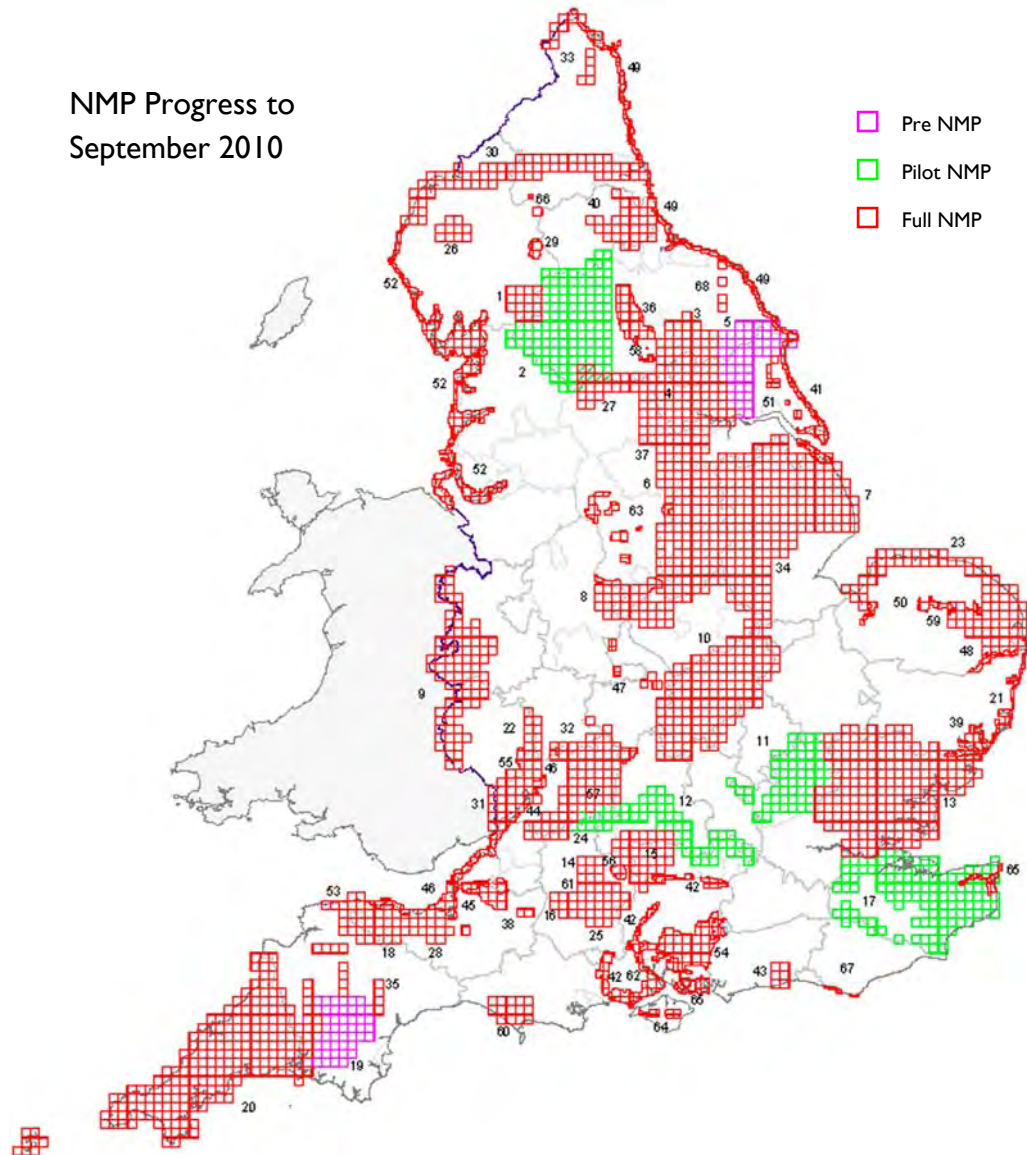


# Conservation, protection and promotion of the historic environment: recent highlights from the National Mapping Programme

## NMP CONFERENCE ABSTRACTS

Janet Watson Lecture Theatre, Geological Society, Burlington House, Piccadilly, London  
9<sup>th</sup> November 2010

NMP Progress to  
September 2010



- Pre NMP
- Pilot NMP
- Full NMP

- |                        |                         |                              |                                 |
|------------------------|-------------------------|------------------------------|---------------------------------|
| 1. Howgill Fells       | 18. Brendon Hills       | 35. North Devon              | 52. North West RCZAS            |
| 2. Yorkshire Dales     | 19. Dartmoor            | 36. Thornborough Henges      | 53. Exmoor National Park        |
| 3. Howardian Hills     | 20. Cornwall            | 37. Magnesian Limestone      | 54. Hampshire – South Downs     |
| 4. Vale of York        | 21. Suffolk Coast       | 38. East Mendip              | 55. Leadon Valley               |
| 5. Yorkshire Wolds     | 22. Malverns AONB       | 39. Suffolk ALSF             | 56. Savernake Forest            |
| 6. Nottinghamshire     | 23. Norfolk             | 40. Durham ALSF              | 57. South Cotswolds             |
| 7. Lincolnshire        | 24. Liddington Environs | 41. Yorkshire RCZAS          | 58. Yorkshire Henges            |
| 8. National Forest     | 25. Stonehenge WHS      | 42. Hampshire ALSF           | 59. Norfolk A11 corridor        |
| 9. Marches Uplands     | 26. Skiddaw             | 43. South Downs AONB (Pilot) | 60. South Dorset Ridgeway       |
| 10. Northamptonshire   | 27. Lower Wharfedale    | 44. Frampton ALSF            | 61. Marden Henge                |
| 11. Hertfordshire      | 28. Quantocks AONB      | 45. Mendip Hills AONB        | 62. Hampshire – New Forest ALSF |
| 12. Thames Valley      | 29. Warcop ATE          | 46. Severn Estuary RCZAS     | 63. Derbyshire & Peak ALSF      |
| 13. Essex              | 30. Hadrian's Wall WHS  | 47. Warwickshire ALSF        | 64. Isle of Wight ALSF          |
| 14. Avebury WHS        | 31. Forest of Dean      | 48. Norfolk Broads           | 65. South East RCZAS            |
| 15. Lambourn Downs     | 32. North Cotswolds     | 49. NE RCZAS                 | 66. North Pennines Miner-Farmer |
| 16. Salisbury Plain TA | 33. Till Tweed          | 50. Norfolk ALSF             | 67. Beachy Head-Peacehaven      |
| 17. Kent               | 34. Witham Valley       | 51. East Yorkshire ALSF      | 68. North York Moors            |

## NMP MEETING PROGRAMME 2010

### 10:45 ARRIVAL AND REGISTRATION

11:00 Introduction from Baroness Andrews

The contribution of the Norwich Growth Point NMP to the conservation and protection of the historic environment.

*Sarah Horlock, Norfolk Landscape Archaeology*

The Yorkshire Henges – landscape change and monument management in the 19<sup>th</sup> to 21<sup>st</sup> centuries.

*Alison Deegan*

A filthy barren ground? Dissemination on Exmoor.

*Cain Hegarty, Exmoor National Park Authority*

NMP in protected landscapes - the South Dorset Ridgeway and the Hampshire Downs

*Andrew Young, Cornwall Historic Environment Service*

Miner-Farmer landscapes of the North Pennines AONB: a never ending story.

*Sally Radford, English Heritage*

Kitchener's Camps at Seaford. The aerial survey of a First World War landscape.

*Robert Skinner, English Heritage Professional Placement in Conservation*

12:45 Discussion

### 13:00 LUNCH IN THE LOWER LIBRARY

14:00 Aerial Photography and the Management of Mineral Extraction in Derbyshire.

*James Brightman, Archaeological Research Services Ltd*

Beyond NMP. Cornwall as a case study

*Andrew Young, Cornwall Historic Environment Service*

The North York Moors National Park NMP: an assessment of the historic environment resource in the most vulnerable areas of the National Park.

*Tara-Jane Sutcliffe, Archaeological Research Services Ltd*

NMP and Higher Level Stewardship in Warwickshire and Oxfordshire: Informing improved management of historic landscapes.

*Toby Catchpole, Gloucestershire County Council*

NMP & AHBR: Enhancing the Hampshire Historic Environment Record.

*Alex Godden, Hampshire County Council*

15:15 Discussion

### 15:30 BREAK

Facing the Enemy: Military Archaeology on the White Cliffs.

*Vicki Lambert, Wessex Archaeology*

The heat, the dust, the flying: Aerial reconnaissance in 2010.

*Damian Grady and Dave Macleod, English Heritage*

Nudity, eugenics and virtual reality: stories from the pre-history of aerial archaeology.

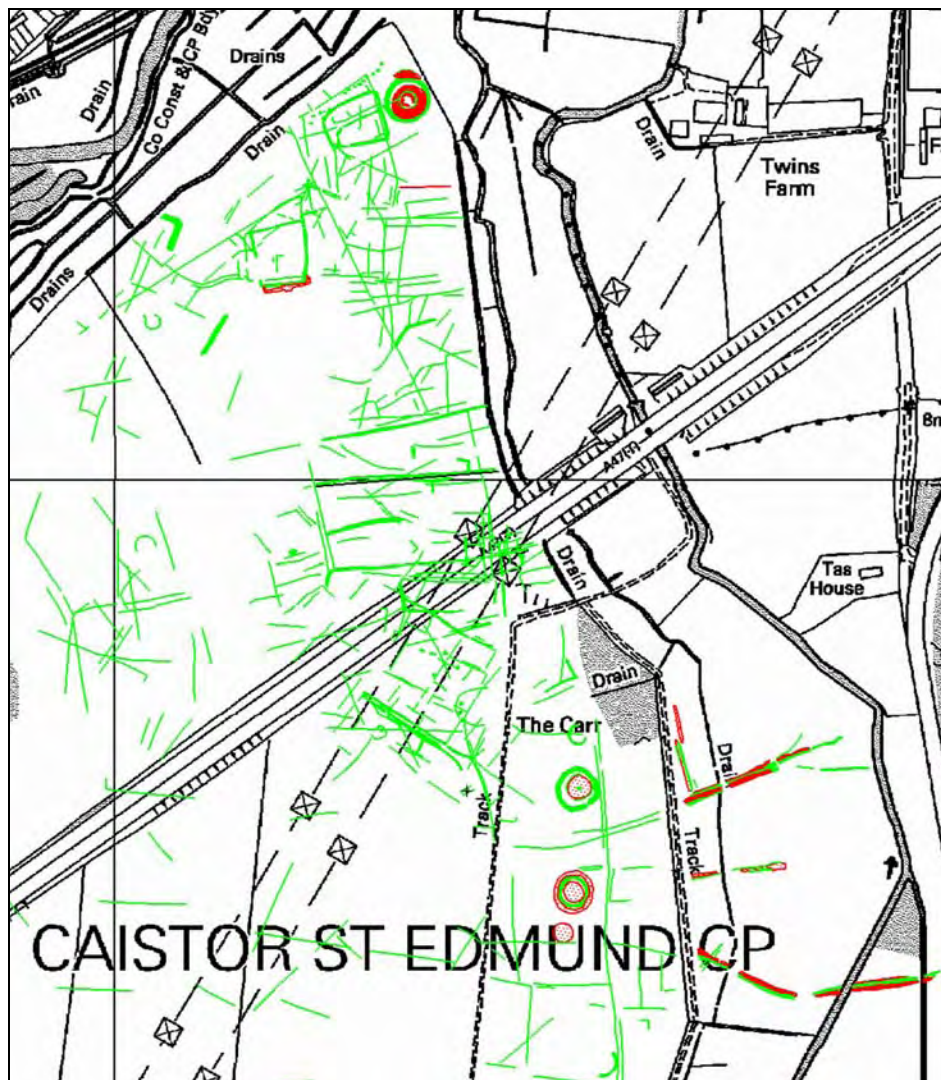
*Martyn Barber, English Heritage and Helen Wickstead, University of Kingston*

16:45 Discussion

*Sarah Horlock, Norfolk Landscape Archaeology*

**The contribution of the Norwich Growth Point NMP to the conservation and protection of the historic environment.**

The Norfolk Growth Points NMP project covers the historic cities of Norwich and Thetford and their environs and the interlinking A11 Corridor. The project has to date mapped and recorded the archaeology of urban Norwich and the surrounding suburban and rural areas, to inform future planning and development strategies. The data produced has already been utilised in the planning and mitigation process for a number of development schemes, most notably the Northern Distributor Route (NDR) road scheme. As with the results of the previous Norfolk NMP projects, the new NMP data is also being utilised in the consultation and preparation of Farm Environment Plans (FEPs), including some large estates located within areas of dense cropmarks. The mapping of earthworks, both those newly identified through NMP and those at existing sites, continues to feed into the work of the Norfolk Monuments Management Project (NMMP). The new NMP data also significantly contributes to existing scheduled and protected archaeological sites, for example its use in support of the proposed extension of designation area for Caistor Roman Town to the south of Norwich.



Complex cropmarks on the Markshall Farm Estate, which are currently being assessed for the development of the Markshall Farm Environment Plan. NMP mapping © English Heritage/Norfolk County Council. Ordnance Survey map reproduced from Ordnance Survey mapping with the permission of the Controller of HMSO © Crown Copyright. Licence number 100019340.

*Alison Deegan*

**The Yorkshire Henges – landscape change and monument management in the 19<sup>th</sup> to 21<sup>st</sup> centuries.**

On the northern and eastern sides of Ripon, North Yorkshire there is a string of at least six Neolithic henge monuments, with less than 12km between the two farthest examples. Although they share a predominantly rural location, historic maps and air photographs indicate that they have each experienced a subtly different recent land use history and varying strategies of active and passive management. I will look briefly at the current outcomes in terms of conditions and knowledge base for these monuments and compare them with the more distant henges at Catterick, Ferrybridge and Newton Kyme.

*Cain Hegarty, Exmoor National Park Authority*

**A filthy barren ground? Dissemination on Exmoor.**

The results of the NMP survey of Exmoor National Park, completed in the summer of 2009, are routinely used in agri-environment consultations and all public enquiries to the Exmoor National Park Authority Heritage Environment Record (HER). Funding has been obtained from English Heritage to publicise the results of the survey. Now in progress, this dissemination project will present the results in two ways. Firstly, HER online thematic essays will discuss a range of topics in a synthetic and accessible form. Secondly, a publication will show how agricultural improvement or reclamation has shaped the landscape of the National Park over the last 800 years.



Illustration for the Exmoor NMP publication © John Hodgson 2010, [www.johnhodgson.uk.com](http://www.johnhodgson.uk.com)

*Andrew Young, Cornwall Historic Environment Service*

**NMP in protected landscapes – the South Dorset Ridgeway and the Hampshire South Downs.**

The Cornwall NMP team have recently completed the mapping phase of two major projects in protected landscapes. The first is the entire Hampshire portion of the newly designated South Downs National Park, which amounts to 605 km<sup>2</sup> and the second is 310 km<sup>2</sup> of the Dorset AONB, which includes the whole of the South Dorset Ridgeway. Both surveys have identified large numbers of previously unrecorded sites, thereby significantly enhancing the existing baseline datasets. The results of NMP will support the implementation of the National Park and AONB Management Plans and inform the management and preservation of the historic environment in both areas. Dissemination of the mapping also has high potential for promoting and increasing public awareness of the archaeology of these protected landscapes.



A view of Crow Hill on the South Dorset Ridgeway, showing Bronze Age 'Celtic' fields and a post-Roman valley floor enclosure. NMR 23707/10 SY5987/45 1<sup>st</sup> Sep 2004 © English Heritage NMR.

*Sally Radford, English Heritage*

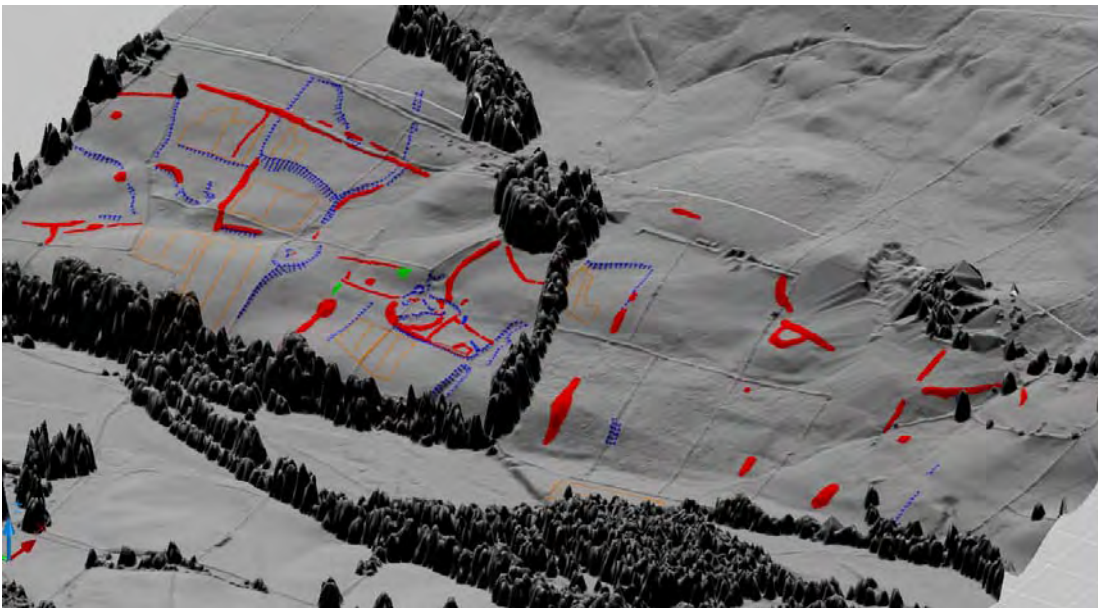
**Miner-Farmer landscapes of the North Pennines AONB: a never ending story.**

The Miner-Farmer landscapes of the North Pennines AONB is a multi-disciplinary survey, using traditional and innovative techniques to record the archaeology of this extensive lead mining landscape, employing the expertise of English Heritage's Research Department teams and external partners.

The aerial survey mapping encompasses a larger area than the core research zone and will provide a wider context for that research. The use of specially commissioned orthophotography and lidar is complimented by traditional vertical and oblique photography and provides an opportunity to compare and contrast these sources.

The range and density of the archaeological features revealed, especially through using the lidar, has been astounding, enhancing and broadening the archaeological record considerably. Although the lead mining industry appears to dominate the landscape, there is considerable evidence for prehistoric settlement and field systems. The modification and reuse of some elements into the medieval period provides a further complexity to this archaeological landscape.

The mapping will feed into the wider project research to further the understanding, conservation and public enjoyment of the historic environment and protected landscape.



Later Prehistoric field system and enclosures, along the banks of the River South Tyne. NMP mapping has been draped over a lidar digital surface model © English Heritage.

*Robert Skinner, English Heritage Professional Placement in Conservation*

### **Kitchener's Camps at Seaford. The aerial survey of a First World War landscape**

As part of an Institute for Archaeologists EPPIC placement at Aerial Survey, Swindon, I have undertaken work on the Beachy Head-Lewes South Downs NMP project. Aerial photographs from the 1940s and 1950s revealed the earthworks of two First World War training camps located in and around the town of Seaford in East Sussex. The vast majority of these remains have since been consumed by Seaford's 20<sup>th</sup> century urban expansion but, contrary to the published belief that the camps were destroyed, extant earthworks have been discovered. As an aid to conservation, a project was instigated to create a detailed map of the camp remains seen in the aerial record and to report on the nature of this forgotten First World War archaeological landscape. Like the war itself, the project has expanded beyond initial expectations in scope and duration revealing many interesting aspects of camp life and of the training landscape in which the two Seaford camps were set. The work has contributed to an ongoing research project being carried out by volunteers on behalf of The Sussex Archaeological Society to which the aerial survey mapping has been an invaluable aid. In turn, their work has contributed a wealth of useful documentary and visual sources to the survey as well as data gleaned from their fieldwork.



RAF vertical aerial photograph from 1951 showing the southwest corner of South Camp the location of the extant earthworks. NMR RAF/58/613 3052 05-APR-1951. English Heritage (NMR) RAF photography

*James Brightman, Archaeological Research Services Ltd*

**Aerial Photography and the Management of Mineral Extraction in Derbyshire.**

From the prehistoric monument complexes of the Trent Valley sand and gravels to the lead mining heritage of the limestone uplands, Derbyshire and the Peak District is one of the richest areas in the country for both minerals and archaeological sites. The Derbyshire and Peak District Aggregates and Archaeology Assessment Project characterised and analysed the archaeological resource in relation to aggregate bodies through application of the 'landform element' approach (Passmore and Waddington 2009). This approach seeks to partition the landscape by delimiting distinct geomorphological units, such as Carboniferous Limestone, Millstone Grit or sand and gravel terraces for example, and then identifying the types of archaeological associations and the types of evaluation and mitigation techniques that can be usefully applied.

One of the key sources of data for this project was a National Mapping Programme survey, undertaken by Archaeological research Services Ltd, which focussed on four distinct mineral-producing landform elements: Carboniferous Limestone, Magnesian Limestone, Sherwood Sandstone and sand and gravel terraces. This aerial photograph mapping has greatly increased the resolution of known sites while also adding over 850 new sites to the National Monuments Record. This paper will discuss the approach taken by this project, and the key landforms and their associations before showing how the new data is now being applied to real-world needs.

Passmore, D. G. and C. Waddington. 2009. *Managing Archaeological Landscapes in Northumberland. Till-Tweed Studies Volume 1*. Oxford, Oxbow Books and English Heritage.

*Andrew Young, Cornwall Historic Environment Service*

**Beyond NMP. Cornwall as a case study.**

Cornwall's NMP was completed in 2006. Since then the mapping has proved an invaluable resource. It is used on a daily basis by the Development Control team and has resulted in a number of proposed developments being altered to avoid damaging sites we have mapped. The data has informed landscape management initiatives, such as the Heath project, and contributed towards defining the area designated as the Cornish Mining World Heritage Site. The NMP data also plays a key role in informing agri-environment schemes, with some sites going under arable reversion. Finally, the NMP data is being used with Historic Landscape Characterisation (HLC) to identify those areas with high potential for the survival of below-ground prehistoric remains in order to better inform future advice on the preservation and conservation of the historic environment.

*Tara-Jane Sutcliffe, Archaeological Research Services Ltd*

**The North York Moors National Park NMP: an assessment of the historic environment resource in the most vulnerable areas of the National Park.**

The North York Moors National Park has been subject to regular reconnaissance and archaeological aerial photography since the 1970s, but it is now over 20 years since any systematic work has been undertaken on the available air photographic resource. The aim of the current National Mapping Programme project is to undertake an assessment of the historic environment resource in the most vulnerable areas of the National Park. The study area comprises three blocks that encompass upland and lower lying ground as well as linking to areas of coastline already mapped as part of Rapid Coastal Zone Assessment projects. A new set of vertical imagery taken in 2009 is being used to monitor condition and management issues relating to Scheduled Monuments within the study area, the results of which will be used to update the HER and SM@Risk databases. Started in June 2010, the project is already yielding exciting results, especially in the upland areas.

Toby Catchpole, Gloucestershire County Council

## NMP and Higher Level Stewardship in Warwickshire and Oxfordshire: Informing improved management of historic landscapes

Gloucestershire County Council has just begun a project to complete NMP coverage of the South-East Warwickshire and Cotswolds Higher Level Stewardship (HLS) Target Areas. Environmental Stewardship (ES) is a scheme managed by Natural England on behalf of DEFRA. ES provides farmers and land managers with a financial incentive for looking after wildlife, landscapes, historic features and natural resources. HLS aims to deliver significant environmental benefits in high-priority areas. Over 100 HLS target areas have been identified across England. They represent the areas where Natural England wishes to focus delivery of HLS. HLS can provide funding for a range of management regimes of benefit to the historic environment, such as arable reversion and also for capital works, such as scrub clearance, consolidation works, the production of management plans and interpretation panels.

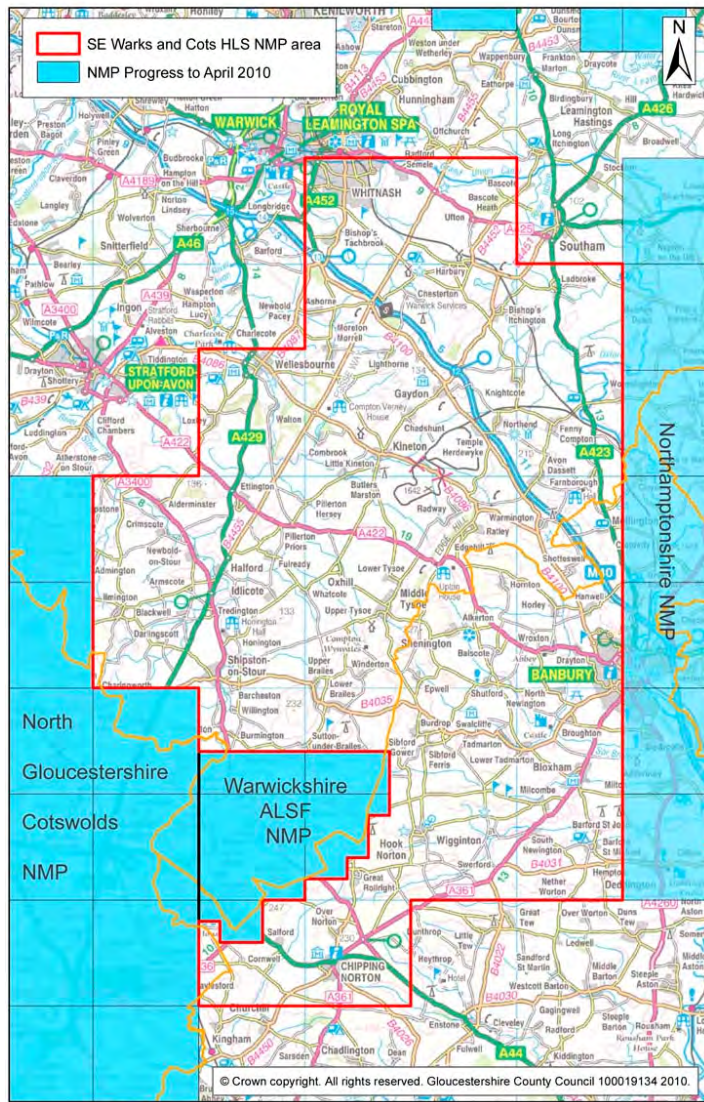


Figure 1: Project area and existing NMP coverage 1:200,000 0 10 km

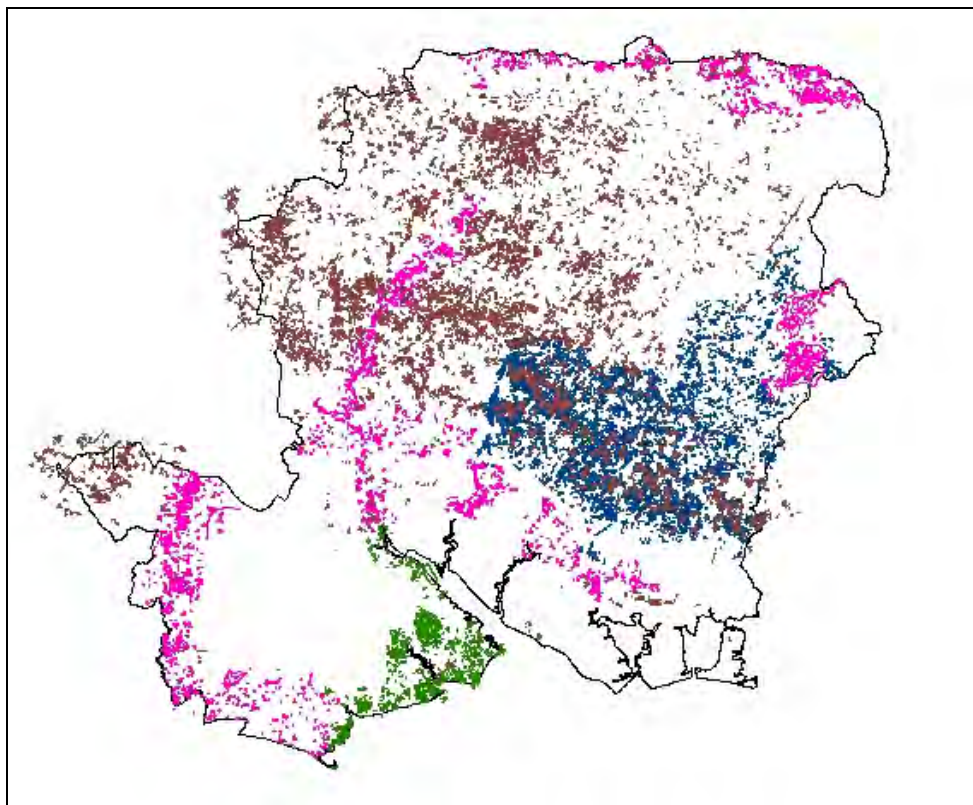
An essential precursor to any application for HLS is a Farm Environment Plan (FEP). Local authority archaeologists provide the following for FEPs: Mapping of all designated sites and other historic assets; A summary of the Historic Landscape Character (including HLC mapping); A summary of the potential for management of the historic environment within the landholding, identifying the significance of the assets within it and giving prioritised management recommendations. There are many practical ways in which the availability of NMP data assists with the completion of FEP consultation advice. These include: The NMP locates many new sites not previously known from other sources; The NMP records almost all monument types, thereby increasing the evidence base for previously under recorded elements of the historic environment, including elements of the wider landscape around known settlements. The wide range of photography used allows the recording of features that are only visible under optimal climatic conditions; The NMP records many features that have been destroyed or obscured since the mid-twentieth century. It also records pre-medieval features that only become visible once medieval agricultural earthworks are removed; The extent of heritage assets is often much more clearly delineated on NMP mapping than in HERs. It represents the morphology and extent of heritage assets far more clearly to non-specialists than a point or polygon on a map. This project has therefore been devised to increase the quality of the background information available in two of the areas where FEP consultations are most concentrated and thereby aid long-term management of the historic environment in these areas.

*Alex Godden, Hampshire County Council*

### **NMP & AHBR: Enhancing the Hampshire Historic Environment Record**

Since 2006, the Hampshire County Council Archaeology & Historic Buildings Team have been working with the Historic Environment Service of Cornwall Council on a series of NMP projects, including a project for the aggregate mineral producing areas in Hampshire, enhancement of the historic environment evidence base due to the creation of the South Downs National Park and the New Forest National Park's coastal audit. Most recently, a project based on the chalk downs of west Hampshire (where there is a considerable history of aerial reconnaissance) had been implemented. The primary task for the Hampshire HER is of assimilating the evidence generated from the NMP projects into the HER. Compatibility of systems allows an almost instant display of the crop mark plots within the GIS system, allowing the evidence to start influencing the landscape and planning management decisions of the curator very quickly after it has been received. Equally important is the assimilation of the NMP interpretations into the HER itself, which allows the new data to be expressed in searches and distribution maps.

The results of the NMP projects are enabling a better understanding of the nature and distribution of the archaeology of Hampshire, and have been able to influence the research frameworks. It has had an immediate impact on development control decisions. Interaction with the HER allows the data to be presented to the wide range of audiences who use and rely on the HER. Whilst there have been hurdles to overcome, and there have been some significant work loads that have had to be programmed in, the over all experience is very positive, and one which Hampshire is keen to continue supporting whenever possible.

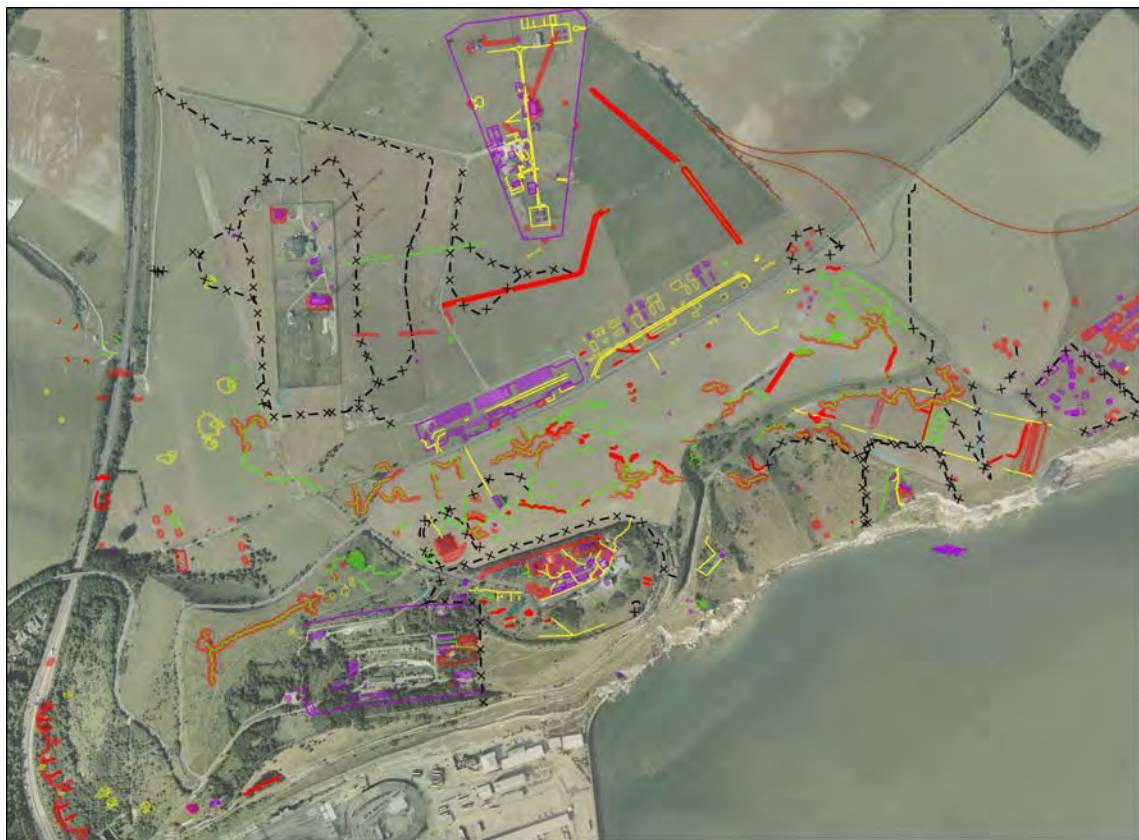


Records derived from aerial photographs on the Hampshire HER including cropmarks, earthworks and structures.

*Vicki Lambert, Wessex Archaeology*

### **Facing the Enemy: Military Archaeology on the White Cliffs.**

The intensity of the impact of warfare on the White Cliffs has been highlighted through the 5000 or so photographs investigated during the South East Rapid Coastal Zone Assessment Survey. This talk concentrates on the coastline between Deal and Dover, and will present a picture of military activity from the Henrician castles of the 16th century to the more temporary installations of the 20<sup>th</sup> century. World War II features are particularly prominent; confirmed by the south-east coast being known as Hellfire Corner. The Channel was the saving grace for Britain, dictating the strategy of warfare and causing the land on either side to become the theatre of much of the military activity. Lying just over 20 miles from occupied France, Dover's pivotal position in the defence against Hitler's 'Operation Sea Lion' made it the focus of Hellfire Corner and the first line of communications inland. A variety of the complex military features mapped during the survey will be presented within this talk and will demonstrate the considerable feeling of threat of invasion and the lengths that were gone to in order to protect the nation.



An area of large scale 20<sup>th</sup> century military activity north-east of Dover Harbour, mapped from a range of vertical aerial photographs as part of the South East Rapid Coastal Zone Assessment Survey (Background image - Next Perspectives PGA Tile Refs: TR 3241, 3242, 3341, 3342, 3441, 3442 12-SEPT-2003 and TR 3243, 3343, 3443 17-SEPT-2003. Aerial Photography: Licensed to English Heritage for PGA, through Next Perspectives™)

*Damian Grady and Dave Macleod, English Heritage*

**The heat, the dust, the flying: Aerial reconnaissance in 2010**

This year was an exceptionally busy year for the EH reconnaissance teams, starting with taking advantage of clear airspace during the ash cloud crisis to one of the best cropmark summers for many years. This talk will illustrate some of the highlights and significant new discoveries from the 2010 flying season.



NMR26650\_005 28-Jun-2010 ©English Heritage.NMR. One of the most exciting new discoveries from this year's reconnaissance was this Roman Camp, near Bradford Abbas in Dorset.

*Martyn Barber, English Heritage and Helen Wickstead, University of Kingston*

**Nudity, eugenics and virtual reality: stories from the pre-history of aerial archaeology**

With the imminent-ish publication of a new version of aerial archaeology's history, and with a series of more academic articles also ready to roll, it seems an opportune moment to offer a (brief) reminder that aerial archaeology's roots pre-date both camera and aeroplane. A search for the origins of the modern discipline yields some surprising and unexpected connections with important developments in 19<sup>th</sup> century science, art and entertainment, in the process offering a perspective on aerial archaeology's origins and development that is radically different to existing narratives. But more importantly, who was the naked aerial photographer?



Vertical stereo pair of St Paul's Island in the Indian Ocean, taken circa 1865. But how?

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