic silo at Cragend Farm, near

this is a building (listed at grade II*) that survives as a monument to a rare failed experiment by the great industrialist Lord Armstrong. Using water sourced from the Blackburn Lake situated within the grounds of Cragside Mansion House, Armstrong's home, the idea was to use hydraulic power to process grass into silage for animal feed and the silo was designed to accommodate the necessary engineering. Much of the equipment still survives inside the building today, including a hydraulic engine in the basement and a turbine at the entrance level. However, the "ensilage" procedure still required a significant amount of manual labour and there were also problems with fumes emanating from the fermenting grass, so the silo was abandoned after a relatively short existence. Throughout the rest of the county, examples can be found of lime kilns, quarries, pottery bottle kilns and tileries; all of which helped the North East drive the country's emergence as an industrial powerhouse.

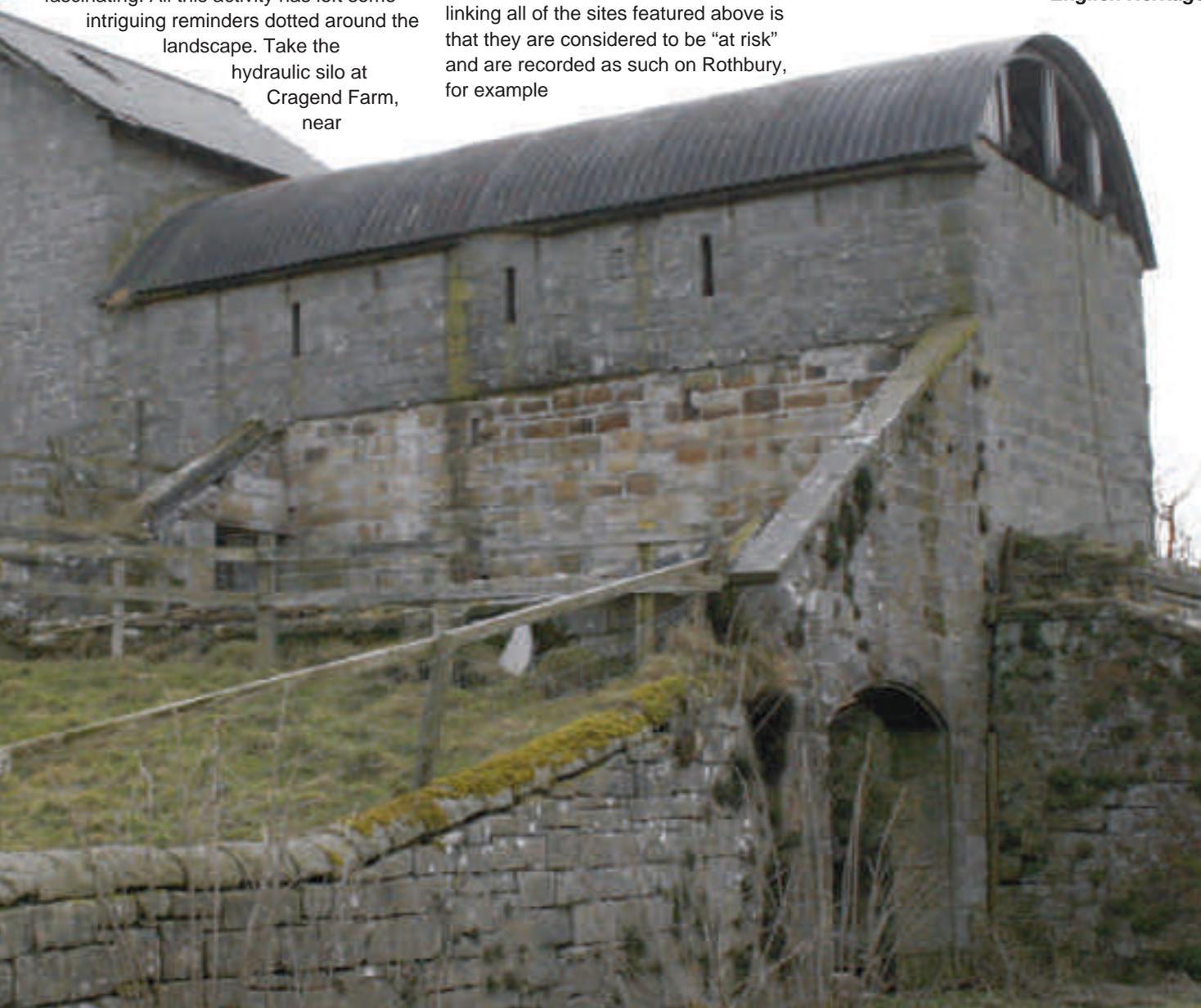
Apart from industry, the common factor linking all of the sites featured above is that they are considered to be "at risk" and are recorded as such on Rothbury, for example

the Heritage at Risk register published by English Heritage. The reasons why so many sites are vulnerable are many and varied but vacancy and vandalism are regular traits of industrial sites. So the race is on to preserve these pieces of our history that so many people have said are important to them. Unless urgent action is taken on many of these sites, schoolchildren will have to rely on images and words rather than being able to visit, touch and see for themselves the buildings and monuments that might well have played a significant role in much of their own family history. For information on how you can help, please visit www.english-heritage.org.uk/industrial-heritage-at-risk. The Heritage at Risk register can also be viewed online, so everyone can learn of sites within their own community that perhaps they can become actively involved in saving.

Photographs

1. Pithead baths Lynemouth (Exterior)
2. Pithead baths Lynemouth (Interior)
3. Hydraulic Silo, Cragend Farm, Rothbury
4. Hydraulic Silo, Cragend Farm, Rothbury

Stephen Allott
English Heritage



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Royal Observer Corps Bamburgh

The Observer Corps was established in 1925 as a means of providing early warning of air attacks. Originally manned by volunteers who were appointed as special police constables the groups soon came under the control of the Air Ministry and was made part of the RAF. Honoured with the title Royal Observation Corps in 1941 it worked through World War 2 providing early warning information and intelligence on aircraft movements but was disbanded when hostilities ceased in 1945.

Two years later, in 1947 it was reformed, again formed primarily of volunteers again to follow aircraft movements. By 1954 the government tasked the ROC with a new, Cold War role - the identification of nuclear explosions and the monitoring and reporting of nuclear fallout and air contamination. In 1956 this role was solidified in the decision to build a series of monitoring 'bunkers' within which four person teams would shelter at the time of an attack to monitor and report on the risks of fallout following a nuclear exchange.

Over the next 10 years nearly 1600 of these bunkers would be built across the UK, generally with no more than eight miles lying between any two. All were built to the same basic design though the work was done by local contractors supervised by local members of the ROC command. By 1968 the then Labour government

10



vation Corps' h Bunker

decided the threat of nuclear war had diminished and cut the number of ROC volunteers from 25,000 to 12,000 and halved the number of active monitoring bunkers to 876. Many of these however remained in regular use until 1991 when the collapse of the Eastern Bloc and communism led to the decommissioning of many Cold War defences.

When the ROC was finally stood down in 1991, the surviving 876 bunkers were locked up and for the most part returned to the owners of the land on which they stood with little other than the monitoring equipment being removed.

The bunkers were generally sited on hill tops and were constructed to a pattern. A hole twelve feet deep was excavated and within this a 'monocoque' concrete cell was cast with six inch thick steel reinforced concrete walls and an eight inch thick concrete roof. This box, measuring approximately fourteen feet by six feet was then supposed to be thoroughly 'tanked' with a tar/bitumin lining to ensure it was waterproof. Above this box the soil was then reinstated often with a small mounding (up to two feet tall) at ground level through which four 'openings' protruded. These were the entrance hatch (and ventilator) at one end, two instrument tubes from the centre of the bunker and at the far end from the entrance a second ventilator. None protruded more than three feet

from the surface and generally from a distance even today these sites look like the kind of agricultural or rural water tank installations which are commonly seen in the countryside (Figure 1).

Access to these bunkers was by means of a heavy steel hatch (Figure 2) that was lifted by means of a counter-weight to provide access to a 14 foot steel ladder (Figure 3). At the foot of this ladder was a metal grate that covered a sump (Figure 4). This sump was designed to collect all water that penetrated the bunker and which could be pumped to the surface by means of a rotary hand pump. In many cases this arrangement kept the bunker dry but in some cases additional duck boards had to be installed as the interior was perpetually wet.

At the bottom of the entrance shaft a partition separated the shaft and a small cupboard containing a chemical toilet and storage area (Figure 5) from the main operational room. This 12 x 6 foot space included a table, instruments and a storage cupboard as well as batteries for power that were stored in two large wooden crates and which could be recharged by means of a petrol generator. Power was, however, carefully managed with switch units having timers on them to ensure they did not get left on when not in use (Figure 6). Three main instruments were monitored in the bunker. A device to detect explosions stood at the top of the entrance shaft while two to monitor air contamination and fallout had their own conduits to the surface from the centre of the bunker (Figure 7). These passed through stainless

steel tubes into the main room (Figure 8) where careful records were maintained by means of telephones to the regional reporting centre and other bunkers in the group and should these fail the lead bunker in each group also had use of a VHF radio.

Space was also provided for two small bunks, usually at the far end of the main room - however in Bamburgh these seem to have been situated just inside the door (Figure 10).

The Bamburgh bunker seems to be one that has remained dry and has undergone many modifications including new switch gear and the installation of polystyrene insulation on the walls. Many of its features remain intact including paperwork (and bible), furniture and even the wellies of the last monitoring team to use the site, though as with all other sites the instruments themselves have been removed. Discussions are being held with the owners of the Bamburgh Bunker to agree how best to preserve, manage and interpret the remains which for the moment remain locked and sealed behind the heavy steel trap door.

Photographs

- 1 Outside the bunker
- 2 The top of the entrance shaft
- 3 The entrance shaft
- 4 The sump and pump
- 5 Stores and toilet
- 6 Switch and timer
- 7 The two instrument pipes
- 8 The pipes in the ops room ceiling
- 9 The main instrument mount and battery boxes
- 10 A view of the main room
- 11 The desk and paperwork

CB



English Heritage: Hadrian's Wall Lidar and Survey

The publication last year of 'Frontiers of Knowledge', a framework for future archaeological research on Hadrian's Wall, clarified what most archaeologists were already mindful of: that there is still a huge amount to understand about this amazing frontier system. However, the discovery this year of new Roman camps on the Wall has highlighted the potential both of the new techniques becoming available to archaeologists and also of the importance of continuing to apply more traditional methods.

The recent discoveries were started thanks to the increasing availability of LIDAR (Light Detection and Ranging) survey data. This technique, which employs an airborne laser, bounces a pulse of light from an aircraft onto the ground below. Sensors in the aircraft measure the time it takes for that light to reflect back from the ground surface and convert it to a height value. This allows very small changes in height to be detected, which means that earthworks from archaeological sites can often be recognised, even where they cannot be seen on the ground. LIDAR also allows the results to be filtered to remove things like tree cover, showing underlying archaeology which would otherwise be invisible to normal aerial photography.

Along Hadrian's Wall, investigation of LIDAR data has shown the presence of at least three previously undiscovered Roman camps, two of which are in Northumberland.

The first of these, close to the Roman fort at Carrawburgh, has been ploughed in the past, meaning that ridge and furrow earthworks masked the remains of the camp, making it very difficult to see on the ground. Manipulating the LIDAR data digitally allowed archaeologists to identify the regular shape of the camp beneath.

However, the second camp, close to Shield on the Wall, was more complex and is perhaps more representative of the type of discovery currently being made. Here, and at a number of other sites in Northumberland and Cumbria, the LIDAR data showed the presence of an earthwork of the right shape for a Roman camp but further evidence was needed to confirm that interpretation. This is where tried and tested techniques, such as aerial photography and analytical survey come into their own. At Shield on the Wall, the potential site was investigated by English Heritage's Aerial Survey Team and low winter sun allowed them to capture the illustrated image of what is very clearly a Roman camp just to the rear of the Vallum. The details of this camp were further investigated on the ground by English Heritage and these two techniques suggested that the camp had been established during the construction phase of Hadrian's Wall, after the line of the Vallum had been surveyed but before it was constructed, possibly in connection with stone quarrying for the Wall here.

This kind of evidence for the dating of such a camp is quite rare and could not have been established from the LIDAR data alone. Likewise, the LIDAR data has shown the presence of other possible Roman remains along the Wall, but where we need further investigation (primarily aerial photography in good conditions) to allow a judgement as to their origins.

These discoveries therefore show that there are amazing new discoveries to be made along Hadrian's Wall, one of the most closely studied monuments in Britain. However, they also show the importance not only of new survey techniques such as the use of LIDAR data, but also of more traditional work, and the increased understanding we get of such sites when these techniques are combined together.

Mike Collins
English Heritage

LIDAR discoveries made by Pete Horne (EH) and by Bryn Gethin. Aerial photography by David Macleod (EH). Article draws on material written by Humphrey Welfare.



Northumberland Conservation

The two years since Northumberland reorganised its local government systems from the two tiers of districts and county to a single unitary system have seen massive changes not only within the new authority (as a whole) but also for Northumberland Conservation.

It has been said that it takes five years to build an organisation [such as the new Northumberland County Council] from scratch and two years in we are still refining what we started out with in April 2009. Now however things are starting to take a more definite shape for Northumberland Conservation, with the family of disciplines and designations managed within the team reaching its current position during the summer of 2010 when we were joined by the members of the Northumberland Coast Area of Outstanding Natural Beauty Team, Mel Nicholls, Tom Cadwallender, Iain Robson and Catherine Gray. While Tom has subsequently retired after nearly 30 years of service we

will in coming months be finding a replacement for him.

The AONB Team's arrival has also coincided with upheaval in central government and major cuts in many centrally funded grants. Much of the spring of 2011 has been taken up with securing the funding for the Northumberland Coast designation for the coming three years both through negotiations with Natural England and DEFRA and also with the County Council for their contribution (now amounting to around 30% of the costs).

While more change may be on the cards for the coming months when the Council institutes a further reorganisation, the process of which started in the Autumn of 2010, we hope that the services of Northumberland Conservation have been secured for the coming years so we can provide the best and most efficient service possible with the resources available.

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Vacant: Building Conservation Officer



Vacant: Building Conservation Officer



Vacant: AONB Built and Natural Environment Project Officer

Any traveller on the A68 and A686 driving down through Otterburn has probably seen Shittleheugh Bastle many times, through its prominent position on the western slope of Blakeman's Law, and its tall gables standing as landmarks, sometimes picked out in pink in the setting sun against the darkening skies. However, they may not have realised the importance of the site, nor its wider landscape. The roofless structure is a Scheduled Ancient Monument and a Grade II listed building; the position of the site, being so marginal, has probably in part ensured its survival despite its close proximity to the Ministry of Defence firing ranges (evidence of previous firing range activity was seen within the site boundary). Nevertheless, continued battering by the elements and structural weakness saw the bastle placed on the English Heritage Building at Risk Register and prompted the owner to seek professional help.

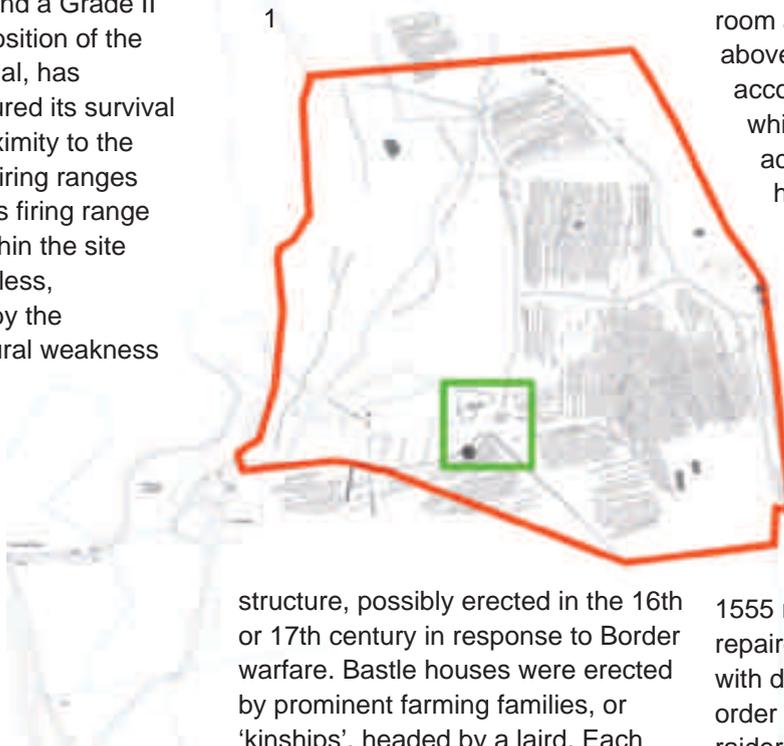
In 2009, a team lead by Countryside Consultants was commissioned to undertake a complex multi-disciplinary Management Plan for the monument, funded by Natural England, designed to halt the progressive deterioration of the monument.

North Pennines Archaeology undertook detailed archaeological surveys of Shittleheugh Bastle and its wider landscape. The landscape features were surveyed using a survey-quality GPS system and standing structures were subject to detailed building recording using a Reflectorless Total Station. All

Shittleheugh Surveying a bastle

elevations were photographed and 'rectified' – ie made flat – in order to produce a permanent pictorial record of the walls prior to consolidation works.

The remains of Shittleheugh Bastle are characteristic of a defensive



structure, possibly erected in the 16th or 17th century in response to Border warfare. Bastle houses were erected by prominent farming families, or 'kinships', headed by a laird. Each kinship was identified by a particular surname strengthened in the system of inheritance known as 'gavelkind' by which a dead man's land was divided equally among all sons. Shittleheugh Bastle has been attributed to the Reed family in the 16th century, and searches of parish registers also show links to the Halls and Andersons. In a 1551 report on the state of the Borders, Sir Robert Bower observed the '*Country of Riddersdale standeth much by surnames, of which surname the Hauls be the greatest and moste of the reputation in that country and*

next to them the Reades, Potts, Hedlies, Dawgs and Fletchers'. Armstrong's Map of Northumberland (1769) shows a representation of a house labelled 'Shittleheugh' with the name 'Mr Reed'.

A typical bastle consisted of a first-floor hall sometimes with a smaller room at one end and garret room above. The ground floor was used for accommodating cattle and horses, whilst the first floor domestic accommodation raised the household above direct attack by assault or battering ram. The thick defensive walls meant that the family and stock were secure against sudden raids. With one or two exceptions surviving examples of bastles are within around 20 miles of the Border; this may be significant as 20 miles from the Border was the distance within which an Act of Parliament in

1555 required castles and forts to be repaired and open ground enclosed with ditches and quick-set hedges in order to impede the movements of raiders. Within areas where bastles are found, they tend to be sited in clusters or within close proximity to another.

Shittleheugh Bastle is constructed of massive masonry blocks, with walls measuring about 1.10m thick. It is rectangular in plan with ventilation slits at ground floor level. The presence of ventilation slits and lack of evidence for fireplaces or windows suggest that the ground floor of the bastle was never intended for humans, and that animals were brought into the building for security during times of border raiding. There was no evidence at the



h: Otterburn e and its landscape

time of survey for any first floor windows which presumably lit the domestic accommodation, or for a first floor although there are the footings for an external staircase against the south elevation; it is possible that there was access between the ground floor and first floor through the timber flooring in the form of a ladder, although no evidence for this survives. A line of projecting corbels against the internal west elevation suggests a fireplace existed in this location and some holes in the internal east elevation may indicate that there was an attic room, or garret, or perhaps a firehood. Above the projecting corbelling are two small cupboards. The doorway to the building opened inwards and showed evidence for two horizontal drawbars used to provide some degree of security for the occupants (Plate 3).

The wider landscape around the bastle is one of open grazing land with large fields in places enclosed by low earth banks and walls. The topographic survey (Plate 6) revealed remains of ridge and furrow cultivation, potential corn-drying kilns, field boundaries, cattle droveways, stone quarries, a shieling and possible stack-stands, all providing evidence of an extensive use of the land over hundreds of years. The field and boundaries suggest how the land was used, with crops located on the east side of the bastle and presumably livestock to the west, suggested by the lack of ridge and furrow on that side.

The land to the north-east marks the start of the upland pasture, where stock would be grazed in the summer months (April to August), moving from the lower valleys to the upper pastures

through a practice known as transhumance. In 1495, the main shieling grounds (a temporary summer shelter for herdsmen) were listed in a valuation of the estate of Sir Robert Tailbois, Lord of Redesdale; they included 7,000 hectares in Redesdale, all located to the north-west of Shittleheugh Bastle. Transhumance continued for centuries up until the 17th century, after which some of the temporary dwellings were abandoned or became permanent settlements. The 17th and 18th centuries saw changes in land tenure in upland areas, with a move from customary tenure to leasehold tenure. This led to the formation of larger farms and the division of common land, first by private agreement then by Enclosure Award.

The remains of a possible shieling and stock enclosure lie north-west of Shittleheugh Bastle. This dry-stone walled building has many of the characteristic features of a shieling, including: a rectangular plan divided internally into two with the smaller room at the west end, a doorway through the south wall, and no evidence for windows (and there may have never been any – light only being provided through small hole close to the eaves). Other features include masonry blocks at the east end which may indicate the location of a fireplace or hearth, and a small room at the west end which may have been a cupboard, or a primitive form of bread oven.

Once the archaeological works were complete, 'light touch' consolidation works were undertaken, entailing minimum interventions such as

retaining the natural soft capping of moorland grasses established in the wall tops to protect the masonry below. The masonry repairs and

pointing were undertaken using hydraulic lime mortar which is sensitive to extreme weather conditions, especially frost, until the carbonization process or setting has completely finished. As the work was being undertaken in the winter months, extensive precautions were undertaken to protect the walls from frost and the bastle walls were wrapped in Hessian blankets after the work was completed. This very visible 'mothballing' of the gables precipitated press articles on the theme of 'all wrapped up for Christmas'!

The bastle was kept wrapped up until spring, and was finally unveiled in April 2010. The consolidation of the bastle led to Countryside Consultants being recently awarded the Constructing Excellence in the North East Small Heritage Project Award 2010.

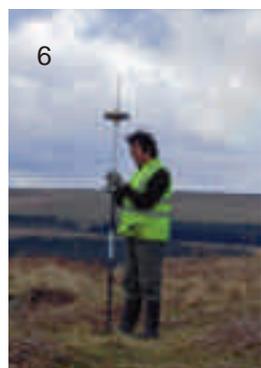
NPA Ltd cordially thanks the landowner, Linden Craven, for all her assistance during the works.

The works could also not have been undertaken without the dedicated enthusiasm and skill of the NPA staff involved, often working in very difficult conditions and this article draws heavily on their results for which I am grateful.

Photographs and illustrations

- 1: Site location showing surrounding features
- 2: Shittleheugh Bastle
- 3: the draw-bar sockets
- 4: ventilation slits
- 5: the shieling
- 6: GPS survey underway
- 7: the eastern droveways
- 8: the bastle after consolidation

Matthew Town
North Pennines Archaeology



1



2



Industrial Building Record Preston Smithy

A photographic and measured survey record was carried out at Preston Smithy, near Ellingham (NU 186 258) in November 2010 in advance of the proposed redevelopment of part of the building.

A range of outbuildings contains a smithy at its south end. The forge itself, the most significant part of the structure, is set against the centre of the south end wall, has brick side walls, a cracked stone hearth 0.73 m above the floor (resting on a course of fire bricks), and a massive tooled-and-margined lintel 2.26 m by 0.48 m, 0.88 m above, carrying a tapering brick hood which steps back, course by course, to the chimney which caps the gable. The front face of the hood

has partly collapsed. In both the side and rear walls of the forge are small rectangular openings, now infilled; that on the east was presumably associated with the bellows, to accommodate which the brick inner skin of the east wall has been roughly cut back

This is a simple village forge of later 19th-century date, of a type often found on large planned farms although here accompanied only by the smith's cottage. The use of snecked stone – usually a late Victorian feature, perhaps points to a date in the 1880s or 1890s. The building remains relatively unaltered (except perhaps for the insertion of one window on the east) but has lost

its internal fittings except for the forge itself.

The forge is an attractive feature, although its hood is currently in parlous condition, occasioned by movement of the southern gable end, and ranks as one of the better preserved examples of a diminishing number of such structures in Northumberland.

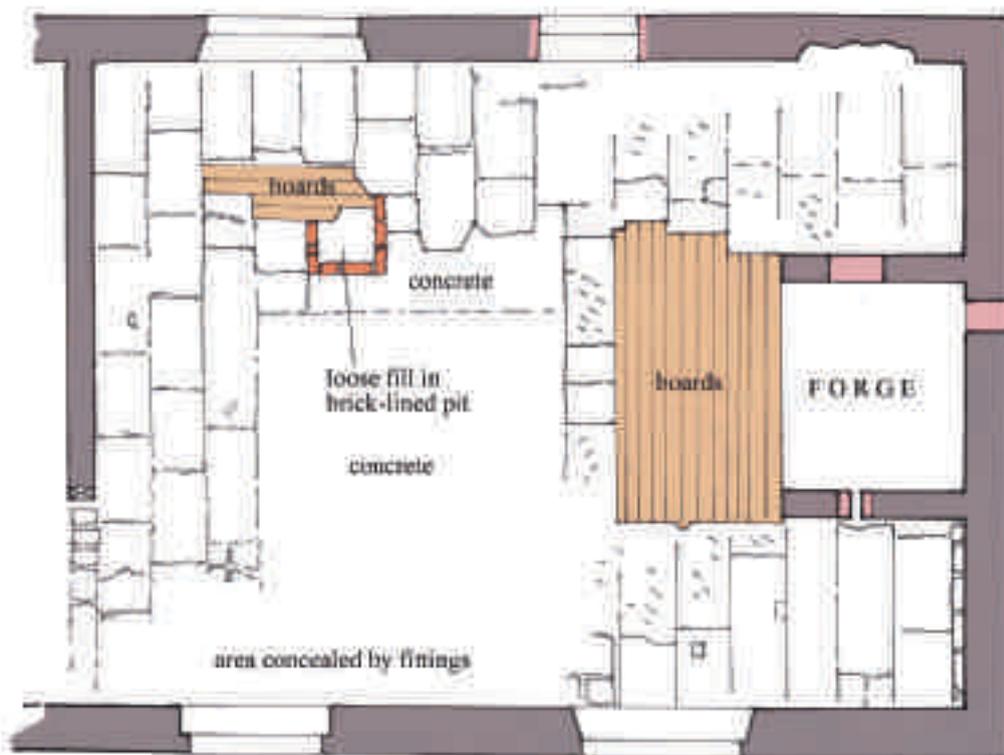
Photographs and Illustrations

1. The west elevation of the smithy
2. The smithy interior
3. Plan of the smithy

**Richard Carlton
and Peter Ryder**

The Archaeological Practice Ltd

3



2 metres

Community Heritage Management Holy Island Partnership

The Holy Island of Lindisfarne, to give it its full title, is, according to many, the jewel in the crown of the beautiful Northumberland coast, indeed a very special place. This is not a cliché. In terms of a combination of nationally important natural and cultural features there are few equals, anywhere. As a result Holy Island has become a victim of unrelenting tourism promotion and interest with visitor saturation point being reached on most summer days. As expected a range of organisations have interests on the Island, but in the past that interest has only extended as far as the boundary of their resource e.g. a building, site or reserve. Very little real thought of the bigger 'Island' picture, including erosion of the island environment, village infrastructure or indeed the impact on the way of life of the 'Islanders', has been given. Whilst some Island enterprises have prospered from the increasing numbers of visitors there can be no argument about the declining quality of life for the 'Islanders' and crucially, the devaluing of the very thing most visitors come for and that is Holy Island and all its treasures.

What was to be done? In 2009 things came to a head over the long running

bone of contention, the management of visitor traffic, became impossible. Holy Island Parish Council recognised that help was needed and asked the Northumberland Coast AONB Partnership to help find a solution. To that end an AONB staff member was seconded to work on Holy Island for an initial two days per week. The first task for the AONB officer was to bring together representatives of all the organisations working on Holy Island with members of the community through Holy Island Parish Council and Holy Island Development Trust, unbelievably this had not happened before. After establishing regular meetings, in 2010, this group formed the Holy Island Partnership (HIP) with a guiding credo of a sustainable future for Holy Island through co-ordinated management. To achieve this ambitious aim the HIP produced an Action Plan, which contained the key guiding principles and delivery plan. All representatives have pledged their support. A clear sign of constructive joint working was in early 2011 with the production by the HIP of the first integrated leaflet highlighting all of the special features on the Island.

To fully implement the principles and tasks of the Action Plan it was recognised, at an early stage, that finance was needed to help restore and interpret some of the natural and cultural wonders of Holy Island and very importantly to enable Islanders to have a major input into conserving the fabric and history of Holy Island. The Heritage Lottery Fund (HLF) 'Landscape Partnership' was seen to fit the bill. So through the later part of 2010 and early 2011 a comprehensive series of consultation sessions and working groups were held to formulate a bid, by the name of *Peregrini Lindisfarne*, into the HLF Landscape Partnership fund for a total of £2.8m. A project board was created to oversee the drawing together of the 'first stage' application, which was submitted at the end of February 2011 under the aegis of the Holy Island Development Trust. A decision on this 'first stage' application is due late July 2011. In the meantime the HIP carries on with its good works under the guidance of a team of committed people who believe in the wellbeing of Holy Island for everyone.

Tom Cadwallender
Formerly of the
Northumberland Coast AONB



Northumberland National Park



Heritage at Risk

9th Ce

Northumberland National Park Authority, in partnership with English Heritage and the Institute for Archaeologists, has secured funding to undertake an exciting new project. The Heritage at Risk Project is based on the concept that heritage, in its broadest sense, is a finite resource that once lost is gone forever. The project has been developed in conjunction with English Heritage, who are responsible for publishing the Heritage at Risk Register, and will require close co-operation between both organisations.

Northumberland National Park has a rich archaeological heritage, with 424 Scheduled Monuments and over 4,000 recorded sites of historic interest within an area little more than 1,000km². Some 55% of the Park's scheduled monuments are currently identified as being at high or medium risk.

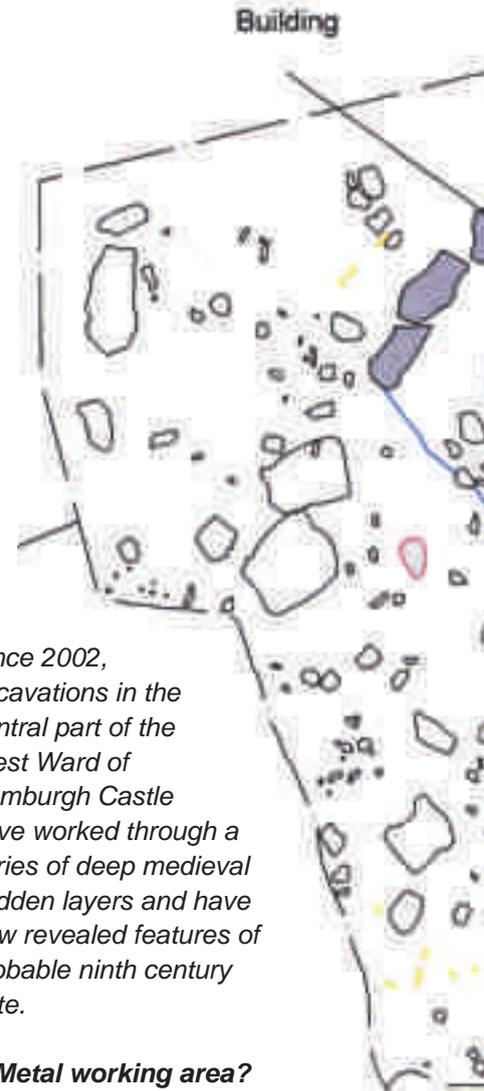
A Heritage at Risk Officer has been appointed in order to begin the task of surveying the Park's heritage assets. Natalie Ward has been appointed on a 12 month, full-time secondment from the Institute for Archaeologists as part of the HLF funded Workplace Learning Bursaries scheme, with

matched funding from English Heritage and the National Park Authority. The project will focus on filling crucial gaps in our knowledge to gain a better understanding of the current state and condition of the Park's Scheduled Ancient Monuments.

Through the involvement of the National Park's Voluntary Rangers and National Park Volunteers the project aims to produce an accurate condition assessment for the monuments at risk, to enable priority sites to be identified and conservation actions developed in order to reduce the number of SAMs within the Park that are registered as 'at risk'. This project will promote best practice and build the capacity of Voluntary Rangers, National Park volunteers and volunteers drawn from the local community to become actively involved in the unique archaeological landscape of the National Park.

The National Park welcomes enquiries from local people who might like to take part in the project.

For more information please contact natalie.ward@nnpa.org.uk



Since 2002, excavations in the central part of the West Ward of Bamburgh Castle have worked through a series of deep medieval midden layers and have now revealed features of probable ninth century date.

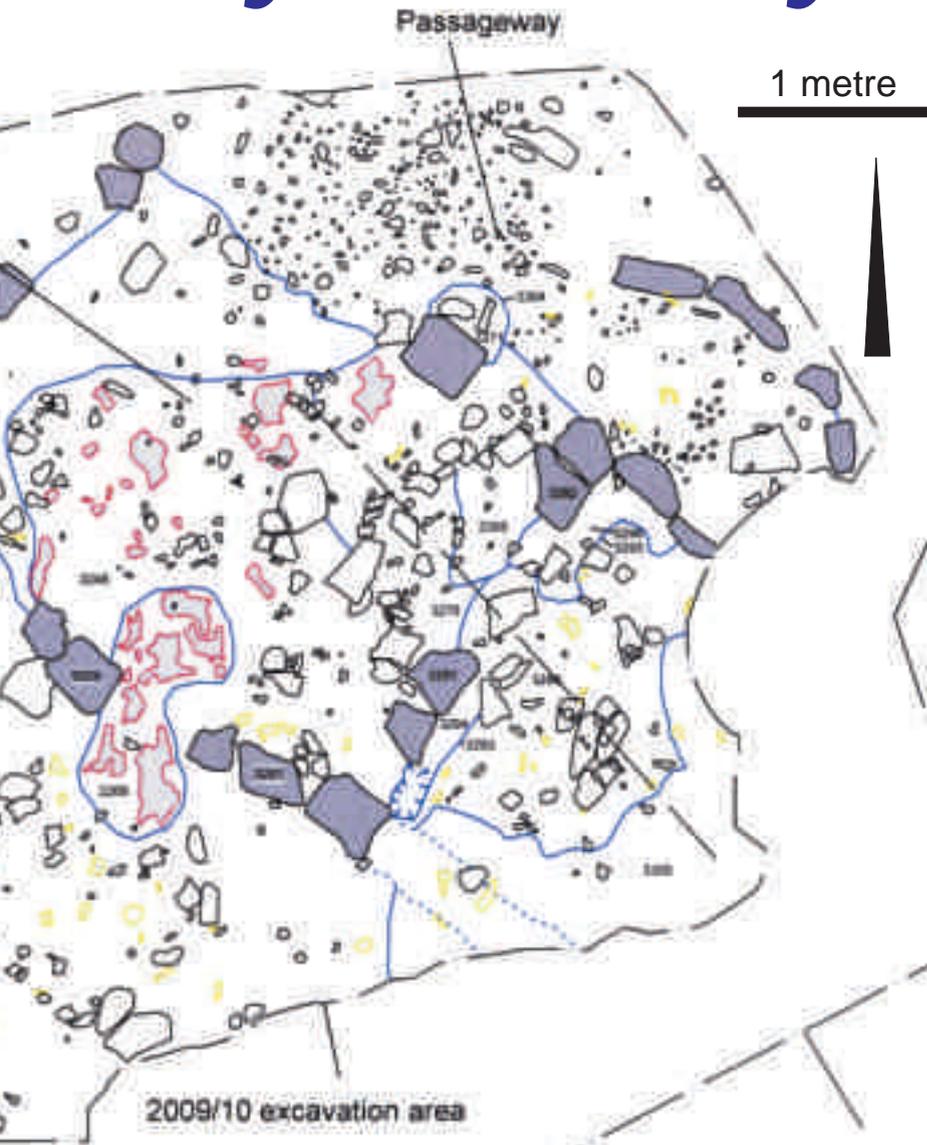
A Metal working area?

The layers currently under excavation are made up of a series of interleaving lenses of ash and silt with a substantial charcoal content. Although no pottery has been found, there are frequent animal bone fragments together with a noticeably greater concentration of metal finds than seen elsewhere in the trench. The finds include copper alloy, iron, and even two rare (and small) finds of decorated gold, adding to the styca coin hoard reported last year. This collection of metalwork has been stylistically dated to the ninth century AD and its variety and quantity has led to the speculation that this part of the trench was used for a metalworking process, perhaps recycling.

As well as the finds, the remains of a possible building have been discovered. Fragments of small- to



Bamburgh Castle 9th Century Industry



medium-sized sandstone appear to form intermittent lines that define the outline of a structure. It measures about 2.6m by over 4m with an apparent internal partition dividing it; if each half was equal in size this would mean a structure about 6m long. Areas of burnt material were also revealed in the trench and most were contained within the structure. The distribution of ash has helped to reveal an entrance, defined by the 'spilling out' of burnt material through a gap in the stone alignment that formed the south-west wall. Two possible opposing entrances and an internal doorway through the partition wall may be identifiable, although it is possible that some gaps in the wall lines could represent merely an absence of surviving evidence for a more continuous wall. Immediately north-

west of this structure, a linear spread of pebbles set in layer of silt has been interpreted as a path. The path extends to the central part of the trench beyond which it could not be traced due to the presence of numerous pits.

Since we now have a possible building associated with numerous metal finds and burnt material it seems reasonable to suspect that we are dealing with a metal working area. As a result of this small sub-samples of soil have been taken from each 20cm by 20cm grid in the planning square as the site is planned. So far six samples have been processed and they have identified both hammer scale (the flakes and detritus produced by blacksmithing) and small spheres

(indicative of high temperature forging or fire-welding). Although the evidence is very limited it is an encouraging basis on which further sampling and analysis can build.

The significance of an early medieval building

If the present interpretation is correct then a somewhat ephemeral timber structure is present within the southern part of the excavation area, associated with a variety of metal finds, together with layers of ash and burnt material. The absence of deep structural cuts would indicate a sill beam or ground surface construction technique for the structure. The presence of gaps within the lines of the traced walls may be indicative of a building that contained gapped, semi-open, sides, which could be functionally associated with an industrial, metal working, function, where control of light and the movement of air would be advantageous.

The presence of an area of metalworking activity within the West Ward of the fortress is not surprising. The West Ward represents the lower lying part of the defended area of the fortress and is therefore a suitable place for a culturally important but generally noxious and dirty activity, lying as it does within the controlled and defended perimeter, but just far enough from the focus of royal power – within the Inner Ward at the summit of the hill, to avoid too much direct exposure. Evidence for industrial processes and their associated structures is of particular interest in advancing our understanding of how high status sites in the early medieval period were organised spatially, in addition to informing our appreciation of how production of goods for the consumption of the ruling class fits into early medieval society. Further excavation in coming seasons, together with the analysis of the material recovered so far, will greatly add to our understanding of this outstanding site.

Graeme Young
Bamburgh Research Project

Latest developments at the National Trust Seaton Delaval

It is one of the North East's architectural masterpieces and thanks to a tremendous fundraising effort Seaton Delaval Hall was saved for the public to enjoy forever in December 2009, with the doors opening to the public in May 2010. Since then work to improve access to the hall and on-site facilities has entailed works which have revealed more about the history of the house and its grounds. Alongside this, work on cataloguing the contents of the house has produced further valuable evidence in the form of pictures and plans.

A "missing" element at Seaton Delaval re-discovered

A large heap of stone and soil which lay on the approach to the walled garden has been removed to enable access to a new car park. Discovered amongst the heap was stonework from the original monumental entrance to the estate – Vanbrugh's massive gate piers, which marked the start of the West Avenue and the processional approach to the house for 18th century visitors. Old photographs show clearly how elaborate, sophisticated and large the pillars were. They are essentially full renaissance aedicules with sculpture niche between attached columns on the west (public face) and pilasters on the east (park) face, and pedimented cornices. They even had surmounting plinth blocks – possibly to support armorial crests. The wing walls to either side of "The Pillars" at Avenue Head were modified in the early 20th century to provide safe pedestrian access to either side of the roadway and the pillars themselves were finally removed in 1938. Only the stubs of the wing walls remain in situ today. The

stonework will be stored at Seaton Delaval and an interesting exercise of spot which piece fits where on the old photographs awaits us.

Archaeological recording during new access and car park works

Initial evaluation trenching was undertaken within the walled garden to investigate the impact of modern land use of the site (used as a market garden in the 20th century) and to confirm the original extent of the central pool and to establish the degree of survival of path surfaces. This was followed by a watching brief during key stages of the ground disturbance by TWM Archaeology. This work revealed path surfaces which tally with mapped features within the pleasure ground so we have had chance to learn a little more about their nature and extent. The new access route narrowly missed the footprint of the now demolished east wing of the house but the proximity of the building was confirmed by a spread of demolition material.

The discovery of a linear spread of rounded stones across one trench (and which continued as a visible earthwork) produced pottery thought on initial inspection to be late medieval in date. This is particularly useful as it tends to confirm Stewart Ainsworth's conclusions that the site preserves earthworks which may represent an earlier landscape (see below).

Assessment of the pleasure grounds

An assessment of the eastern side of the pleasure grounds was carried out to help plan a proposed new path

from the walled garden to the house at Seaton Delaval. The view eastwards from the (now demolished) east wing is described in the 1770s... *Here are several walks disposed with great taste, some of which are shaded as well by lofty old trees as plantations, through which various vistas are cut, some of them being terminated by elegant stone buildings, and others opening delightful prospects to the sea towards the east, greatly heightened by ships which are frequently sailing in sight of the windows* (Hutchinson 1777, A View of Northumberland p.332).

Although there are some 18th century writings and views of the house, an 1808 estate plan is the earliest available depiction of the layout of the 18th century pleasure grounds.

The plan shows a formal terrace to the east of the east wing, which has developed into a broad sweep (of gravel?) named the Stable Yards. This, together with the Coach House and the Brew House are effectively screened by a deep belt of deciduous trees, which would also help to provide shelter from the north-easterlies! A walk is shown tucked into the plantings heading for the north-east bastion and the little door leading out of the pleasure ground and into the walled gardens.

Another estate plan of 1818 shows much the same arrangement on the eastern side of the pleasure grounds but makes a distinction in the plantings between the larger trees framing the eastwards vista and a more detailed planting – presumably a



Trust's newest Northumberland property Seaton Delaval Hall

shrubbery, either a feature which was developed between 1808 and 1818, or was shown by more representative plan drawing.

The First Edition Ordnance Survey plan is the first really accurate larger scale map of the pleasure ground and reflects the shift of emphasis in the pleasure ground from east to west following the 1822 fire which effectively destroyed the east wing and rendered the central block roofless and uninhabited. Detailed gardening is now developed in the fenced area on the western side of the main vista, adjacent to the still inhabited west wing.

The Second Edition Ordnance Survey plan reflects the increasingly moth-eaten appearance of the original pleasure ground plantings – trees now perhaps approaching 170 years old and giving the appearance of an open woodland rather than a tightly controlled 18th century “Wilderness”.

Partnership working with English Heritage

The English Heritage archaeological survey team at York is supporting the development of a survey brief for Seaton Delaval. A visit by Stewart Ainsworth in 2010 has confirmed the good survival of earthworks in and around the pleasure grounds together with a strong indication of clustering which suggests remains of an extensive medieval settlement are focused on the early church and supposed castle site. A similar investigative approach is being taken with the fabric of the buildings on the site with the help of Adam Menuge.

The Brewhouse

The estate brewhouse is named on the 1808 estate plan but does not fit easily with the layout of the pleasure ground and the other early 18th century buildings and it is possible that it may pre-date the present house. Its utilitarian purpose has been masked by the addition of an ornamental brick façade and it has been much altered over the years. In the mid 20th century it served as the estate joiner's shop and the large opening in the north wall was added to improve access, and it was later restored by the late Lord Hastings to house a collection of wheeled vehicles. Several timbers from the old roof have been retained in the present roof structure.

Clues to its original purpose can be seen in the surviving raised plinth which stands above the general floor level at the south end of the building and which probably formed the base for a boiler. The substantial brick chimney stack which took the smoke from the boiler fire away remains against the outside of the south wall. The general layout of the components of an estate brewhouse can be seen at Traquair, near Innerleithen, and a visit there towards the end of 2010 made a lot more sense of what remains at Seaton Delaval.

The brewing of large quantities of beer was an essential part of the estate economy as beer was the drink of choice when the quality of water supplies was uncertain. It is no accident that half the cellar provision of the house was devoted to beer!

The brewhouse was perhaps sited away from the house and to the east so that the smell of fermentation was

carried away by the prevailing south-westerly wind. Beer was brewed between October and March because it was not possible to cool the fermentations in the summer months.

Hot off the press!

Investigation at roof level on the west wing revealed a tantalising boarded up doorway to the small turret behind the pediment. A picture taken through a crack in the boards revealed some surviving mechanism of a clock. Further investigation for structural purposes later in the year required access to the space and the boards were removed. The clock mechanism looked early and interesting so Keith Scobie-Youngs was invited to take a look in more detail and give advice on conservation. He was full of enthusiasm about the clock which appears to be of the right period for the initial fitting out of the house and has clearly been out of commission for a long time and appears to have little wear suggesting a limited working life. His report is awaited with interest!

Photographs

1. *Brewhouse external chimney stack*
2. *Stone boundary feature found on the line of the proposed new path*
3. *Work to clean and record the stone heap, the remains of the avenue gate piers*
4. *Topsoil stripping in the walled garden*
5. *Archaeological work reveals the line of a path with the walled garden*
6. *The turret clock mechanism*

Harry Beamish
The National Trust



4



5



6

Northumberland Coast AONB World War 2 Inventory

In 2009 the Northumberland Coast AONB commissioned ARS Ltd to carry out a rapid assessment of the remains of Second World War structures in the AONB. The field work for the study was carried out in January 2010 and the report delivered in early February 2010.

The main objective of the study of the World War 2 remains in their area was to record, survey and photograph remains of any type that are associated with the military fortification of the coast between 1939 and 1945. The study examined all 138 sq km of the AONB and gathered 141 records including all types of remains from static beach defences to defensive structures.

Pillboxes

Thirty-seven pillboxes were recorded during the 2010 study, these structures are the most prominent and well-recognised World War 2 structures on the coast. This group includes a wide range of structures that performed a variety of differing functions.

While the perceived wisdom is that many of the pillboxes in the coastal area are of the 'lozenge' type this study has demonstrated a broad range of forms and types constructed both of cast concrete, shuttered either with wood or corrugated iron, or constructed of sand bags filled with concrete, stacked, soaked and cast in place.

Pillboxes in the AONB are generally well preserved and are located both at tactical locations along the shore, at points where access to and from the shore might be

possible and at other important locations such as road junctions, railway crossings and other strategically important locations.

What is also evident from the AONB study is the wide range of forms these structures take. While the UK's wartime government issued detailed plans for a range of pillboxes to perform a variety of tasks, these were often modified locally, either by the military engineers planning their construction or by the contractors building them. In the AONB there are thirty-seven pillboxes all of differing construction and size.

Defensive Fieldworks

At the time of their construction pillboxes and static beach obstacles (see below) formed an integrated scheme of defence. These manned and unmanned structures were glued together with defensive fieldworks that took the form of trenches, foxholes and weapons pits. Such works might be described as earthworks and as such have not survived well over the 60 years since the the end of the war as they are generally easy to fill up or plough out. The AONB study has revealed however that the survival of these structures is more widespread than previously thought in marginal areas, such as dune land or on the edge of field margins, but in inland areas they have largely disappeared. The report raises the threat to these features from continued agricultural improvement and coastal erosion.

Concentrations of these features have been found to survive in the areas

around Dunstanburgh Castle, on the shore at Boulmer and as single instances in Scremerston, Goswick, Beal, Budle and Alnmouth.

Static Defences

Originally, static defences would have been deployed all along the Northumberland Coast. These would have taken the form of obstacles constructed of scaffolding, wood and concrete that were designed to slow and stop the progress of any invasion force landing on the Northumberland shore.

Today the concrete elements are almost exclusively the one feature to survive (although scaffolding obstacles have previously been recorded at Alnmouth). These defensive blocks (generally 1m or 4ft cubes of concrete) were designed to stop the progress of enemy vehicles and are a common sight along the coast. The nature of erosion and movement of sand means that they can appear and disappear almost overnight but there are several locations where they can be regularly seen including at Alnmouth, Dunstanburgh and Bamburgh. The best surviving set are at Goswick however, in the dunes in front of Goswick Golf Club.

The full report is available to be read at the Northumberland Conservation HER or on the AONB Website.

**Summary of the
ARS Ltd report by CB**

Photos - remains of a concrete sandbag pillbox at the north end of Goswick Sands



Dueshill Farm: Coquetdale

Unusual Hollow Ways

In May of 2010 I was taken to see some unusual hollow ways at the far western edge of the Dues Hill Farm estate, around 12 miles to the west of Rothbury near Holystone in the Coquet Valley. Initially presenting themselves as a very impressive set of 'hollow ways' (photo 1) typical of the drove roads seen on the slopes and crests of hills throughout the area including just to the south of this site (photo 2), it soon became clear that these features were something more.

Some of the hollow ways certainly were just that, reaching an average depth of around 2 metres and with the expected U-shaped profile, however the majority in this area were deeper, some as much as 3 metres deep and with considerably more vertical sides which seemed in places to have been

carved through the local bedrock (photo 3).

Scouting around, my local guide (Ian Glendinning) pointed us to a beautifully carved, but broken stone trough (photo 4). We soon found the remains of several others which perhaps point to the true origin of these features not only as routes of transport but as quarries presumably of late medieval or post-medieval date.

The site is another example of the breadth and depth of the un-recorded archaeology in Northumberland and will provide an interesting survey project for one of the County's growing number of volunteer groups in the future.

CB



1



2



3



4

Slymfoot: Alwinton

A Mill on the Coquet

The remains of buildings, livestock enclosures and rig and furrow are all evidence that the Cheviot uplands were once much busier than they are today. In the summer of 2010, members of Coquetdale Community Archaeology took advantage of a quiet day on the ranges to start surveying what may be the remains of a long house on the south bank of the Coquet at Windyhaugh, about 10 kilometres upstream from Alwinton.

A real bonus was that we located what may be the remains of a medieval fulling mill about 200 metres downstream from where we were working. The presence of this mill has been suspected for some time; an entry in the Newminster chartulary dating to 1226 contains a licence for a millpond, while David Dippie Dixon claimed that in the 19th century “the foundations of an ancient building were discernible when the water was low and clear”. But its actual position has been lost for 100 years.

Fulling was a key part of cloth production, both removing oil and consolidating the fibres.

*Clooth that cometh fro the wevyng is
noght comly to were. Til it be fulled
under foot or in fullyng stokes*

Piers Plowman – William Langland.

Remains were found at two sites lying about 60m apart. Downstream are

substantial well-worked masonry blocks in the bank, together with some restraining timbers. Next to these, in the river, are two horizontal timbers and a post driven into the riverbed; one of these timbers contains the remains of a large mortice. Photographs were sent to Damian Goodburn, a timber specialist at the Museum of London, whose view is that this is typical of the early high medieval period, with the two holes at the end being the overcuts of a spoon auger used to cut the end grain of such a joint so that the rest of the timber can be chopped out with a twybill.

The upstream site is simpler, but equally interesting. There are two posts in the bank and a much larger timber construction on the riverbed. This consists of at least five large beams with a cross-member that also has the remains of mortice and tenon joints. Preliminary investigation has shown this to be a substantial piece of work, perhaps weighing a few hundred kilograms. We have conducted extensive photography of the site, both above and below water and, with the help of Richard Carlton, have used a total station to conduct a site survey.

It seems possible that the downstream site represents the remains of a small mill built out over the river, perhaps with a horizontal

wheel. The upstream site may be some form of water control system, with the large timber artefact on the riverbed being a sluice gate or section of a dam. Our search for a millpond has been unsuccessful but, given the gradient of the river and the rocky banks, it would make sense to create a head of water by damming the river itself. Indeed, there are deep pools just above the upstream site.

Grants from the Council for British Archaeology and the Society of Antiquaries of Newcastle upon Tyne have helped us get radiocarbon dates for the timbers. There is good correlation with the documentary evidence from Newminster Abbey and when combined with other data, such as the earliest date for fulling mills in this country, it looks as if the downstream site originated between AD1175 and AD1225. The upstream site – the possible dam or sluice – is probably a bit later at between AD1226 and AD1270.

English Heritage and the Heritage Lottery Fund have been very generous in funding two seasons of excavation. These have taken place mostly in the river bank so far but, depending on the water level and temperature, it may be possible to explore the river itself – one of our members has offered his services (with a wet suit) to explore the pools upstream. Watch this space.

David Jones
Coquetdale Community Archaeology



Assessing the past

The following list contains details of archaeological assessments, evaluations and other work carried out in Northumberland in 2010-11. They mostly result from requests made by the County Archaeologist for further research to be carried out ahead of planning applications being determined. Copies of these reports are available for consultation in the Archaeology Section at County Hall.

Akeld

Lanton Quarry: report on an archaeological excavation. Archaeological Research Services for Tarmac Northern Ltd (event 14496)

Alnwick

Installation of an Electricity Cable at Hotspur Street and Bondgate Without. Bamburgh Research Project for Power On Connections (event 14543)

Ancroft

Excavation of Bird Scrapes, Beal: report of archaeological monitoring and recording. Bamburgh Research Project for the Environment Agency (event 14580)

Ashington

Archaeological watching brief at the Ashington Mine Pipeline Diversion. Archaeological Research Services for United Utilities (event 14686)

Bamburgh

Mizen Head: archaeological watching brief. The Archaeological Practice for Country and Coastal Homes Group (event 14546)

Land adjacent to Mizen Head Hotel: archaeological strip and record watching brief. The Archaeological Practice for Country Homes and Estates (event 14578)

Bavington

Kirkharle Wind Farm: archaeological evaluation. Archaeological Services Durham University for Arcus Renewable Energy Consulting (event 14665)

Beadnell

The Haven, Beadnell: archaeological desk based assessment. TWM Archaeology for idpartnership northern (event 14509)

Watching brief at Beadnell Campsite. Archaeological Research Services for Lindisfarne Leisure Ltd (event 14676)

Bellingham

Redesmouth Farm, Redesmouth: watching brief report. Northern Archaeological Associates for Mr Scott (event 14538)

Demesne Farm, Bellingham: archaeological monitoring. Northern Archaeological Associates for Mr and Mrs Telfer (event 14539)

Berwick-upon-Tweed

Archaeological evaluation at the 'Steps of Grace' site, Berwick-upon-Tweed. Bamburgh Research Project for Community Renewable Energy Ltd (event 14474)

Spittal Point, Spittal, Berwick-upon-Tweed: archaeological desk-based assessment. TWM Archaeology for Box 22 Ltd (event 14478)

The Former Blackburn and Price Site, Silver Street, Berwick-upon-Tweed: historic building report. CgMs Consulting for Lindisfarne Homes Ltd (event 14487)

Land at Spittal Point: archaeological evaluation. North Pennines Archaeology for Royal Carleton Estates (event 14579)

Pier Road Maltings: archaeological watching brief. North Pennines Archaeology for C and V Developments Ltd/Box 22 (event 14632)

John Dewar's Granary Development, Berwick-upon-Tweed: report of archaeological monitoring and recording. Bamburgh Research Project for Berwick-upon-Tweed Conservation Trust (event 14641)

76 Ravensdowne Road: archaeological test-pit evaluation. CFA Archaeology for Northern Southern Ltd (event 14682)

Railway Street: watching brief. TWM Archaeology for Northumbrian Water (event 14689)

Berwick Infirmary: historic environment desk-based appraisal. Northern Archaeological Associates for DTZ on behalf of Northumbria Healthcare NHS Foundation Trust (event 14692)

Birtley

Green Rigg Wind Farm: archaeological watching brief. Archaeological Services Durham University for Wind Prospect Developments Ltd (event 14650)

Blyth

Plessey System: archaeological watching brief: Area 2. TWM Archaeology for Northumbrian Water (event 14564)

Historic Environment Desk-Based Assessment: South West Newsham. Northern Archaeological Associates for Nathaniel Lichfield and Partners (event 14668)

Cheviotside

An Archaeological Survey of Threestoneburn Forest. Archaeological Research Services for Scottish Woodlands (event 14693)

Corbridge

7 Trinity Terrace, Corbridge: archaeological watching brief. The Archaeological Practice for Mr Farrar (event 14528)

2 Princes Street, Corbridge: archaeological monitoring. Archaeological Services Durham University for County Life Corbridge Ltd (event 14532)

39 Roman Way: archaeological watching brief. The Archaeological Practice for Mr and Mrs Norton (event 14536)

Corbridge (continued)

Watching brief on Corbridge Bridge. Pre-Construct Archaeology for Northumberland County Council (event 14541)

Cow Lane, Corbridge: archaeological watching brief. The Archaeological Practice Ltd for Mr Ashworth (event 14577)

Princes Street, Corbridge: archaeological monitoring. Archaeological Services Durham University for CE Electric UK (event 14621)

Watching brief on Stagshaw roundabout (B6318/A68 junction) signing improvements. Pre-Construct Archaeology for Northumberland County Council (event 14647)

Trinity Court, Roman Way: archaeological watching brief. The Archaeological Practice for Isos Developments Ltd (event 14670)

Cramlington

Windmill Industrial Estate: watching brief report. North Pennines Archaeology for Sinclair Knight Merz (Europe) Ltd (event 14473)

Damdykes Farm House and Farm Buildings: historic building recording. The Archaeological Practice for Moy Build (event 14597)

Northumbria ECC, East Cramlington: archaeological desk based assessment. SLR Consulting for Balfour Beatty (event 14633)

Craster

Dunstanburgh Castle: archaeological monitoring. Archaeological Services Durham University for English Heritage, 2009 (event 14501)

East Bedlington

Land adjacent to Vald Birn Factory, Cambois: geophysical survey. Archaeological Services Durham University for Banks Property Ltd (event 14533)

North Blyth Renewable Energy Project: archaeological desk-based

assessment. TWM Archaeology for W A Fairhurst & Partners (event 14567)

Land adjacent to Vald Birn Factory, Cambois: archaeological evaluation stage 2. Archaeological Services Durham University for Banks Property Ltd (event 14699)

Ellington and Linton

Ferneybeds proposed opencast site, Widdrington Station: desk based assessment. TWM Archaeology for Banks Developments (event 14681)

Ford

Ford Moss Colliery, Ford Village: archaeological desk-based assessment and topographic survey. Pre-Construct Archaeology for Ford & Etal Estates (events 14598 and 14599)

Greenhead

Greenhead Cycleway, Carvoran: archaeological watching brief during drainage works. Alan Williams Archaeology for Northumberland County Council (event 14589)

Archaeological watching brief on land at Carvoran, Greenhead. The Vindolanda Trust (event 14638)

Harbottle

Priory Farm, Holystone: historic building recording. The Archaeological Practice Ltd for Mr and Mrs Waddington, 2009 (event 14500)

Hartburn

St Andrew's Church: archaeological watching brief. The Archaeological Practice for NEDL (event 14544)

Hartleyburn

Ash Cleugh Farmhouse: historical and archaeological assessment / archaeological watching brief 2009/2010. Peter Ryder (event 14497)

Haydon

Langley Castle: archaeological watching brief. North Pennines Archaeology for Langley Castle

Hotel (event 14683)

Hebron

Morpeth Northern Bypass: geophysical survey. Archaeological Services Durham University on behalf of AECOM for Northumberland County Council (event 14513)

Hebron: archaeological watching brief. TWM Archaeology for Northumbrian Water (event 14542)

Northgate Hospital: archaeological evaluation. Northern Archaeological Associates for Mott MacDonald (event 14687)

Northgate Hospital: geophysical survey. GSB Prospection for Northern Archaeological Associates (event 14688)

Heddon-on-the-Wall

Stables, Close House: building recording. Archaeological Services Durham University on behalf of _space for Close House Hotel (event 14507)

Rudchester Manor and Barn: archaeological watching brief. AOC Archaeology Group for Lancaster Associates Architects (event 14547)

Stable Cottage, Rudchester: archaeological watching brief. AOC Archaeology for Lancaster Associates Architects (event 14548)

YG Blyth – Stella West OHL: archaeology report - tower YG74. Ian Farmer Associates for Eastern Electricity Alliance (event 14658)

4ZY Stella West – Eccles OHL: archaeology report - tower 4ZY454. Ian Farmer Associates for Eastern Electricity Alliance (event 14659)

4ZY Stella West – Eccles OHL: archaeology report - towers 4ZY460 and 4ZY461. Ian Farmer Associates for Eastern Electricity Alliance (event 14661)

4ZY Stella West – Eccles OHL: archaeology report - tower 4ZY458. Ian Farmer Associates for Eastern Electricity Alliance (event 14662)

Heddon-on-the-Wall (continued)

Rudchester Farm and Roman Fort: archaeological assessment and historic buildings survey. Mouchel for Northumberland County Council (event 14690 and 14691)

Henshaw

Eastbanks Bothy, Gallowshieldrigg: watching brief. The Archaeological Practice for Mr Mitchell (event 14552)

Holy Island

The Rocket Field: heritage statement of significance. Archaeological Services Durham University for Natural England (event 14573)

St Mary's Church: archaeological evaluation and watching brief. The Archaeological Practice for St Mary's Parochial Church Council (event 14604-5)

Horsley

Land at Northside Farm, Harlow Hill. The Archaeological Practice for Mr Lockey (event 14620)

Welton Farm, near Harlow Hill: building recording. North Pennines Archaeology for Tims Morris Ltd (event 14643)

Humshaugh

Walwick Hall: archaeological monitoring during installation of NEDL cables and associated works. Alan Williams Archaeology for G Wylie (event 14570)

Knaresdale with Kirkhaugh

Whitlow Bastle (Whitlow III), Castle Nook: archaeological watching brief during developments. Alan Williams Archaeology for Mr and Mrs Edgar (event 14571)

Kyloe

East Kyloe Tower: archaeological recording report. AOC Archaeology Group for Natural England (event 14514)

Longframlington

Laundry building at Embleton Hall Hotel: archaeological recording. Archaeological Services Durham University for Mr and Mrs Lacroix (event 14506)

Construction of domestic dwellings at West House, Longframlington: archaeological monitoring and recording. Bamburgh Research Project for W B G Fletcher (event 14640)

Meldon

Todd Hill Wind Farm, Morpeth: archaeological evaluation. Archaeological Services Durham University for Arcus Renewable Energy Consulting Ltd (event 14498)

Milfield

Milfield Threefolds North excavations: interim statement. R Miket and B Johnson (event 14596)

Newbiggin by the Sea

Land near St Bartholomew's Church, Church Point. North Pennines Archaeology for Newbiggin-by-the-Sea Heritage Partnership Ltd (event 14619)

Newbrough and Fourstones

Carrow Stables, Carraw: archaeological watching brief. Alan Williams Archaeology for JSA Dodds & Son (event 14588)

Newton-on-the-Moor and Swarland

Newton Greens Farmhouse: archaeological watching brief. P Ryder (event 14499)

Hartlaw Cottages: tree-ring analysis of timbers. English Heritage (event 14554)

North Sunderland and Seahouses

Seafeld Caravan Park, Seahouses: archaeological desk based assessment. Archaeo-Environment for Anthony Walker and Partners (event 14553)

Archaeological Building Recording of Thorburn's Yard, South Street, Seahouses. Archaeological Research Services for Hush Homes Ltd (event 14639)

Nunykirk

Wingates Moor Wind Farm: geophysical survey. Archaeological Services WYAS for WYG Environment Planning Transport Ltd (event 14669)

Wingates Moor Farm Wind Farm: archaeology and cultural heritage desk based assessment. WYG Environment for British Telecommunication Plc (event 14678)

Ponteland

YG Blyth – Stella West OHL: archaeology report - tower YG48. Ian Farmer Associates for Eastern Electricity Alliance (event 14656)

YG Blyth – Stella West OHL: archaeology report - tower YG66. Ian Farmer Associates for Eastern Electricity Alliance (event 14657)

4ZY Stella West – Eccles OHL: archaeology report - tower 4ZY431. Ian Farmer Associates for Eastern Electricity Alliance (event 14660)

Prudhoe

Former West Lodge, Prudhoe Hall: archaeological watching brief. TWM Archaeology for Northumberland, Tyne and Wear NHS Trust (event 14581)

Rochester and Byrness

High Rochester Roman Fort: archaeological evaluation. The Archaeological Practice for Messrs Corbett & Co (event 14671)

Rothley with Hollinghill

Fallowlees, Ewesley: watching brief. Northern Archaeological Associates for The National Trust (event 14667)

Seaton Valley

Land at Seghill Caravan Park, Seghill: archaeological evaluation. North Pennines Archaeology for Mr M Burke (event 14642)

Shotley Low Quarter

Boundary Lane Wind Farm, near Whittonstall: geophysical survey. Archaeological Services Durham University for Wind Prospect Developments Ltd (event 14556)

Boundary Lane wind farm, near Whittonstall: archaeological evaluation. Archaeological Services Durham University for Wind Prospect Developments Ltd (event 14655)

Stamfordham

Watching brief on B6318 signing improvements, Harlow Hill. Pre-Construct Archaeology for Northumberland County Council (event 14646)

Stannington

Well Hill Surface Mine: archaeological assessment. The Archaeological Practice for BHP Develop on behalf of Thompson's of Prudhoe (event 14511)

Thirston

Thirston Mill, Felton: statement of significance. CgMs Consulting for Mr and Mrs Dawe (event 14486)

Archaeological watching brief, Thirston Mill. Archaeological Research Services for Mr Dawe (event 14702)

Warkworth

Church of St Lawrence: archaeological excavation and historic buildings recording 2008-2010. The Archaeological Practice for Warkworth Parish Council (event 14545)

Castles Dike, Warkworth intertidal habitat creation: archaeological monitoring and recording. Bamburgh Research Project for the Environment Agency (event 14701)

Warden

Frankham Farm: historic building recording. The Archaeological Practice for Butler Haigh Associates (event 14537)

Whalton

Bonas Hill Farm: standing buildings assessment. Alan Williams Archaeology for Mr Irwin (event 14527)

Whittingham

Swarland Brick Company extraction site, Alnwick: desk based assessment. Bamburgh Research Project for AMS Associates (event 14491)

Whittington

Hallington Hall: archaeological monitoring. Archaeological Services Durham University for xsite

architecture LLP for F Barratt (event 14508)

Shellbraes Farm: archaeological mitigation works. Alan Williams Archaeology for Mr and Mrs Abraham (event 14530 and 14531)

Widdrington Village

Steadsburn Opencast Site: archaeological excavation and watching brief. TWM Archaeology for UK Coal Ltd (event 14700)

Wooler

The Former Ferguson (Redpath) Transport Premises, South Road, Wooler: desk based assessment. North Pennines Archaeology for Silvercoin Investments Ltd (event 14476)

Land at Ferguson's Transport Yard South Road, Wooler: archaeological evaluation report. North Pennines Archaeology for Silvercoin Investments Ltd (event 14477)

Wylam

Oakwood Burn: geophysical survey. Archaeological Services Durham University for Environment Agency (event 14551)

Flodden Artefa

An Artefact Roadshow, originally scheduled for November of 2010, but cancelled due to heavy snow, was held at Branxton Village Hall during late January 2011. The aim of the Roadshow was to encourage people living close to the battlefield of Flodden (1513) around the village of Branxton, to come forward with any artefacts they might have found, either in their gardens or in the fields surrounding the village, which might relate to the events of September 1513.

Given the range of archaeological remains recorded in the area - from the mesolithic (7000+ years ago) through the whole of prehistory, early history, the medieval period and also the post-medieval and modern period, the team fully expected to be shown artefacts of all types and dates, not just those from the 16th century and the battle.

The Flodden 500 team was supported by Dr Rob Young (English Heritage) an expert on flints and other prehistoric finds, Dr Rob Collins the North East Finds Liaison Officer, along



en 500: Archaeology ct Roadshow

with several of his students, Roger Miket an expert in Prehistoric and Saxon finds and Jenny Vaughan and John Nolan (Northern Counties Archaeological Service) who provided expertise in medieval and post-medieval pottery and other artefacts.

Over the four hours of the event collections of artefacts from all over northern Northumberland and the Scottish Borders were examined by the experts providing a wide range of newly reported finds for the broader area.

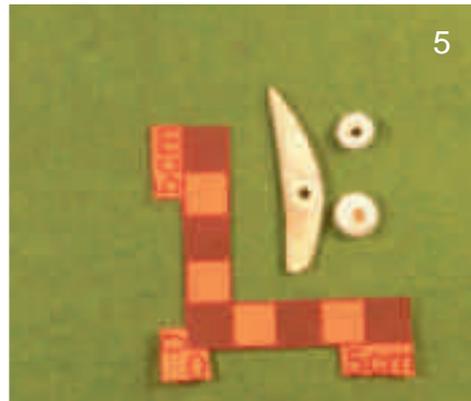
Fourteen previously unrecorded cannonballs were presented for identification. Of these ten are attributed to the battle and were found in the fields around Branxton. These were of two primary types being either about 4 or 6 inches diameter and were typical of projectiles from the Scottish guns of 1513. Interestingly none of the 3 inch lead cannon balls (again typical of the smaller Scottish guns) or the 2 inch lead cannon balls representative of the English guns were reported.

Other finds brought for identification included spindle whorls, prehistoric, medieval and post-medieval pottery, flints, as well as a fine collection of Iron Age beads from Lowick, a fine medieval trade weight, made of lead, found in the fields to the east of Barmoor Castle and a collection of bronze Roman brooches from the coast south of Seahouses.

1. Branxton Hall during the event
2. 4 inch cannon ball from Branxton
3. 6 inch cannon ball from Branxton
4. Roman artefacts from Beadnell
5. Beads from Lowick
6. Lead trade weight from Barmoor

It is hoped that further similar events will bring more of Northumberland's hidden history to light helping us to further understand events such as the Battle of Flodden. A future Artefacts Roadshow is proposed for Barmoor Castle near Lowick. This was the camp site of English Armies for over 800 years.

CB



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