RURAL MATTERS

Introduction by Jane Grenville

Major changes in rural life pose a challenge which will need to be met by new policies to support agriculture, conserve diversity and historic character in the landscape and maintain the balance between town and countryside

When I was about nine or ten, I became curious about a pattern of rectangles I could see on Grimstone Down in Dorset. We were there, as every summer, for a family holiday with my maternal grandparents who had recently retired from farming in the area. My father obligingly looked on the map and confirmed that they were 'Celtic fields'. The conversation between my mother and her sisters, children of the farm, fell to subsidies and the problem of ploughing these upland sites which had 'always' been open sheep pasture. Now only a handful were protected by law and the rest were at risk from an economic system that was a hangover of the war years, when self-sufficiency in food had been paramount.

I remember my mother's indignation that the subsidy was paid for the act of ploughing, not planting and harvesting, so that the archaeology was being needlessly disturbed for the sake of a bureaucratic profit – and my biologist father's concern for the loss of essential habitats.

What it is to be an impressionable child! My appetite for archaeology, whetted by the glimpse of a prehistoric landscape, was leavened with the knowledge that contemporary politics and economics also leave their mark. The countryside was far from static – if the hills had 'always' been for sheep, then why did the Celts (whoever *they* were) enclose such small fields? Though I would scarcely have analysed it thus, I was made aware that the fate of the remains was affected by a kaleidoscope of shifting factors: national farming policy, international politics, local agricultural practice and national protective mechanisms for (some but not all) monuments. I knew that people lived, worked, were rich and were poor in the countryside. I knew we 'townies' used the countryside for rest and recreation and, even back then in the 1960s, I was aware of tensions that the changing demography of the countryside was creating, as commuters moved out to villages and villagers found themselves priced out of their traditional homes while affordable new build was problematically 'out of character'. I knew that the relationship between the local market town of Dorchester and the farming community was close and I knew from the remains of the Roman aqueduct in the Frome valley that this interdependence was ancient and took many forms.

That relationship between old and new, between town and country, between the value of one aspect of the landscape and another (whether archaeological, ecological, economic or aesthetic) was inextricable. It remains so. The specific imperatives have changed: now we face the decline of agriculture on a scale unimaginable in my childhood, the influence of Brussels, the changing nature of subsidies, the shifting social balance of rural populations, the accelerating loss of archaeological sites and ecological habitats, new perceptions of the countryside. Following the focus of the last *Conservation Bulletin* on urban issues, this issue concentrates on the countryside and the place of its past in regeneration for the future. □

Jane Grenville
English Heritage Commissioner

Grimstone Down, Dorset, the nucleus of a Bronze Age/Iron Age settlement with traces of Celtic fields covering more than 100 acres, all with field-banks up to 4–5ft high

THE COUNTRYSIDE

At the crossroads

With agriculture in crisis, there is a passionate debate over the future of farming and the British countryside. The Government will soon have to take decisions that could influence the character of the landscape for generations to come. Care for the environment – historic and natural – and its contribution to rural prosperity and quality of life should be an important consideration as policy makers choose the way forward

Our countryside is valued by many for its timeless qualities, tranquillity and atmosphere of permanence. In reality, ever since the last ice age, the landscape has continually changed in response to a complex interplay of human and natural pressures. There is virtually no part of the British landscape that has not been shaped by the hand of man. The attractiveness and diversity of our countryside, often referred to as 'natural beauty', is in fact the result of centuries of exploitation and careful management. In many places, this has resulted in complex patterns of superimposed settlement and land division, providing testimony to this process of change. Only rarely do very early landscape patterns survive unaltered.

Against this background of constant evolution, deliberate attempts to conserve ancient features and the historic character of the landscape may seem unnecessary. If so much has survived from the past, why should it not persist into the future without intervention? If our history is one of continual change, why try to influence this process?

Acceleration of change

It is important to recognise, however, that the pace, extent, and depth of change in the countryside has accelerated at an unprecedented rate in the last fifty years and is likely to continue. While it is true that visually more striking transformations in the landscape have occurred in the past – for example, during the period of the enclosures – the changes wrought since World War II, spurred on by globalisation, intensification and technological advance, have been far more fundamental. They have affected not only the appearance and character of the countryside, but also the diversity of its wildlife, the quality and integrity of its land, air and soil, and, increasingly, the stability of its climate. As a result, the future of historic features that have already survived many previous centuries of change is now uncertain. Only today, as we begin to understand the potential scale of these losses, are we also starting to understand the full value of our historic assets. This value goes well beyond their aesthetic and academic interest to include social and economic benefits fundamental to a sense of identity and well-being among rural communities.

In large part, these changes were triggered by policies for agriculture initially intended to increase self-sufficiency in food supplies in war-ravaged Europe. Subsequently, the Common Agricultural Policy (CAP) was developed to nurture and protect the farming industry and to provide consumers with cheap food. In practice, the price of this policy – with its emphasis on intensification and subsidised production – has been very high, not least in its impact on the historic environment. The 1998 Monuments at Risk Survey, for example, showed that since 1945 agriculture has been the single biggest cause of unrecorded loss of archaeological sites. On the basis of the MARS sample, it can be estimated that agriculture has been responsible for 10% of all cases of monument destruction between 1945–95 and for some 30% of piecemeal, cumulative damage during the same period. Thirty-two percent of all rural field monuments (including 21% of all scheduled field monuments) were still under arable cultivation when surveyed and the quality of survival of 68% of all recorded rural earthwork monuments was categorised as 'very poor' or worse. More recent research (see Olivier, 40-5) has also calculated that a combination of cultivation and agricultural drainage has damaged or destroyed over 13,000 valuable historic sites in our wetlands.

> '...the quality of landscapes, wildlife and habitats, recreational amenity and our historic and cultural heritage are equally important ...'
>
> *Our Countryside: The Future.*
> *A Fair Deal for Rural England*
> Rural White Paper, November 2000

Changes in farming practice have also been leading to the large-scale loss of traditional countryside features such as walls, hedges and ponds as well as to the redundancy and dereliction of many traditional farm buildings.

It is estimated, for example, that one third of hedges in England, including many of great antiquity, were lost between 1984 and 1993 and that one third of dry stone walls were derelict in 1994. In 1992, 17% of listed farm buildings were 'at risk' and 24% 'vulnerable', and a 1997 study of unlisted field barns in the Yorkshire Dales National Park, showed that less than 60% were intact. More up-to-date figures on farm buildings are currently being researched (see Lake and Gaskell, 28-9).

New challenges

There are now opportunities to arrest some of these destructive processes. Negotiations on world trade liberalisation and the European Union's desire to embrace former eastern-bloc countries mean that the CAP must change. There is already widespread recognition that the current arrangements for production and export subsidy are unsustainable economically and environmentally. The apparent cheap food benefits of the CAP are outweighed by the tax bill for farm subsidy and for repairing environmental damage. In addition, after BSE and Foot and Mouth Disease, public concern over farming and food safety cannot be ignored.

At the same time, farming is in crisis. Farm incomes are at their lowest levels for over a generation and the future is bleak. Many farmers are leaving the industry each year and few young people are willing to risk such a precarious living. In the UK, the devastating effects of Foot and Mouth (see *Conservation Bulletin* **41**, 55–7) have worsened an already difficult situation. Lord Haskins, the Government's Rural Recovery Coordinator, has recently suggested that, without intervention, half of the UK's farms could disappear within the next 20 years. Eighty percent of the countryside is farmed and changes of this magnitude will have very serious effects on the historic and natural environment, as well as posing severe problems for the social fabric of rural communities.

The tragedy of the Foot and Mouth outbreak may, however, point the way to a new and more sustainable approach to farming. Emerging from the crisis is a general recognition – most significantly in the recent report of the Policy Commission on the Future of Farming and Food – that the countryside is important to society in a variety of ways, not simply as a place to mass-produce food. In particular, it is becoming clear that a well-managed, diverse and environmentally sound countryside underpins the rural economy by stimulating tourism and attracting inward investment. English Heritage believes that, if society wishes the countryside to fulfill these functions in the future, we will need a diverse agricultural industry, which still includes a good proportion of family-scale farm businesses, actively encouraged to undertake work to maintain and enhance the landscape.

This cannot be delivered without bold reform of the Common Agricultural Policy and will require vision and resolve on the part of all members of the European Union. A key requirement will be for those resources currently supporting environmentally damaging production and export subsidies to be incrementally re-directed towards securing environmental enhancements, 'multi-functional' farm businesses, and the diversification of the rural economy.

'We must use our rural development policy to make sure that farmers farm in a way which is environmentally friendly and which contributes to the preservation of our landscape, which, may I say, is essentially a man-made landscape, created by generations of farmers over hundreds of years. This landscape is as much part of our cultural heritage as our historical cities and towns.'

Dr. Franz Fischler, Member of the European Commission responsible for Agriculture, Rural Development and Fisheries, 'Feeling the Pulse of the CAP' (speech at Cernobbio, 19 October 2001)

Langstrothdale in the Yorkshire Dales. Eighty percent of England's countryside is managed as farmland, a complex pattern of ancient and modern, natural and man-made. The conservation of many of its archaeological sites, traditional buildings, historic settlements and intricate field patterns are inextricably linked to the future of farming

The UK Government has already made important advances in this respect and is in the vanguard of countries campaigning for change. Two years ago, as part of its Agenda 2000 reforms, it made a first move towards 'top-slicing' the production subsidies made to farmers and re-directing the resources to rural development programmes in England and the devolved administrations. The resultant Rural Development Programme in England (ERDP) provided an integrated package of agri-environment and rural development measures, with an overall budget of £1.6 billion over six years (see page 9). More recently, in another sign of its intention to secure reform, the Government has replaced the Ministry of Agriculture, Fisheries and Food (MAFF) with a new Department for Environment, Food and Rural Affairs (DEFRA). The work of the new department, with respect to the historic environment, is considered further in this issue (Middleton, 16–21).

These changes are extremely welcome, but must be kept in perspective. CAP support for environmentally damaging intensive farming still totals some £3 billion each year, dwarfing the sums directed towards the new programme. Nevertheless, the ERDP provides a good practice example to other EU member states, as few others have adopted similar measures. It also serves to illustrate the immense benefits further and more radical reform could bring. Government has now been presented with a route map for this reform by the Policy Commission on the Future of Farming and Food. English Heritage welcomes the Commission's report 'Farming and Food: a sustainable future' which coincides closely with our own views on CAP reform. These are set out in more detail opposite.

Working with change

Even if radical, far-reaching and beneficial reforms to the CAP are delivered, it is inevitable that the landscape will continue to evolve, often in ways we cannot easily predict. The historic environment sector must consider how to accommodate and work with this process of change in order to conserve the diversity that contributes so much to the character of England's landscape.

Some changes can already be predicted. Many will revolve around the need to restructure the farm industry, create alternative sources of employment, regenerate rural communities and find alternative uses for land. It is clear, for example, that even if additional sources of support are introduced, many farmers will leave the industry. Many more will become part-time and diversify into other businesses. As a result,

Relict fieldscape, Burderop Down, Wiltshire. This downland landscape includes a well-preserved fragment of an originally far more extensive prehistoric field system, now largely destroyed by modern arable cultivation. Conversion to arable cultivation would destroy this last fragile remnant. Nationally, historically and biologically important grassland is still being lost to intensive agriculture and the MARS survey demonstrated that the extensive remains of early field systems are particularly vulnerable

Future Policy on Farming: English Heritage's view

The 2003 mid-term review of the Rural Development Regulation will provide an early opportunity for European Governments to consider the effectiveness of their respective Rural Development Programmes and to push for more rapid reform of the Common Agricultural Policy. Although further and potentially more radical changes will be possible in 2007, the pressures on farming and on the countryside in the UK require decisive action now.

English Heritage wishes to see:

- a farming industry that rewards farmers for their commitment as land managers and recognises that their social and economic contribution goes far beyond the production of food;
- farming carried out more sustainably and in a manner that conserves and enhances historic features, biodiversity and the locally distinctive character of the landscape;
- greater engagement of rural communities in decisions pertaining to agriculture and landscape management, leading to a restoration of public confidence in the farming industry; and
- increased public physical and intellectual access to the countryside and its historic features.

In order to achieve these changes, English Heritage recommends that the mid-term review of the ERDP should deliver:

1. Enhanced funding of the English Programme by adopting a progressively increasing rate of modulation, more ambitious than that currently proposed. Before 2010 this should reach the 20% ceiling permitted under the Rural Development Regulation.
2. Better integration of Programme measures – such as the agri-environment schemes, the Woodland Grant Scheme and the Rural Enterprise Scheme – underpinned by a clearer recognition of the social and economic contributions made by the historic environment, biodiversity and landscape character.
3. Greater local flexibility and accountability in targeting and rates of grant-aid for all Programme measures, within a framework agreed nationally.
4. Simplification of the current English agri-environment schemes to create a single scheme that:
   - Draws on the best elements of the existing schemes both in England, the UK devolved administrations and Europe;
   - Provides incentives to farmers to protect the existing environmental quality of their land, as well as to restore degraded environmental assets;
   - Provides greater support to farmers for undertaking environmental enhancements, particularly where uptake has previously been limited by inadequate incentives (in the case of the historic environment, this should include arable reversion schemes and traditional farm building restoration) balanced by a more critical and informed targeting of resources on the most significant assets;
   - Makes greater use of landscape-scale targeting and whole-farm planning;
   - Supports selective farm survey where the evidence base is inadequate to support decision making;
   - Is administratively simple in order to encourage uptake and participation.
5. Support for the facilitation of projects and applications by communities and individuals, including enhanced and better coordinated environmental and business advisory services;
6. Greater recognition of the special role of local authorities in providing advice to DEFRA on the historic environment in relation to Programme measures, and new initiatives to support and enhance that role;
7. Further strengthening of DEFRA's in-house expertise in the historic environment in order to match more closely its in-house expertise in the natural environment;
8. Increased commitment by DEFRA to undertaking social, economic and scientific research on the historic and natural environment, in order to underpin and strengthen the evidence base for Programme measures, including joint research initiatives with the historic environment sector;
9. Adoption of procedures for consultation and advice on the historic environment for all ERDP schemes, based on 'best practice' already adopted for agri-environment schemes;
10. Implementation of the discretionary 'cross-compliance' provisions of the Agenda 2000 reforms, requiring adherence to minimum environmental standards for farm businesses in receipt of any direct aids.

Ancient field system, Rosemergy, in West Penwith, Cornwall. In only a few areas does the layout of the present-day landscape derive directly from a prehistoric pattern of land division. Survey has demonstrated that the majority of the large dry-stone walls and terraced fields dominating the actively farmed landscape of West Penwith originated as early as 600BC. This unique landscape is maintained as an Environmentally Sensitive Area

the already pronounced rate at which farm buildings are becoming redundant or are being converted to other uses is likely to accelerate.

New crops will be introduced which, while delivering important environmental benefits, could have significant impacts on the landscape. 'Bio-mass' crops (short rotation willow coppice and 'elephant grass') will be developed as a renewable energy source for a new generation of power stations. New structures, such as wind farms, will appear in greater numbers and new locations, such as off our coasts. The coast itself will change, realigned to accommodate rising sea levels and increased storminess (see Murphy and Trow, 46–7). Large-scale afforestation is also planned, designed as much to accommodate leisure uses, re-cycle contaminated land, and provide carbon sinks, as to produce timber. In addition, following the recent Countryside and Rights of Way Act, the countryside will increasingly be used for recreation, allowing the public far greater access to their rural heritage.

Driven by these forces, the countryside of the future cannot be a replica of the countryside of today or yesterday – nor would that be desirable. The challenge is to strike the right balance by planning and managing change in order to retain the best and most significant of our historic features and allow the historic grain of the landscape to guide its future evolution. To achieve this we must develop new tools to help us analyse the subtle characteristics of the landscape and better understand current trajectories of change. We need to identify those historic assets under greatest threat and establish clear priorities for intervention. Above all, we need to find ways to engage rural communities in the decision-making process that will shape their children's and their grandchildren's surroundings.

This edition of *Conservation Bulletin* describes how some of these tools are being developed by English Heritage and by our partners in local government. It describes new work to involve communities in understanding their landscape (see Fairclough, 10–11) and to characterise the farm buildings and rural settlements that punctuate it (see Lake, 30-1, and Thomas, 68-71). It examines projects designed to assess the pressures that are acting on important landscape features, and to identify the assets most worthy of protection and management (see Olivier, 40-5; Humble and Barnett, 48–51; Anderton and Went, 52-5, Lambrick, 22-3).

'Great progress has been made over the past 20 years in recognising the important public interest in taking firm action to protect the natural environment. We now want to make similar progress to protect the historical environment, which has significance for all of us.'

Lord Macintosh of Haringey:
Lords debate on *Power of Place*,
20 December 2000

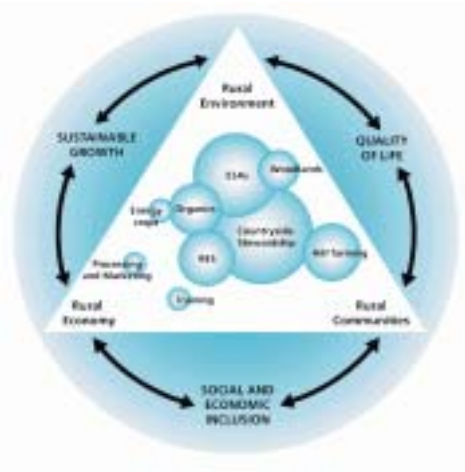
It also points to ways in which the economic benefits of the historic environment can be extended further into the community (see Rowe, 65 and Chesher, 66–7). Much of this work is in its early stages, but it is hoped that it will develop to allow the historic environment sector to fully participate in the debate about the future of our countryside. Above all it will help us to support rural communities who are not only confident about the future, but who also celebrate their past. □

Stephen Trow
Head of Countryside Policy

The England Rural Development Programme

The England Rural Development Programme (ERDP) sets out how the Government is implementing the Rural Development Regulation - otherwise known as the 'second pillar' of the Common Agricultural Policy.

The Programme will cost £1.6 billion between 2000 and 2006 and will address economic, social and environmental needs within the countryside through ten coordinated grant-aid measures. These include schemes to conserve and improve the environment and schemes to enable farming, forestry and other rural businesses and communities adapt to changing circumstances and develop.



DEFRA is responsible for administering and directing the Programme with the assistance of a National Strategy Group and Regional Programming Groups. English Heritage belongs to these national and regional groups, alongside the other national conservation and countryside agencies and representatives of other government departments.

One of the five key national priorities for the ERDP is:

To conserve and enhance rural landscapes and the diversity and abundance of wildlife (including the habitats on which it depends), to safeguard their integrity and value for future generations and to provide a source of economic opportunity.

Specific ERDP policies relating to landscape and the historic environment are:

- the safeguarding and enhancing of the *landscape character* and *local distinctiveness* of the *wider countryside* to attain targets or solve problems identified in regional Countryside Character descriptions;
- the protection and enhancement though appropriate management of *historic and archaeological features of international, national and local importance*, and their settings, in particular by:
  - Conservation and repair of *ancient monuments and landscapes at risk*;
  - Repair of *rural historic buildings* at risk, appropriate adaptive re-use of functionally redundant buildings and maintenance of the diversity of local vernacular features;
  - Maintenance and repair of *traditional man-made and semi-natural features* such as hedgerows and dry stone walls;
- the conservation and enhancement of *nationally important landscapes* and landscapes close to where people live;
- the securing of favourable collaborative management of the cultural and historic features and the valued landscapes and habitats of commons as a national resource.

You can find more information about the England Rural Development Programme on DEFRA's website:

www.defra.gov.uk/erdp

The ERDP schemes contribute to rural communities, the economy and the environment, through sustainable growth, social and economic inclusion and enhanced quality of life. The diagram opposite demonstrates the relative contributions of each scheme and its comparative scale

CULTURAL LANDSCAPE

View from Europe

English Heritage's Monuments Protection Programme has for some years been coordinating a national programme of Historic Landscape Characterisation (HLC) by county council archaeology departments (see Conservation Bulletin **40**, *23–6). But we also look beyond England, to other parts of the UK and Europe for a wider context for cultural landscape. Already, our HLC work is delivering many of the aims of the new European Landscape Convention*

People often start to value something when it is threatened, and the recent consequences of Foot and Mouth Disease, its long-term consequences still not clear, raised the stakes on the future of the rural landscape. The countryside has long been highly valued, but rural policy has tended to focus on its natural attributes. Its historic dimension is neither well understood nor, as a result, adequately managed. Heritage conservationists have until recently been strongly focused on sites and monuments, treating landscape as the background rather than significant in itself.

In its own right, however, the historic landscape is perhaps the most fundamental, diverse and readily accessible part of the cultural heritage. It is the human habitat affecting everyone, extensively adapted over thousands of years. It is cultural, not just natural. It comprises farm buildings, woodland and villages, and everything in between, from land cover to hedges and roads - the whole of the countryside. It embraces both the physical remains of past human activity and intangible associations.

European Landscape Convention

There is now a solid framework for helping to look after this valuable legacy: the European Landscape Convention, launched in October 2000 by the Council of Europe. It is not yet in force (first needing ratification by ten countries), but more than 20 countries have signed it and one (Norway) has formally ratified it. The Council of Europe has established an annual Signatories Conference to promote its implementation, and it is already influencing thought and policy across Europe. In the UK, current practice already mainly meets its aims, and it is hoped that the Government will soon agree to be added to the list of signatories.

The Convention defines landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. The concept of 'action and interaction, by people in the past' emphasises the importance of cultural and historic landscape, and its changes. The definition also emphasises the cultural aspect of landscape, its material remains created over a long period by human activity. More than 'environment', landscape exists only after people have imagined it.

The Convention also emphasises that landscape exists everywhere, not just in special places: it can be urban as well as rural, maritime as well as terrestrial, 'degraded' as well as well-preserved, everyday as well as outstanding, typical as well as special. Landscape in all its diversity contributes to the formation of local cultures and is a basic component of cultural heritage as well as collective and personal identity. The strong theme of personal involvement in landscape, which runs through the Convention, supports the view that democratic participation is essential in landscape management.

The Convention sets out both specific and general measures that countries should adopt to achieve landscape protection, management and planning. Specific measures include awareness-raising, training and education and the use of landscape character assessment to measure its social value and monitor the forces for changes.

General measures include recognition in law of the idea of landscape, and the need for landscape policies to be integrated with other aspects of policy, including spatial planning, and cultural, environmental, agricultural, social and economic policies.

Upland hay meadows in the Pradi de Togola, Parco Naturale of Paneveggio Pale di san Martino, Eastern Trentino, Italy, one of the 12 EPCL projects. A component of a complex landscape in the territory of Caoria, but representative of much of the Alpine zone, the meadows reflect the history and culture of the area's community over several centuries

European vantage point

The Convention places England's countryside in a wider context. Looking at the English historic landscape from a European vantage point gives new insights. Some parts of England – our uplands with their extensive prehistoric remains, the medieval ridge and furrow of the eastern midlands, or the dense long-established hedgerow patterns of western England – are unique or outstanding at a European level. Other parts provide background and context for important landscape elsewhere, underlining European diversity. They form a contrast with other areas: the open landscapes of the Alentejo, for instance, contrast stunningly with those of Scania and both have little in common with Norfolk, yet all are distinctively European. This unifying diversity reflects several thousand years of common cultural practices that are arguably more important in forming perceptions of landscape than the natural differences of topography or geography.

Diversity of approach for understanding and managing the landscape is also important, and the exchange of ideas and experience across Europe is a central concern of the Convention. Other parts of the UK, for example, use English HLC-type approaches, modified to suit local needs and different landscape types – in Wales as part of a selective 'special area' approach to archaeological landscape, in Scotland to capture both modern and abandoned land use patterns. Outside the UK, Ireland and Sweden are starting to experiment with HLC, further modifying techniques to suit their circumstances. Indeed, a wide range of useful and diverse techniques are being developed by archaeologists and cultural geographers throughout Europe, many described in Europe's Cultural Landscape: archaeologists and the management of change, a recent joint publication by English Heritage and the Europæ Archaeologiæ Consilium (European Archaeological Council).

European Pathways to the Cultural Landscape

A Culture 2000 project called European Pathways to the Cultural Landscape (EPCL) is also exploring this diversity of approach. This three-year networking project covers ten countries from Ireland to Estonia and 12 areas spanning a wide range of different landscape types and cultural milieu. These studies have common aims and will produce joint results, but

Education and Culture
Culture 2000

European Union

The scope of the Culture 2000 European Pathways to the Cultural Landscape project

the methods used will vary. The principles of the European Landscape Convention will underpin them all, as will a desire to manage change sensibly within the whole European landscape in ways that respect both diversity and unity, both rare and typical areas. EPCL could be a model for a more formal European observatory to understand and monitor the historic landscape. It also shows what is needed locally for countryside conservation in England: a clear appreciation that the landscape contains our roots and our stories but that it offers many different narratives and identities.

Graham Fairclough
Head of Monuments and Countryside Protection Programmes

For information about *Europe's Cultural Landscape: archaeologists and the management of change*, edited by G J Fairclough and S J Rippon, contact archcom@english-heritage.org.uk

Changing landscape near Castillones, Lot et Garonne, France. Small hedged fields slowly succumbing to landscape change from the pressures of intensified arable cultivation

THE LEADER + SCHEME

Helping rural communities help themselves

New EU funding for sustainable rural communities is encouraging local involvement in social, economic and environmental issues

EU funding of almost £33 million has been awarded to rural partnerships in England to develop small scale, innovative projects for their own communities. The aim of LEADER+ is to encourage local people to identify and address local issues in socially, economically and environmentally sustainable ways. There were nearly 50 applications and this January, the Rural Affairs Minister, Alun Michael, announced the 24 successful English groups (see list below). Separate LEADER+ programmes are being run in Scotland, Wales and Northern Ireland.

These Local Action Groups, representing a partnership of different community and economic sectors, were asked to prepare a local development plan around themes chosen from

- Using 'know how' and new technologies to make rural products and services more competitive
- Improving the quality of life in rural areas
- Adding value to local products
- Making the best use of natural and cultural resources.

Local Action Groups were also asked to identify the following target groups for their projects:

- Women
- Young people
- Older people
- Unemployed and under-employed
- Rural businesses and workers affected by restructuring.

Local Action Groups are now selecting projects to fund under their own development plan. LEADER+ is not designed to fund major capital projects, but there is scope to support new heritage initiatives. Nearly half of the selected Local Action Groups are planning to focus on activities to enhance the natural and cultural heritage.

Individuals, local communities or local organisations can become involved in LEADER+ historic environment planning and projects by:

- Representing their local community on the local action group
- Commenting on and putting forward ideas to the local action group on their development plan
- Suggesting and becoming involved in projects

Alun Michael, Rural Affairs Minister, with Stephanie Buckingham of Mount Farm, Wadhurst, at the announcement in January of the successful Leader + groups. Stephanie Buckingham, who diversified from food production to food processing, treated guests to refreshments at the village hall in Forest Row, East Sussex

The 24 Local Action Groups and what they will be doing:

East of England region

Name	Area	Description of activities
The Broads and Rivers LEADER+ Partnership	Norfolk Broads encompassing most of the Broads National Park	Focusing on traditional rural skills and local products with projects to promote reed bed maintenance, reed products and green tourism initiatives such as electric boats using renewable energy sources
The Fenlands LeAP (Leader+ Action Partnership)	Fenland area of Norfolk and Cambridgeshire	Innovative solutions to outreach work and improving access to services, information, leisure and employment opportunities

East Midlands region

Name	Area	Description of activities
LEADER+ in the Peak, Dales and Moorlands	Most of the area falls within the Peak District National Park	Based on the principle of 'reaching people', proposals include arts activities, career-orientated tourism, new ideas for integrated transport and developing the skills, crafts and cultural traditions special to the Peak District
Lincolnshire Fenland Action Group	The Fenland area around Spalding, south east Lincolnshire	Enhancing the competitiveness, quality of employment and community pride of the horticulture sector in the area
Rockingham Forest Local Action Group	Based on the Rockingham Forest Countryside Character Area in Northamptonshire	Actively involving local communities in the conservation and enhancement of the area's natural and cultural heritage. Developing and promoting local countryside products, services and visitor attractions in a sustainable way

North East region

Name	Area	Description of activities
LEADER+ in North Northumberland	The Alnwick and Berwick upon Tweed districts of North Northumberland bordered to the north by Scotland	Adding value and synergy to local initiatives focusing on the cultural heritage, arts and crafts and food and drink products of the area. Extending tourism opportunities through the environmental and cultural base of the area
North Pennines	Includes Northumberland National Park and the North Pennines AONB	Supporting and encouraging rural micro-businesses, promoting an entrepreneurial culture and sustainable economic development. Encouraging local people to explore their traditions and culture through the arts

South West region

Name	Area	Description of activities
Blackdown Hills Rural Partnership	Based on the Blackdown Hills AONB across the Devon/Somerset border	Adding value to local food and drink, forestry and woodlands, and arts and crafts products through the creation of a Blackdown Hills brand. Promoting environmental best practice and increasing social inclusion
Dorset Chalk and Cheese Local Action Group Partnership	Corresponds closely with the Dorset Downs and Cranborne Chase Character Area	Marketing of locally branded products through co-operatives. Developing new tourism initiatives based on assets of the area. Increasing the environmental knowledge and skills of people living in the area and among those who visit it
North West Devon LEADER+	The area between Exmoor and Dartmoor National Parks, and the main Bristol Channel resorts	Encouraging rural enterprise through leadership and team working including local product marketing and biofuels initiatives. Cooperative working between agriculture and tourism
The Somerset Level and Moors LEADER+ Local Action Group Partnership	The unique low-lying Somerset Levels and Moors area	Adding value to local products. Developing tourism based on the natural and cultural resources of the area using village tourism forums to promote local sustainable tourism, events and festivals
The 'Sustain The Plain' Local Action Group	Salisbury Plain area of Wiltshire	Bringing together the diverse military and rural communities located around the Plain. Environment and heritage conservation. Tourism, recreation and business development

West Midlands region

Name	Area	Description of activities
Herefordshire Rivers Local Action Group	The parishes around the rivers Wye and Lugg and their tributaries	Promotion of local products based on the environment and heritage of the area and the celebration of the environmental and heritage aspects of the area

Yorkshire and The Humber region

Name	Area	Description of activities
East Riding of Yorkshire Local Action Group	Covering the wolds and coast areas of East Riding of Yorkshire to the north and east of Hull	Supporting new local enterprises drawing on the enhancement and conservation of the natural and cultural heritage of the area. Strengthening market towns as a nucleus for rural restructuring
Penistone and District Community Partnership	Bordered by Barnsley on the east, the western part of the area is in the Peak National Park	Creating employment by enhancing the competitiveness of local small businesses. Promoting tourism through the rural heritage of the area. Securing rural services for local communities
Selby District Local Action Group	The most southerly district in North Yorkshire	Rural employment initiatives including support for small businesses, local products marketing and training and development

North West region

Name	Area	Description of activities
Cumbria Fells and Dales LEADER+	The English Nature 'Natural Area' for the Cumbria Fells and Dales including the Lake District National Park	Creating a dynamic local produce economy based on the principles of sustainable development through the local selling of locally branded products, with links to the tourist market
Lancashire LEADER+ Local Action Group	North and East Lancashire	Providing a greater range of locally available services and employment opportunities. Establishing a Charter Mark to open up new market opportunities for rural products
Northern Marches - England	Located within the Cheshire and Shropshire Plains	Business support activities including training and the use of redundant buildings, and enhancing and promoting the natural and cultural assets of the area. Includes joint projects with the neighbouring Northern Marches-Cymru local action group

South East region

Name	Area	Description of activities
Isle of Wight Rural Action Zone	Based largely on the Isle of Wight AONB	Developing tourism and economic activities based on the natural characteristics of the area. Promoting a sustainable landscape and identifying problems associated with living and working on the land slip
Mid Kent	Stretches north to south from the Isle of Sheppey and river Swale coastal marshes to Romney Marsh and Dungeness	Creating a thriving and varied business base on and off farm through the promotion of local produce and the utilisation of rural resources. Promoting sustainable environmental land management practices. Improving the provision of and access to local services
New Forest Local Action Group	Based entirely on the New Forest Heritage Area	Bringing together traditionally separate sectors within the area through the promotion of locally branded products and the New Forest pony. Also developing sustainable land management practices
The Wealden and Rother Rural Renewal LEADER+ Area of East Sussex	Based on the East Sussex Rural Priority Area, including the High Weald AONB	Local enterprise development through fostering traditional skills. Investing in local products and landscapes and maximising the human and cultural resources of the area
West Oxfordshire Network	The West Oxfordshire District area	Improving access to health, welfare and rights. Community action to address the decline in rural services and improving the physical and social infrastructure for access to services

You can find more information on LEADER+ from the DEFRA's England Rural Development Plan website at www.defra.gov.uk/erdp and local action group contact details are available from the Government Offices listed on www.defra.gov.uk/erdp/leader/contacts0501.htm

For information on other EU funding for culture see Euclid's UK Cultural Contact Point website www.euclid.co.uk

Agri-environment schemes

Agri-environment schemes provide major benefits to the historic environment, with the potential to achieve far more. This article examines the schemes, in particular, Environmentally Sensitive Areas and Countryside Stewardship Schemes, and their successes

Government agri-environment schemes have been in operation in England since 1987. Over the past 15 years they have expanded and taken an increasingly active role in the protection and management of the rural historic environment. Following the Agenda 2000 reform of the Common Agricultural Policy, the schemes have been incorporated in the England Rural Development Programme, and are likely to double in scale over the next six years. The growth of the schemes has run concurrently with the development of landscape management techniques and a new understanding of the pressures on the historic environment created by intensive farming. This understanding includes the recognition that the system of price supports, initiated after World War II, has become anachronistic, having led to higher indirect costs to consumers and a degraded environment. The recent Foot and Mouth outbreak has shown how vital the countryside is to the rural economy.

In the design and implementation of agri-environment schemes, a balance is struck between wildlife, landscape, historic elements, public access, practical land management and agricultural factors. This means that the schemes are broad-based with prescriptions that cover the wide variety of circumstances encountered on holdings nationally. Since their inception, however, the schemes have been developed to address specific technical issues both nationally and locally. Good examples are the Environmentally Sensitive Areas (ESAs), originally relatively simple schemes, which have, through periodic review, become more focused on specific issues within their borders. New options have also been added to the Countryside Stewardship Scheme to address specific land management issues, such as the enhancement of upland landscapes and the encouragement of arable bird populations. These changes affect the historic environment, notably through restoration of traditional farm buildings in both schemes and the option to manage upland archaeological sites.

Delivering benefits

The main schemes deliver benefits to the historic environment in different ways, given their history, implementation and the manner in which external advice has enhanced individual agreements. Underlying these differences, however, are common principles:

- Farmers and landowners can enter voluntary, ten-year agreements to undertake certain farming practices and capital works to maintain and enhance the rural environment;
- Agreement holders are compensated for undertaking the work by payments calculated on the basis of the income foregone (into which can be included a small incentive element, up to 20% of the total);
- Capital works are grant-aided up to a maximum of 80% of the total costs.

Under the schemes, the historic environment is protected in two ways: by cross-compliance and proactive works. Under cross-compliance, all agreement holders are obliged to prevent damage to environmental assets such as historic and archaeological features.

Cross-compliance

Two new cross-compliance conditions were introduced under the Agenda 2000 reforms. First, there is a greater emphasis on grazing management in order to ensure that permanent pasture fields on the holding, whether under agreement or not, are stocked at a sustainable level to prevent overgrazing and undergrazing on fragile earthwork sites. Second, there is a greater emphasis on adherence to the Code of Good Agricultural Practice and the Code of Good Farming Practice in order to ensure that agreement holders in breach of environmental legislation – including the Ancient Monuments and Archaeological Areas Act 1979 – may have their management agreements curtailed. Other England Rural Development Programme Schemes, including the Organic Farming Scheme and the Hill Farm Allowance, have similar cross-compliance conditions.

The effectiveness of cross-compliance conditions is assessed by on-site monitoring. Compliance checks and care and maintenance visits are undertaken by the Department of Environment, Food and Rural Affairs (DEFRA) staff, who

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Bronze Age reaves in the Upper Plym Valley, Dartmoor. The archaeology of open moorland will benefit substantially from the introduction of sustainable stocking densities and proactive management works under agri-environment agreements

ensure that agreement holders are aware of their responsibilities, and by the Rural Payments Agency, which validates claims on work undertaken. In both cases, the evidence suggests that cross-compliance effectively protects sites and that there has been little new damage to archaeological sites under agreement. This conclusion is supported by the results of a formal monitoring process that is an integral part of the scheme and an obligation under EU rules.

The effectiveness of ESAs in the management of the historic environment was monitored between 1987 and 1998 through assessing changes in land-use and undertaking baseline surveys of individual monuments. The results suggest that monuments have been better protected on ESA agreement land than on land not under agreement, a finding particularly important in view of the significant land improvement in the late 1980s brought about by the first ESAs. Similarly, monitoring of the Countryside Stewardship Scheme, through appraisal of agreements, suggests that the scheme has been successful in protecting the historic environment.

Proactive work

The most important component of agri-environment schemes is the pro-active work than can be undertaken to maintain, protect and enhance sites and landscapes. That work covers the management both of specific sites and of landscapes. Management of specific sites includes general positive measures such as reversion of arable land to permanent grassland, scrub clearance, boundary restoration and fencing for grazing management, all undertaken as standard items within the schemes. In addition, there are measures individually tailored for each site, such as ESA Conservation Plans and Countryside Stewardship Scheme Special Projects, which permit specialist restoration of a wide range of individual sites, from Bronze Age barrows and medieval field systems, to a 19th-century greenhouse and World War II airfield buildings. There is also a specific Countryside Stewardship Scheme measure to promote the management historic features (up to 1.5ha in extent) situated in Less Favoured Areas.

Restoration of traditional farm buildings

There are provisions within both schemes for restoration of traditional farm buildings – essentially pre-World War I structures in traditional materials (see Trow, 24–7). Under these provisions authentic materials must be used, with replacement on a like-for-like basis. Also, though grant-aid does not dictate the post-repair use of the building, the fundamental structure of the building cannot be changed. This element has increased in importance over

the life of the schemes, although the level of uptake clearly reflects the levels of grant available. On upland both within ESAs and in Less Favoured Areas, the top rate is 80% of costs: in lowland ESAs and through Countryside Stewardship Scheme, the grant rate is 40–50%. Some ESAs have no buildings option.

Management of landscapes

In addition to these specific measures, the schemes also permit a wider understanding and management of the landscape. The Countryside Stewardship Scheme, for example, embraces historic landscape restoration projects including specific measures for parkland and water meadows. These are eligible for a one-year Restoration Plan to identify the value of the landscape and repair measures to be carried out under the full ten-year agreement that follows.

A common problem in all schemes is how to gather environmental and economic data so that each agreement addresses the full range of environmental issues. The Integrated Land Management Plans, developed by the Agricultural Development Advisory Service (ADAS) in the early 1990s, were based on a survey of wildlife, landscape and archaeology within a holding. That method of collecting environmental data was subsequently used in ESA and Countryside Stewardship Scheme agreements, realigned to take account of the practicalities of implementing large schemes.

Audit of environmental data

To include local circumstances in ESA agreements, Project Officers use environmental data provided by other bodies or new data acquired at the time of designation. Increasingly, new data has been obtained from Geographical Information Systems (GIS), and some ESA teams use the new ArcView-based Gen-i system containing a wide range of environmental data sets including SMR information. Environmental checks are undertaken for each application area, and the management agreements include the values and priorities identified. That system was developed to deal efficiently with large numbers of applications, particularly in the early years of the ESA.

Where the number of applications is small – the older ESAs or small designated areas – each is sent to the County Archaeologist for consultation. In the Blackdown Hills ESA, however, a different approach was adopted. A survey undertaken at designation led to the compilation of a database of sites, each linked to generalised management prescriptions based on land-use, site complexity and survival, which is used by Project Officers to advise applicants.

In the Countryside Stewardship Schemes, environmental data has been acquired through consultations with partners. This approach was devised when the scheme was small, with less than 800 agreements nationally in the first year. County Archaeologists and English Heritage have been key partners, providing information on the location and management of both designated and non-designated sites. The enlargement of the scheme over the past ten years – and most particularly the additional resources conferred by the England Rural Development Programme – has caused problems due to the large number of applications and a timetable for consultation driven by a single mid-summer application deadline. DEFRA, English Heritage and the Association of Local Government Archaeology Officers (ALGAO) are exploring ways of resolving those problems.

Business data

A key element missing from earlier consultations has been data relating to the business of the holding, which would permit environmental actions to be related to the ability to undertake management action. Two 'Upland Experiments', each lasting from 1999 to 2001, have addressed this omission by linking the Countryside Stewardship Schemes with Objective 5(b) Structural Funding in the Forest of Bowland and Bodmin Moor. The Upland Experiments were seen as pilots to inform the development of future agri-environment schemes and rural development policy. Each application in these areas has been accompanied by a survey of the environmental assets of the holding accompanied by an assessment of the farm business. Through this audit, environmental data, including existing SMR information, is collated and synthesised and priorities identified. For archaeological remains in need of management action, a payment is available for 'Restoring historic features in upland landscapes', also available in other Less Favoured Areas.

This inclusion of environmental data, with partner organisations involved in the acquisition and the collation of data, has been adopted in other agri-environment schemes, most notably in the Welsh Tir Gofal and Scottish new Rural Stewardship Scheme.

Examples of good management

The workings of the agri-environment schemes are best illustrated by two recent examples from Devon where the schemes have contributed significantly to the protection of the historic environment:

Clayhanger Roman Fort, Devon:
This fort was discovered in 1987 through aerial photography followed by ground survey that revealed excellent survival of the enclosing ramparts as earthworks standing about 0.5m high. The field was under arable cultivation, and the ramparts, at the top of the slope surrounding the site, were considered under significant threat from erosion. The site was subsequently scheduled. An application for a Countryside Stewardship agreement was received in 1999 for the holding that included management works on boundaries, margins on arable fields and the reversion of the fort to permanent grass from arable which, by that time, was under 'set-aside'. This was a considerable commitment on the part of the farmer since the area of the fort was his most productive arable land.

The application was notable for the emphasis it placed on archaeology, possibly following a drive by the Farming and Rural Conservation Agency (now DEFRA) to raise awareness of the historic environment among partners who routinely submit applications to the Countryside Stewardship Scheme (see Bretherton, 56–7). The fort at Cudmore has now been reverted to permanent grass, to be managed under a sustainable stocking regime with no application of fertiliser. For the duration of the agreement, the threat of arable cultivation has receded, and continued agreements could ensure the long-term survival of the site.

This example reinforces the fact that farmers and landowners may undertake archaeological management works for reasons other than financial; in this case the farmer wanted to 'do the right thing' with an archaeological site in which he had gained an interest through the Countryside Stewardship Scheme.

Aerial view of Clayhanger Roman Fort at Cudmore, Devon, with surviving enclosing ramparts, discovered in 1987 through aerial photography followed by ground survey

Braunton Great Field, Devon:
The Great Field at Braunton is a rare survival of an intact medieval open field in North Devon that covers 142 ha of Grade II arable land. It was never enclosed and is still divided into strips, which average 0.2 hectares, separated by thin strips of grass, known locally as 'landsherds', vulnerable to loss through ploughing. The only physical boundaries that separate the furlongs are additional ridges, many of which have survived as tracks, and stone markers, or 'bondstones', most of which have been lost (Exeter Archaeological Field Unit, nd). There has been a significant reduction in the number of strips from 448 with 62 owners in 1842 to 86 strips with 20 owners in 1994, reflecting the agglomeration of holdings that has accelerated in recent years.

The loss of the strips and the consequent detrimental effect on the historic character of the Great Field has been of concern for some time, largely because management options are not straightforward. The arable character of the field, which was never in a rotation system, needs to be retained while protecting and reinstating the non-structural landsherds. These archaeological concerns also need to be balanced against the requirements of the farmers of the field who need to farm in a practical manner using modern machinery, usually incompatible with narrow strips.

In 2000 a scheme was introduced for the Great Field under the Countryside Stewardship Scheme Special Project provision whereby work outside the scope of Countryside Stewardship Scheme guidelines and standard payments could be undertaken. The aims of the Braunton scheme are to:

- Retain the historic character of the Great Field;
- protect existing landsherds and furlong boundaries;
- encourage restoration of landsherds and furlong boundaries (based on the 1842 Tithe Award map);
- ensure the ecological diversity of the landsherds.

Braunton Great Field, North Devon, showing 'landsherd' strip division and amalgamated strips in the background

© DEFRA

A relic field boundary on Roborough Down, Dartmoor. This under-grazed common has seen substantial scrub clearance under an ESA Habitat Management Plan which has substantially benefited both the historic environment and ecology of the common

The scheme achieves these aims by ensuring that the landsherds are not ploughed but cut every year, that no fertiliser is applied and that furlong boundaries are managed.

Given the value of the land for cropping and its quality (it is the best land in the Braunton area), it has taken time to persuade farmers that the scheme is of value and will not detrimentally affect their farming systems. Due to the newness of the scheme, it is too early to demonstrate its future success, although the fact that one of the four farmers with the largest holdings on the field has applied augers well for the future. It is to be hoped that elements of the scheme can be used in other areas with similar problems, notably the strip fields of the Isle of Axholme where a Special Project is under consideration.

These examples are two among many that demonstrate management issues addressed by agri-environment schemes. This is not to say that there are not challenges ahead, some of which will be highlighted in the mid-term England Rural Development Programme review in 2003. In terms of the historic environment, these include: greater use of pro-active conservation measures to ensure that full use is made of the schemes; a balance between administrative simplicity and incorporation of effective technical advice into agreements; and a greater understanding of the impact of agricultural practices on the historic environment and ways to mitigate them through targeted research and development.

There is already a body of evidence, both from formal monitoring programmes and informal discussion, to confirm that the schemes are already having significant success in the protection and management of the historic environment. □

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PLOUGH DAMAGE

A new approach to mitigation

Solutions to plough damage, which has long been recognised as a threat to archaeological sites, are now being formulated in a joint project by DEFRA and specialist teams

Plough damage to archaeological remains is as old as farming itself and has been acknowledged as a problem for conservation since at least the early 17th century. Most recently, *The Monuments at Risk Survey 1995*, published by Bournemouth University and English Heritage in 1998, brought home the scale of destruction by ploughing, showing that agriculture is the largest single source of piecemeal damage to archaeology and that sites in areas of arable landuse are at much greater risk of damage than those in other uses. After years of campaigning, these results directly provided the basis for English Heritage and the Council of British Archaeology (CBA) to encourage the government to undertake a study of ways to help farmers reduce such damage.

The Management of Archaeological Sites in Arable Landscapes project is being undertaken for the Department of Environment, Food and Rural Affairs (DEFRA) by the Oxford Archaeological Unit in conjunction with the CBA, Oxford University and Reading Agricultural Consultants. The objective is to develop a management strategy for preserving archaeological sites on arable land where damage is most serious and sustainable solutions urgently needed. Such solutions must be effective in substantially reducing the medium- to long-term threat of damage (knowing where it is most likely to occur) as well as in maintaining agricultural viability and minimising extra cost to the exchequer or loss of revenue to the farmer.

Archaeological site damage

The range and character of damage to archaeological sites in arable landscapes is well attested and varied. The archaeological complex at Knowlton, Dorset, is a good illustration. Even where earthworks survive as unploughed 'islands' in arable land, they are not immune from damage – for example by scrub, rabbit and badger burrows. A recent condition survey of the largely arable landscape of the Avebury World Heritage Site has shown how threats to the archaeological monuments vary from one part of the area to another, reflecting detailed landuse and topographical differences.

Though it is easy to demonstrate that damage has occurred, it is often a great deal more difficult to show how active or fast the attrition is. Often there is a threshold effect where critical evidence could be destroyed at a stroke by only slightly deeper cultivation, as at the Roman mosaic at the Stanwick Roman Villa in Northamptonshire and in many nearly-ploughed-out barrows where key evidence may survive in remains of old ground surfaces once sealed beneath substantial mounds. However, this threshold of damage can be buffered by a sealing layer of older ploughsoil, colluvium or alluvium, though even here damage may result from subsoiling or drainage.

Getting a grip on plough damage has also been hindered in the past by the sheer scale of the problem. Although some sites have been carefully examined (the scheduled Roman city of Verulamium, for example), it is plainly not feasible to carry out elaborate and possibly expensive archaeological evaluation of every threatened site. What is needed is a reasonably robust and simple method of assessing the risk of damage and location of its greatest threat. The DEFRA project has, therefore, been developing methods of risk assessment geared to key factors that affect damage, including intrinsic site characteristics and land management.

Assessing the risk of damage

At the site-specific level, two ways of assessing risk are currently being field-tested, a scoring method and a decision-tree approach. At national level, the extent and scale of the risk has been digitally mapped to indicate soil depth, erodability and drainage combined with cropping patterns. The national map correlates quite well with the sample of sites recorded by the MARS project. With further refinement, the map should

The effect of ploughing on ancient monuments. Damage to a Roman mosaic at Stanwick, Raunds, Northamptonshire

help identify suitable areas for piloting remediation schemes and assessing the scale of resources needed on a national scale. It should also show where efforts might best be focused regionally in relation to other issues of agri-environmental policy.

Finding solutions

There are two means of stopping or at least decreasing the rate of cultivation damage. The first is to revert land to grassland or long-term 'set-aside'. The second is to adopt archaeologically benign methods of cultivation (or at least substantially postpone the point when damage will start to occur again). Either can be combined with additional measures to address problems arising from other threats to archaeology in arable landscapes, such as drainage, farm infrastructure requirements, burrowing animals and visitor wear.

Reversion to permanent grassland or long-term 'set aside' is archaeologically the most secure solution, and this also has numerous other potential benefits in terms of habitat regeneration, soil conservation and promotion of farmland bird populations – the key indicators for agri-environment policy. This is not, however, always practicable for arable farmers. They may have little or no use for such land if they have no livestock, and taking high-yielding arable land out of production can be relatively expensive. Direct drilling (or 'no-till cultivation') and various forms of minimum cultivation offer alternative approaches that potentially allow archaeological sites to remain in arable production without deep soil disturbance. Although there are some technical issues to be addressed, an encouraging finding emerging from the DEFRA study is that the areas where there is greatest risk of damage to archaeology are also those where direct drilling is most viable from a farming point of view. This type of cultivation also offers other environmental benefits, including better soil management, lower energy consumption, reduced use of agro-chemicals and potential for improving arable biodiversity (ground nesting birds, arable weeds).

Managing archaeological sites on arable landscapes

In addition to technical solutions, the study is examining what procedures – good practice codes, agri-environmental schemes, ancient monument management agreements – might deliver better management of archaeological sites in arable landscapes. Consideration is also being given to overcoming barriers to reversion or benign cultivation solutions, through farm business types, capital investment strategies and crop rotation systems.

Earthwork monuments. Aerial photograph of Knowlton, Dorset, showing the upstanding earthworks of a late Neolithic henge and round barrow (centre), with the cropmark traces of levelled earthworks all around

For some areas, neither reversion nor minimum cultivation offers a simple practicable and cost-effective solution. In the East Anglian Fens, deep cultivation for high-value root crops and drainage threaten exceptionally well-preserved archaeology that is steadily emerging from the shrinking peat. This situation is particularly challenging in terms of the farm economics of the area and the unsuitability of minimum cultivation methods for root crops. The Fens are likely to become a key test area for resolving conflicts between high-value farming and high-value archaeology.

More generally, there is a good chance that a practical scheme for encouraging farmers to conserve archaeological sites currently under threat can be developed. After two centuries of recognition by archaeologists, plough damage is being taken seriously as a primary issue for the conservation of non-renewable environmental assets in intensive arable landscapes. The potential for delivering other environmental benefits through archaeological conservation measures, and the prospect of the shift in farming support highlighted elsewhere in this issue, together offer further hope that sufficient resources might become available in the coming years to make a serious start on addressing this huge issue. □

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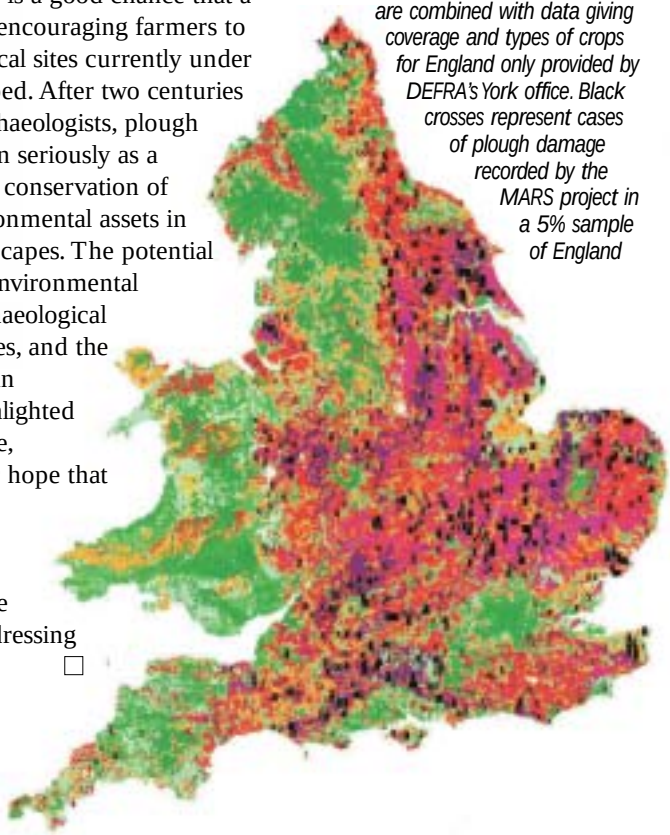

Map of the risk of plough damage to archaeological sites. Key soil characteristics for England and Wales (based on data giving the predominant soils per 1km square supplied by the National Soil Resources Institute of Cranfield) are combined with data giving coverage and types of crops for England only provided by DEFRA's York office. Black crosses represent cases of plough damage recorded by the MARS project in a 5% sample of England

ABANDON • REPAIR • CONVERT?

Finding a future for historic farm buildings

With a difficult future facing agriculture, the outlook for many traditional farm buildings is uncertain. Yet these buildings are major contributors to the character of rural areas and represent important historic and economic assets that must be managed carefully if their potential is to be fully realised

Traditional farm buildings are by far the most numerous type of historic structure in the countryside. They provide testimony to the long history of farming and settlement in the English landscape and are valued as a prominent contributor to regional distinctiveness. They also provide an invaluable resource for the future diversification of the farming industry and for wider rural development initiatives.

Historic farm buildings are not immune from the accelerating pace of change in the countryside. Change is being driven by a complex series of factors: the decline of traditional rural employment; the replacement of small-scale farming by larger capital-intensive enterprises; the problem of declining farm incomes and depopulation in upland areas; and the effect of national, European and international agricultural and trade policy. Foot and Mouth disease has further forced the pace of change.

The challenges posed to the historic farm buildings of the countryside present a particularly acute dilemma. On the one hand, farmers and land managers cannot be expected to shoulder the burden of maintaining buildings that have limited or no agricultural use. On the other, the large-scale dereliction of buildings or, equally, the wholesale, poorly informed or ill-conceived conversion of surplus buildings could irrevocably damage important and irreplaceable historic assets. Rapid and large-scale changes to the farm building stock could also seriously impair the quality of our most valued landscapes and damage their appeal for locals and visitors alike. With the quality of the landscape now increasingly recognised as a major contributor to regional economies, particularly in the north and the west, the policy framework for these buildings needs to recognise and balance their multi-functional role as historic, scenic and economic assets. Policy decisions on their future should be based on the best possible information.

Finding and funding a future

There are two key features of the Government's response to the structural decline of the agricultural industry in the UK, as outlined in the Rural White Paper. The first is to boost support offered for environmental land management by extending its agri-environment schemes (Middleton, 16–21). The second is to encourage and facilitate diversification of agricultural incomes, one particularly significant opportunity for farmers being the conversion and re-use of historic farm buildings. The Government has already revised its Planning Policy Guidance (in PPG7) to ensure that local authorities are able to take a more positive approach to farm diversification proposals.

Research recently published by the Department for Transport, Local Government and the Regions (DTLR) demonstrated that planning regulations are not a serious constraint on farm diversification. Far more significant problems are caused by the limited availability of advice and finance for diversification projects. The provision of grant-aid for the repair or conversion of buildings will therefore be an important factor in stimulating rural regeneration. A variety of organisations can offer assistance. English Heritage grant aids the repair of particularly architecturally significant structures listed at grade I or II* (see Hughes, 38–9). In addition, grant-aid for the repair of farm buildings, listed or unlisted, has long been a feature of MAFF and now DEFRA policy where this is in keeping with specific environmental objectives. The Countryside Stewardship Scheme can, for example, contribute up to 50% of eligible costs to land managers undertaking the restoration of traditional farm buildings, providing the work meets the Scheme's objectives for landscape and history. It can also contribute up to 80% of the costs for projects in Environmentally Sensitive Areas.

In parallel with this assistance for the repair of traditional farm buildings, grant-aid is also available for conversion to other uses. The Redundant Building Grant Scheme, operated by the Regional Development Agencies, is designed to support the conversion of redundant farm buildings to business use, particularly within Rural Priority Areas. The fund can contribute up to 25% of the cost of necessary building works and can be combined with other public funding. Following publication of the Rural White Paper,

additional funding of £4 million was added to the scheme for 2001–2. Funding for the renovation of rural buildings may also now be available, as part of a wider project, under the Rural Enterprise Scheme (RES), which is part of the England Rural Development Programme (ERDP).

The Rural Enterprise Scheme

Among its aims, the RES can support 'renovation and development of villages and protection and conservation of the rural heritage' and 'diversification of agricultural activities and activities close to agriculture to provide multiple activities or alternative incomes' where this will assist the development of 'more sustainable, diversified, and enterprising rural communities'. The RES can, therefore, assist with the conversion of rural buildings, including historic farm buildings, to alternative business or community use. Where projects will have a minimal economic return for the applicant, funding can vary between 50% and (exceptionally) 100%. Where an economic return is likely, grant is paid at a rate between 30% and 50%. RES is administered on a regional basis with each region having its own priorities. Applications are assessed on a competitive basis against similar projects received. The Government has also recently announced that farmers considering the future of their farm buildings will be eligible for the costs of a day's advice from a planning consultant in order to help them apply for a grant under the RES.

Although the Rural Enterprise Scheme is in its infancy, it is clearly going to have major potential in terms of finding new uses for traditional buildings. It is particularly welcome therefore that the scheme is flexible enough to fund good quality feasibility studies, as well as the conversion work itself. One example of this is provided by a grant recently paid to a local amenity trust to produce a report and conservation plan for the Grade II listed 16th-century market hall in Pembridge, Herefordshire. Feasibility studies of this type should ensure not only that projects, including those incorporating building conversion proposals, are financially well-grounded, but also that the historic character of buildings is recognized and properly reflected in any proposals for change of use.

Derelict field barn at Thornton Rust, in the Yorkshire Dales National Park. In the open countryside, conversion to alternative uses will often be too intrusive visually and will generate traffic. Low key re-use may be possible but many buildings have already been abandoned. What will be the impact of further large-scale dereliction on our most sensitive landscapes in the future?

Abandon, repair, convert?

Identifying priorities

There is a careful balance to be struck in considering conversion proposals. In the past, too much attention has focused on conversions to domestic use. Domestic conversions tend to be the most damaging to historic fabric and character and are potentially the most intrusive in sensitive landscapes. They also tend to attract inward migration to the countryside rather than serving local communities and, in doing so, often shut off employment-generating options for new businesses.

Strategies for the re-use of farm buildings therefore need to focus on alternative uses wherever possible. As the state, character and current use of the traditional farm building stock and the economic drivers governing the health of the farming industry vary radically from region to region, it is important that these strategies should be responsive to local economic factors as well as to broader historic and landscape concerns.

While the new and enhanced sources of grant-aid under the ERDP are welcome, it is clear that there is an extremely limited information base available either to those formulating policy or taking casework decisions. At present, too many key questions simply cannot be answered. For example, how many traditional farm buildings survive, how many are derelict, and how many are already converted? What historic, social and economic criteria should be adopted in order to determine whether conservation or conversion is the most appropriate option for a building? How can the landscape contribution of individual buildings or groups of buildings be evaluated? How important are traditional farm buildings in encouraging tourists to visit particular landscapes?

In order to begin to address these questions and provide a better framework for decision making, English Heritage has commissioned a number of projects. In collaboration with the Countryside Agency, for example, we have sponsored a desk-based 'Audit and Evaluation' project to provide

Unlisted timber-framed barn at Cliddesden, near Basingstoke, in the process of conversion, 2001

© Lake District National Park Authority/Andrew Lowe

Agri-environment schemes have rescued many farm buildings, particularly within our visually most striking landscapes. Here, Ecclerigg Barn is repaired as part of the Lake District Environmentally Sensitive Area scheme

facts and figures on the current situation as well as an overview of local planning policy on traditional farm buildings. We have also undertaken a pilot programme of farm building characterisation, aimed at assessing the significance of historic building types and their distribution within the landscape. In addition, as part of our wider Buildings at Risk initiative, we have analysed local authority 'At Risk' registers in the predominantly rural East of England Region, providing us with a first regional-level overview of need.

All of these initiatives are examined in more detail elsewhere in this issue and future issues will report in more detail on the results of our joint venture with the Countryside Agency. □

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Guidance on the Rural Enterprise Scheme is available from the DEFRA website: www.defra.gov.uk/erdp

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Local craftsman 'torching' (applying lime plaster to the underside of the slates) the roof of a farm building, as part of an project funded through the Dartmoor Environmentally Sensitive Area scheme. Rural Development Programme projects conserve the historic environment, help keep craft activities alive and create employment

HISTORIC FARM BUILDINGS

Audit and evaluation

Historic farm buildings are a much-valued rural feature but under pressure in many parts of the country. English Heritage and the Countryside Agency have joined forces to commission research that will provide a better understanding of the changes taking place

The pace of change in the countryside is accelerating at a rate unprecedented in modern times, and historic farm buildings are not immune from this process. Important factors are the decline of traditional rural employment and small-scale farming; its widespread replacement by larger capital-intensive enterprises; the problem of declining farm incomes and depopulation in upland areas (invariably those with the greatest number of designated landscape areas); and the effect of national and European policy. Massive economic and social pressures arising from the current and severe agricultural depression have been worsened further through the recent outbreak of Foot and Mouth Disease. Shifts in government policy and new initiatives for the diversification of the rural economy are also likely to result in increased development pressures.

The need for research

If decisions on the management and protection of historic farm buildings are to be well-founded, it is essential that the resource is accurately described and changes monitored. Only from this base of knowledge can the impact of modern farming practices, the pressures for development in the countryside, and the impact and effectiveness of the planning system on the management of the resource be properly assessed. Surprisingly little is known, however, about the effect of the planning system on the management of the historic farm building resource. There is a need for research to determine the nature both of statutory development policy and non-statutory guidance at a national and local level and the extent to which they are based upon an appreciation of the traditional farm building resource. Also, to what extent do they encourage or discourage conversion and re-use, and to what extent do they take account of the variety of farm building types? To find some of the answers, English Heritage and the Countryside Agency have formed a partnership to undertake an audit and evaluation of English farmsteads. The Countryside and Community Research Unit (CCRU) of Cheltenham and Gloucester College of Higher Education is conducting the research on their behalf over a 13-month period between March 2001 and March 2002.

Haymaking in the Yorkshire Dales is being replaced by silage making, which does require the field barns that are a prominent feature of some of these upland dales

© Peter Gaskell

Traditional historic farm buildings are often unsuited to the demands of modern commercial farming. This is part of a Grade I listed longhouse and stable in Dartmoor

Audit and Evaluation Research Project

Part 1 Quantifying the listed resource and identifying trends:
The aim of Part 1 is to provide baseline data on the character, management and threats to listed farm buildings in rural areas. This will provide robust data to inform English Heritage, the Countryside Agency and other policy makers of the extent and nature of change to the management of the farm building resource. A number of different data sources are being used to build a picture of the listed resource, including analysis of building at risk surveys, photographic records and local authority planning applications. The results will provide a set of indicators to monitor changes taking place to the listed farm building resource.

Part 2 Understanding the issues and identifying best practice:
The aim of Part 2 is to identify and describe factors that precipitate change in the historic farm building resource. This phase of research encompasses the whole resource (listed and unlisted). A literature review, combined with a series of interviews with key policy makers, is being undertaken to identify macro-pressures for change that bear upon on the rural economy and to provide a context for detailed analysis of statutory development policy and non-statutory guidance at the local level.

A postal questionnaire sent to Conservation Officers and their planning authorities will give a comprehensive picture of the management of the resource at local level. This is being combined with a desk study of development plans and written guidance to identify examples of best practice. By evaluating the effectiveness of policies that affect historic farm buildings, this research will provide valuable information to aid development of future policy.

The project has already generated great interest within central and local government and among professional and voluntary organisations that deal with historic farm buildings. This is borne out by the very high response rates the research team have obtained from their survey work to date. Over 62 % of local authorities, for example, do not monitor changes to the listed resource; only 12 % of those who have kept a buildings at risk register keep it updated annually. Almost all would value the publication of frameworks for understanding of the listed and unlisted resource (see Lake, 30–1). This feedback is building a detailed picture of the complex factors that affect the management of the historic farm building resource in different parts of the country.
The report will be available in August. □

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Listing Team

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© Peter Gaskell

Traditional historic farm buildings are often unsuited to the demands of modern commercial farming. Listed examples, as here, cannot survive without some form of viable use

HISTORIC FARM BUILDINGS

Characterisation

Management of historically important farm buildings that give local and regional character to the countryside is increasingly supported by thematic survey, landscape characterisation and frameworks for evaluation

Farm buildings have always been replaced or adapted to meet the needs of evolving farming practices, and they will need to change in the future. Because there are so many surviving, their exposure to demolition or obliteration has provoked little reaction. Their diversity and apparent great number – an estimated 1.2 million buildings dating from before 1914 in England and Wales – has also presented obstacles to their inclusion within broad conservation programmes, unlike linear landscape features such as walls and hedges. The Historic Buildings Resurvey of the 1980s resulted in many exciting discoveries and new additions to the lists, from cruck-roofed field barns on the Cumbrian fells to medieval timber-framed barns in East Anglia. The fieldwork conducted on these parish-by-parish surveys, however, drew our attention to the lack of well-researched criteria for selection and the all-important context within which informed decisions concerning future designations and management should operate.

Thematic surveys

In order to remedy this situation, English Heritage's Listing Team started a series of thematic surveys of farm buildings to analyse present statutory lists and produce frameworks for future assessment. Norfolk provided an ideal county in which to compare and contrast the statutory lists (last updated in the early 1980s) with the results of detailed survey work undertaken by the Centre for East Anglian Studies in 1986–7. Historical development, regional variations within the county, building types and dating were all considered. The report concluded with appendices including recommendations for (exemplar) listing and analysis of the lists. The thematic survey of Norfolk farmsteads and the general leaflet, *Understanding Listing: The East Anglian Farm*, were both produced by English Heritage's Listing Team in 1997, and described in *Conservation Bulletin* the following year.[1]

It became increasingly apparent during subsequent survey work in Suffolk that the thematic *listing* approach was in danger of becomingly inequitable, principally for the reason that access depended on the goodwill of individual owners. Draft reports for Cumbria and Devon have, therefore, concentrated on the broad evaluation and analysis of the built resource. An initial report has also highlighted the importance of planned and model farmsteads in the development of agriculture in the 18th and 19th centuries, the range of building types surviving, and both the chronological and spatial distribution of known surviving examples. A gazetteer of all known examples was compiled and distributed to county Sites and Monuments Records (SMRs) and relevant Conservation Officers in 1999, and a publication will be available in April.

© Peter Gaskell

Although none of the small field barns that characterise the northern gritstone valleys of the Yorkshire Dales has been listed, they form an integral part of a highly distinctive and specialised agricultural landscape. Parts of Swaledale have now been included in a Barns and Walls Conservation Scheme, managed by the Yorkshire Dales National Park in partnership with English Heritage

Need for guidelines

It was evident that listed farm buildings form only a fraction of what can be defined as 'historic' and contributory to regional character and distinctiveness. Nevertheless, it was also evident that plotting the distribution even of listed buildings by type and date strongly relates to associated historic landscape character, as the maps compiled for the Norfolk pilot study clearly showed. It follows that characterisation of the built resource must, where possible, complement

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Park Farm, a Grade II listed group on the Alnwick estate, Grade II, designed by John Green for the Duke of Northumberland in 1827. Our thematic survey has examined model farmsteads, which show that British farming, often led by the great landlords, was at the forefront of the development of commercial agriculture on a global scale

landscape characterisation work at both the broad level and in the more detailed regional studies now underway (see Fairclough, 10–11).

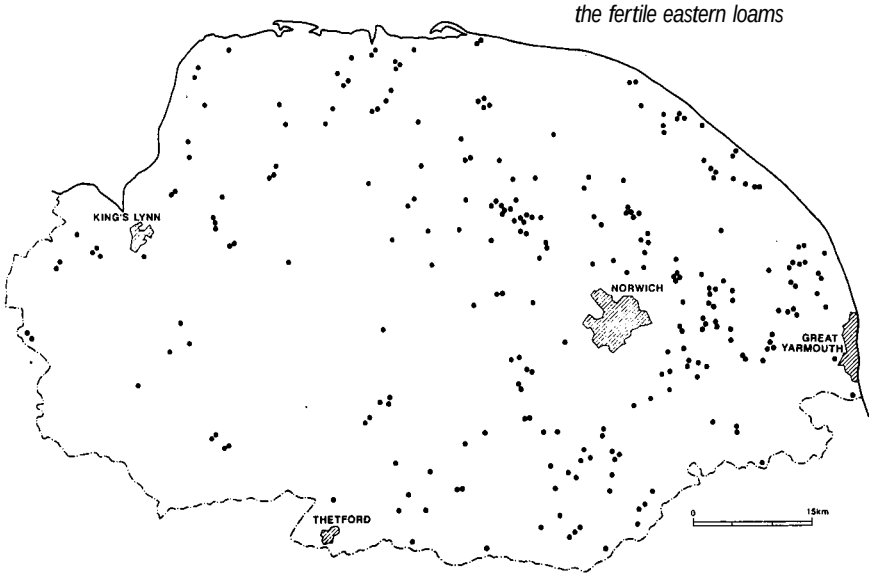
Frameworks for evaluation, rather than characterisation in its purest sense, can also comprise tools for positive management of the built environment by organisations and individuals. A recent review of Countryside Stewardship Schemes, for example, identified the need for specific training in the identification and protection of historic and archaeological features. The adaptive conversion of historic farm buildings promoted by the Rural Enterprise Scheme and the Rural White Paper highlights the need for even the most basic kind of guidance on regional character and acceptable levels of adaptation.

Clearly, definition of the market (planners, conservation and agri-environment practitioners, economic development officers, owners and their agents and architects) dictates what shape characterisation should take, through the use both of examples and observations on the listed and unlisted resource. To establish a methodology that is both nationally applicable and comprehensible to its users, English Heritage and the Countryside Agency are producing exemplar reports for discussion and future refinement at county and regional level. The latter could match government regions, reflect past and present cultural, agrarian and economic diversity, and integrate guidance on conversions and acceptable adaptations to listed and historic buildings in both continuing agricultural use and new adaptive reuses. □

Jeremy Lake
Inspector of Historic Buildings
Listing Team

(1) Lake, J and Hawkins, B 'Thematic listing surveys of farm buildings', *Context* **58** (July 1998), 24–5; Lake, J 'New strategy to save farm buildings', *Conservation Bulletin* **34** (July 1998), 22–3.

Map showing the distribution of listed farm buildings within Norfolk dating from between 1700 and 1800. Increased productivity led to new building in the fertile eastern loams



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EAST OF ENGLAND REGION

Rural buildings at risk

Last year's analysis of local Buildings at Risk registers has given the East of England Regional Team a database with a distinctive local view of the changing character of rural England. This database can be used to devise strategies, target funding and promote consistency

More than a third of the buildings at risk (BARs) in local registers in the East of England are categorised as being domestic or residential, but this covers an immense range, from mansions to hovels. Conversely, a windmill might be categorised as agricultural, industrial or water/drainage, yet its structure and the problems associated with re-use are the same, whatever the original function. Also, the unassigned category can hide some locally important building types.

The following analysis of more than 800 of those BARs treats building types in a more flexible way to examine trends behind their redundancy and to promote a better understanding of the situation in this rural area.

Changing agricultural practices

One third of the buildings in the sample are at risk because of changing agricultural practices. More than 100 of the entries are threshing barns (reflecting their predominance in the listing schedules), but the category also includes cart-sheds, byres, stables and even a piggery. While few of the farm buildings are ruinous, some of these less prestigious structures are vulnerable to neglect. Only in a few cases is the complete farmstead recognised as being 'at risk'. Many of the barns have consent for residential conversion.

The demise of horsepower in food production led to the redundancy of a range of farmyard buildings from stable blocks, to smithies and coach houses. None of the horse-related buildings is ruinous and only one is incapable of beneficial use. With strong policies and imaginative, coordinated action, many of the stables could continue in some horse-related use.

While some agricultural dwellings are in villages, many of the farmhouses and cottages at risk are associated with isolated and run-down redundant farmyards or with active farmyards where re-use is not welcome.

*Changing agricultural practices at Freethorpe Stockhouse, Norfolk (Broadland DC), Grade II**

Decline of the Great House

Some country houses and mansions have been empty and roofless for generations. Others are capable of re-use for family living or corporate headquarters. Also included in this category are associated lodges, gatehouses and servants' wings, most of which are eminently suitable for re-use.

A wide range of ancillary 'kitchen garden' buildings helped to support the smooth running of the Great House. This often-neglected category – including dovecotes, orangeries, ice houses, detached kitchens, dairies, water towers and kennels – forms an important socio-economic sub-group. Some are vernacular, while others are classically decorative. Many of these buildings could be given new uses and few are ruinous. However, there are follies, summerhouses and temples in the gardens of the Great House, designed for pleasure; tea-houses at the ends of walks and detached music rooms have potential only for low-key re-use. Structures, such as bridges, arches, walls, ha-has and terraces, need to be cared for as such. Although only two such structures are ruinous, few appear to be capable of any beneficial use.

Changing technology

We still need to drain low-lying land and process raw materials, but more than fifty mills (some with machinery) lie abandoned, their function superseded by technological change. While few are ruinous, more than half are incapable of beneficial re-use, including drainage mills, and most tower mills. Only the larger water mills and steam mills have potential for re-use. Though these mills are complex, requiring expert advice and craftsmanship, there is a shortage of skilled millwrights and few apprentices to replace them.

Almost all other industrial buildings were built for food processing, including maltings, breweries, a mustard factory, a fish curing works and kilns. Most of the industrial buildings are robust, none is ruinous, and most are capable of beneficial economic use.

The rapidly evolving technology of military hardware means that, even over a very short period, uniquely important buildings have been abandoned. Many of the 20th-century military structures are of metal (such as airship hangers) or reinforced concrete (such as radar blocks) and require specialist conservation techniques. Martello Towers form the largest group in this category, but only one is fit for economic use.

*Remains of former technology at Sutton Mill, Norfolk (North Norfolk DC), Grade II**

Changing modes of transportation have led to a wide variety of redundant buildings, including railway stations, goods sheds, ticket offices and road bridges. Those associated with water transport include lock gates, a ferry berth gantry, a lighthouse and a wreck house for the Cinque Ports.

Changing role of market towns

Market towns are service centres for rural parishes, and places to live, work and be entertained. They contain significant numbers of empty historic buildings capable of economically beneficial uses. Most residential entries on the BAR lists are flats above shops and offices, an untapped source of potential residential floor-space. The list of redundant civic buildings includes large edifices such as corn exchanges, workhouses and hospitals. Buildings originally erected for entertainment (such as pubs, spa-rooms and cinemas) are also numerous. English Heritage's Heritage Economic Regeneration Scheme (HERS) and the new Market Towns Initiative can help revitalise market towns and bring such buildings back into use (see Thomas, 68–71).

Religious observation

East Anglia is renowned for its wealth of pre-Reformation churches. Some churches have been redundant for generations, and isolated, ivy-clad towers feature strongly in some landscapes. Over half are ruinous, and few are capable of any beneficial use. They need repairing, consolidating and making safe, perhaps benefiting from coordinated interpretation. Finding appropriate uses for others requires imagination and effort. The character of a church will change if its furnishings and fittings are removed, and few can be subdivided without losing their contemplative aspect.

Next steps

Country life has changed radically during the centuries, leaving many historic buildings empty and neglected all over England. Analysing the local BAR Registers in the other English regions would give us useful insights into a variety of rural problems, not least the effects of the crisis in agriculture upon historic farmsteads. Understanding of the nature and extent of the buildings at risk, in light of contemporary rural issues, should help us formulate relevant and effective BAR strategies.

Unfortunately, the standard and coverage of local registers varies considerably, making comparisons difficult. A new national impetus is required to encourage consistency of categorisation and format. By taking on a coordinating role, English Heritage can help to make local BAR registers more effective tools for action and enable experienced local authorities to come together to establish best practice.

Those local authorities that do not yet have BAR registers need to be made aware of the benefits of setting out their BARs in register format, analysing the results and formulating strategies to tackle problems. By promoting the best BAR registers, English Heritage could spread good practice, with a target of full coverage in each region.

English Heritage already part-funds a number of local authority BAR officers, some of whom work in partnership to consider case studies and common problems. The effectiveness of BAR staff could be enhanced by English Heritage strengthening these partnerships and formalising a BAR network.

Part of a former military network. Martello Tower Z, Bawdsey, Suffolk (Suffolk Coastal DC), Grade II and Scheduled Ancient Monument

© English Heritage

Redundant 14th-century Church of St Mary the Less, Thetford, Norfolk, looking for a new owner

While individual local BAR registers can direct grant-aid towards specific building types in a district or county, a regional or national analysis can focus spending on a wider scale. Rural development funding can be influenced by a proper analysis of BARs. Also, bids for European funding can be made with more certainty and on a broader basis if based on a firm understanding of the BAR problem. Indeed, *Power of Place* seeks to establish State of the Historic Environment Reports, which should encompass a well-informed consideration of neglected and redundant historic buildings. □

Jenny Carlile
Historic Areas Advisor
BAR focal point
East of England Region

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*The decline of the Great House. Gatehouse at Purton Grange, Hertfordshire (N Herts DC), Grade II**

FARM BUILDINGS AND FMD

English Heritage's response

During the recent 11-month outbreak of FMD, English Heritage offered advice and support to government officials to reduce the risk of damage to historic farm buildings and buried archaeology

Cleaning and disinfecting historic farm buildings and equipment has been an essential part of the Government's programme for eradicating Foot and Mouth Disease (FMD). Unfortunately, the potentially damaging impact of this large-scale operation on the historic environment was not anticipated when the first cases of FMD were announced in February 2001. Once English Heritage began to receive reports that farm buildings were being damaged in Cumbria and other areas, it was clear that we needed to respond to the crisis by providing practical advice and establishing a dialogue with the officials working on the ground. The National Trust and the statutory amenity societies, particularly the Society for the Preservation of Ancient Buildings and the Council for British Archaeology, joined us in calling for an approach that took account of the significance of historic farm buildings and buried archaeology.

The scale of the crisis was enormous. In Cumbria alone, over 1900 farmsteads were affected, of which over 20% involved listed buildings. The disease had a major impact on farming and farm buildings in many parts of England, particularly Devon, the Welsh borders, parts of Yorkshire and north Lancashire and Northumberland. All farms with cases of the disease, or near infected farms (dangerous contacts), were unable to function as farming businesses or re-stock with animals until they had been officially declared 'clean' by officers from the Department of Environment, Food and Rural Affairs (DEFRA, formerly MAFF).

© DEFRA

A bank barn on an unlisted farm at Cunningarth, Wigton, incorporating a Roman altar, was not pressure-washed

Damage to farm buildings

DEFRA Field Officers specified a programme of cleaning for each group of farm buildings, to be undertaken by contractors or the farmer. In the early stages of the clean-up operation, damage was certainly caused to the historic environment. At least one clay-built farm building in west Cumbria was demolished during the operation, a regrettable loss to this specialised group of vernacular buildings. Other farm buildings had all internal timbers, including loft floors and animal stalls, removed and burned, because those timbers were considered incapable of cleaning. In other cases, cobble floors and yards were removed or covered with concrete. Strong chemicals such as phosphoric acid were used that would corrode, stain or cause salt damage to historic masonry and timbers. Damage was also caused by pressure-washing fragile historic fabric such as clay or soft sandstone. Due to restrictions on access, it was not possible for local authority conservation officers to visit farms to advise DEFRA on the cleaning operation.

In June 2001, in response to continuing concerns about apparently unnecessary damage, English Heritage produced a practical guidance document on managing the cleaning and disinfecting of farm buildings, *Gently Does It*, available on www.english-heritage.org.uk/days-out/footandmouth.asp#guidance in a section entitled 'Advice on Cleansing and Disinfection'. It contains advice on consultation, the legal framework, details of non-damaging alternative treatments, such as lime-wash and citric acid, and lists of suppliers and contacts. It had not, however, been straightforward for us to demonstrate that a traditional material such as lime-wash is effective as a disinfectant and so gain DEFRA's official approval for its use. The Building Conservation and Research Team at English Heritage, led by John Fidler, therefore commissioned research at the Institute of Animal Health at Pirbright. We were able to show that limewash has a pH of more than 12, which is effective as a disinfectant.

Our first priority in liaising with DEFRA was to ensure that its officers were aware of which buildings are listed, partly through local authority

databases and partly through our own database at the National Monuments Record Centre. Second, we urged DEFRA to follow the guidance in *Gently Does It*. Third, we encouraged DEFRA to appoint historic buildings consultants to provide in-house advice on each case. This worked very well in Cumbria, where Peter Messenger was seconded to DEFRA from his post as Carlisle City Council's Conservation Officer. He coordinated a team of consultants to provide practical advice on historic farm buildings. In other areas, including Lancashire and Yorkshire, English Heritage ensured that DEFRA had access to appropriate professional expertise on archaeology and historic buildings. These actions greatly reduced the risk of damage, and it was clear that without specialist advice on the ground, on a case-by-case basis, the guidance in *Gently Does It* would have been difficult to implement in practice.

We are pleased that DEFRA effectively responded to our concerns about damage to historic buildings, although we regret the damage that was caused in the first few months. It became DEFRA policy not to demolish buildings. To avoid major works to buildings in very poor condition, DEFRA increasingly used powers to close off contaminated buildings, using the notification procedure under Article 38 of the Foot and Mouth Disease Order 1983. This did mean, however, that repairs could not be undertaken to these fragile buildings during the timescale of the notice, potentially increasing their risk of deterioration.

© DEFRA

Cleaning and repairing cobbled floors, East Old Wall. Many farmers preferred to clean these themselves rather than let contractors pressure-wash them

© DEFRA

Penruddock, Cumbria, Grade II. The rotten floor in this byre was removed at the request of DEFRA

Buried archaeology

In the early months of the outbreak, buried archaeology was under threat from DEFRA's operations in digging pits for disposal of slaughtered animals and infected materials and also digging lagoons to take infected slurry and water. Again, the initial concern was that DEFRA was not aware of the archaeological implications of their operation, and a system was established to ensure that DEFRA consulted the SMR in each area. It also became DEFRA policy not to dig trenches or lagoons. The extent of damage to archaeology in the early months of the outbreak remains unknown.

The FMD crisis has exposed the need for good quality databases on all aspects of the historic environment. Some local authorities do not have GIS and still rely on paper records that are difficult to access. We are now more aware than ever that farm buildings are a vulnerable but very valuable part of the historic environment and that not all buildings that deserve protection are listed. The crisis highlighted the very poor condition of many farm buildings, which needs consideration if we are not to lose more. The need to direct additional help to farmers for repairs should be included in discussions on the long-term future of farming and farm buildings. On a positive note, we have found that there is considerable appreciation of the value of historic farm buildings among the farming community and DEFRA officials, and our practical advice was welcomed where it had been provided at the right time. □

Marion Barter
Historic Buildings Inspector
North West Region

After 11 months, England was declared free of Foot and Mouth Disease after the lifting of the last 'at risk' status from Northumberland at midnight on 15 January 2002

ABBEY FARM BARN

Repair rescues monastic barn

The repair of Snape Barn, damaged by a storm in the late 1980s, is an example of how low-cost, well-considered building works can extend the life of a medieval building and create opportunities for new uses

Abbey Farm Barn is one of only two medieval aisled barns in East Suffolk. It lies a short distance to the east of the village of Snape in Suffolk, in farmland to the north of Snape Maltings. The historic farmstead group includes Abbey Farmhouse, a 16th- or early-17th century timber-framed farmhouse of two storeys, listed Grade II, as well as later cartsheds. The monastic barn is a medieval timber-framed aisled building of seven bays, listed Grade II*. The farmstead group stands close to the site of Snape Priory, founded as a cell of the Benedictine Priory of Colchester in *c.* 1155, of which there are no other upstanding remains.

The barn is weatherboarded externally, with roof coverings of pantiles to upper slopes and tarred tin sheeting to the lower pitches. In recent years, it has been used as a general low-key storage shed, as its dimensions would not allow easy access for modern farm machinery.

In October 1987, the barn suffered storm damage. The owners installed temporary bracing, but the barn was still near collapse when the owner's architect consulted English Heritage for technical advice and asked about the possibility of grant-aid for urgent repairs. In recognition of its condition, the barn was put on English Heritage's Buildings At Risk register.

The cost even of a minimal repair scheme appeared prohibitive, especially in the context of the low-key, non-income-generating use of the barn. The proposal to limit repairs to those which were absolutely essential to secure structural integrity and maintain the building as wind- and weather-tight was therefore considered appropriate by all. Clear parameters set by the structural engineer allowed the architect to concentrate on what really mattered, avoiding the temptation to complete non-essential repairs or tidy it up. Rigour in adhering to this philosophy resulted in the retention of the essential character of the building and kept costs under control.

Preparatory work

The initial tasks included building analysis and drawn survey work in order to understand the historic and archaeological significance of different parts of the building. This information was used to inform repair strategies. The resultant drawings were also reproduced to show proposed repairs, which were then cross-referenced to the specification and schedule of work. Analysis continued throughout the repair phase to record things that came to light and inform ongoing repair decisions.

Partnership

Decisions regarding the building were taken in consultation with English Heritage staff, the owners, the conservation officer and the contractor. This partnership approach was the key to a successful repair project, since everyone understood what was required, and the contractor in particular responded positively to being included in making decisions.

Dendrochronological samples were also taken but unfortunately failed to produce conclusive evidence with which to date the medieval timbers of the barn. Dating of the structure has therefore been made primarily on the basis of the building structure and joint types, in relation to other buildings in the county.

Discoveries

The most significant discoveries were the survival of large amounts of original fabric in the west gable-end wall, the location of the original east end wall, the innovative use of raking (and possibly earthfast) arcade posts and the presence of a stop-splayed scarf joint on two opposing arcade plates, of a type seen only in the 13th-century barn at Great Coxwell, Berkshire. The conclusion is that the building may well date from the 14th century, based on comparisons with buildings exhibiting similar features elsewhere in the county.

The repair work was based on the criteria of minimum intervention and avoidance of distorting the evidence provided by the fabric. The original proposal to complete timber-to-timber repairs was discarded as this would have led to the loss of significant quantities of important medieval fabric. A library of purpose-made metalwork repairs was devised to guide and record the repair work. The interventions are

clear but do not detract from the character of the barn. Timber-to-timber repairs were used for fabric of less archaeological significance. The use of steel components was the eventual solution that enabled virtually all the original fabric to be retained. In September 2000, work commenced on site; in March 2001, repairs were completed on time and to budget.

The Future

The project demonstrates that it can often take some time to assess a building and devise an appropriate repair and re-use strategy relevant to the archaeological and historical importance of the building but suitable for sustainable future use. The barn is now safe and secure, but the story does not end there. The owners have been involved in preliminary discussions with the Local Authority and English Heritage over permissible low-key uses that would preserve the essential character of the monastic barn, allow public access and generate income to maintain it. The owners and their architect are considering the possibility of converting adjacent, later buildings to holiday accommodation that would enable the barn to remain in a low-key ancillary use. They are also exploring possible links with the Snape Maltings site. □

Trudi Hughes
Historic Buildings Surveyor
East of England Region

Abbey Farm Barn, a medieval aisled barn, Snape, Suffolk, Grade II – before (left) and after (below) repair*

ENGLAND'S WETLANDS

Monuments at risk

English Heritage is committed to the conservation and good management of wetland landscapes and the monuments they contain, a most fragile part of the historic environment. We will work to extend the cooperation and understanding between the historic environment and nature conservation disciplines that has been developed in recent years

Research into monuments at risk in England's wetlands, commissioned by English Heritage from the University of Exeter, shows:

- at least 50% of the original extent of lowland peatland has been lost during the last 50 years, and
- an estimated 2,930 wetland monuments have been totally destroyed, and some 10,450 are likely to have suffered damage, desiccation and partial destruction in the same period;
- the main causes of this widespread destruction are drainage, water abstraction, conversion of pasture into arable, peat wastage, peat erosion, peat extraction, and urban and industrial development, but
- 72% of local authorities have no policy for the identification, assessment, preservation, or management of wetland archaeology.

For almost thirty years, English Heritage has supported a long-term strategy of survey and research of the main lowland wetlands areas of England (the Somerset Levels, the Fens, the raised mires, basin, and valley wetlands of north-west England, and the Humberside Levels). Unlike free-draining soils, wetland landscapes preserve both organic archaeological remains (especially wood) and natural palaeo-environmental material, a uniquely important component of our cultural heritage.

In the early 1970s, it was apparent that wetlands were under severe pressure from peat extraction, intensifying agricultural exploitation and natural erosion. The primary aim of four wetland projects was to identify and record the archaeological potential of each area in order to support a proactive management strategy to conserve areas of high archaeological potential and significance.

That extensive survey programme, completed in 2001 with the publication of the final reports of the North-West Wetland Survey Project and the Humber Wetland Project, was celebrated at a conference held by the British Academy on the subject of 'Wetland Landscapes and Cultural Responses' and also by the publication of a special wetland issue of *Current Archaeology* (sponsored by English Heritage).

'It is through visiting wetlands that people come into direct contact not merely with fascinating flora and fauna, which is our ecological heritage, but also with areas of long-standing social and cultural significance.'

Michael Meacher MP,
Minister for the Environment
'Wetlands and the Community'
(speech on Wetlands Day,
31 January 2002. London)

For the future, English Heritage has developed a high-level strategy to encourage more effective conservation, protection and management of England's wetlands. This strategy is based on the results of the four survey projects, the Wetland Management Project and a desk-top assessment of Monuments at Risk in England's Wetlands. Implementation of this strategy is a key component of our Monuments at Risk agenda.

Wetland management project

Throughout the work of the surveys, the threats and pressures acting on wetlands continued unabated. It had been possible to respond in particular circumstances with specific conservation or excavation projects (such as the preservation of the Sweet Track, the Fenland Management Project, experimental monitoring at Market Deeping and Sutton Common), but there was a limit to what could be achieved by a reactive, site-specific and resource-intensive approach. We needed, instead, to adopt a much broader proactive role to define the causes of damage and destruction to wetlands in a landscape context and to develop management techniques to mitigate them.

In 1993 English Heritage commissioned a survey of techniques used to protect and manage wetlands in other contexts (including wetland

nature reserves). This survey showed that considerable expertise already existed in other disciplines and that archaeologists had a great deal to learn from agencies managing the natural heritage. The survey also demonstrated that wetlands with an archaeological component require active management if they are not to degrade, and it concluded that archaeological and nature conservation interests should work together to manage wetlands. To achieve this, archaeologists would need actively to promote the concept of cultural heritage to agencies managing wetland nature reserves to ensure that archaeological interests were neither neglected through lost opportunity nor inadvertently damaged through ignorance of the historic environment.

Monuments at Risk in England's Wetlands Project

The final stage of our strategy was the Monuments at Risk in England's Wetlands Project, commissioned from Exeter University in 2000 (www.ex.ac.uk/marew/). This desktop assessment collated data on the destruction of wetlands in England over the past 50 years together with evidence for the rate of destruction or damage to archaeological sites in wetlands. It provided a general picture of the condition of England's wetland archaeological resource and the risks it faces, creating a benchmark for future monitoring. It examined, in particular, the effect of hydrological changes on waterlogged organic archaeological and palaeo-environmental remains and the impact of peat extraction, forestry, and urban and industrial expansion. The project also collated and assessed information on governmental and non-governmental policies that effect wetlands and wetland archaeology.

The results of existing surveys, together with data drawn from relevant Sites and Monuments Records, allow us to calculate that the average density of archaeological sites in all England's wetlands (including lowland and upland peatlands and alluviated lowlands) is 1 per 100 hectares (220 acres), with an estimated total of at least 13,400 individual monuments. Before the drainage and cutting of peat, each of these sites would have been well preserved, and many would have contained important waterlogged materials.

The most visible and widely recognised threat to the wetland archaeological resource is peat extraction, and several organisations including the Council for British Archaeology have long campaigned against the continued extraction of peat. The project demonstrates clearly, however, that the greatest impact is from the drainage of

Wicken Fen, Cambridgeshire. A fen reserve managed to encourage the diversity of wildlife that developed as a result of human exploitation over the centuries. In order to maintain the ecological interest of the reserve, crops of reed, sedge and litter are harvested regularly. The area shown has been cut for sedge, and the surface pools are indicative of the success of measures taken to prevent loss of water from the reserve

land for agriculture and the subsequent drying out of archaeological remains, followed by peat wastage from agricultural land. Other significant threats include urban and industrial expansion onto wetlands and the eutrofication of peat through agricultural fertilisation. In all, an estimated 1.1 million hectares of wetlands can now be shown to have been destroyed as a result of these various threats.

New threats, such as short rotation cropping (including the encouragement of energy crops as part of the England Rural Development Programme) continue to emerge. Generally the lowland wetlands have suffered considerably more that upland wetlands, many of which are located in our national parks (Dartmoor, Exmoor, the Peak District) with a rather more sympathetic land management regime. Nevertheless, taken across the country as a whole, the rate of destruction of the wetland archaeological resource over the past 50 years is staggering: well over half of the potential 13,400 sites will have been destroyed or damaged, resulting in the unrecorded loss of a very significant part of our cultural heritage.

Of the surviving wetlands, less than 1% constitute areas of semi-natural land or are under active nature conservation management (although much larger areas are subject to schemes that benefit from land management and conservation regulations and subsidies that recognise and enhance wetland habitats). In most cases, such measures help protect the archaeological resource by discouraging the conversion of pasture into arable land. Nevertheless, the use of fertilisers on permanent pasture and the variable watertable that exists in such schemes (high in the winter but lower in the summer) poses a serious threat to the waterlogged archaeological resource. Despite the conclusions of the Wetland Management Project, close cooperation between nature conservation agencies and the archaeological community has been slow to develop.

The project also surveyed the prevailing land use and management regimes of surviving wetland areas in order to estimate the current condition of our wetland heritage. Although the majority of known wetland monuments have suffered from partial destruction and desiccation and a very significant number have been completely destroyed in the past 50 years, the extent of unsurveyed wetland areas (including the inter-tidal wetlands and urban waterlogged deposits) is still considerable.

Hydrology is the critical factor in preserving the archaeology of England's wetlands. Sites can be preserved only if their hydrology can be controlled. The project highlighted both the need for better prospection techniques to identify wetland archaeology and also for new approaches to the management and conservation of wetland deposits. These must address issues of drainage, catchment and water quality in order to preserve whole wetlands rather than isolated sites or 'islands' of monuments. This broader approach requires an active partnership between archaeologists, nature conservationists and a wide range of interest groups in order to preserve the natural, cultural and recreational values of surviving wetlands.

English Heritage's wetland strategy

Following completion of this project, we have developed a high-level strategy for conserving and managing wetlands that sustains many of English Heritage's core activities: identifying, understanding, protecting and managing the historic environment. It includes elements of the *Power of Place* agenda, in particular, the link between cultural heritage and nature conservation in the regeneration of the countryside, training and education to promote better conservation, and increased public access and enjoyment.

The strategy is based on four main principles:

- Management, promoting ways to conserve and protect the cultural heritage by developing guidance and best practice jointly with nature conservation;
- Outreach, promoting understanding and appreciation of the cultural heritage of wetlands by making the results of wetland research easily accessible to the general public, landowners, managers and specialists;
- Policy, promoting the cultural heritage interests of wetlands in the work of local authorities, national, international and intergovernmental agencies;
- Research, continuing with programmes of survey and excavation as a pre-condition of successful management and promoting applied research to underpin management and inform future policy.

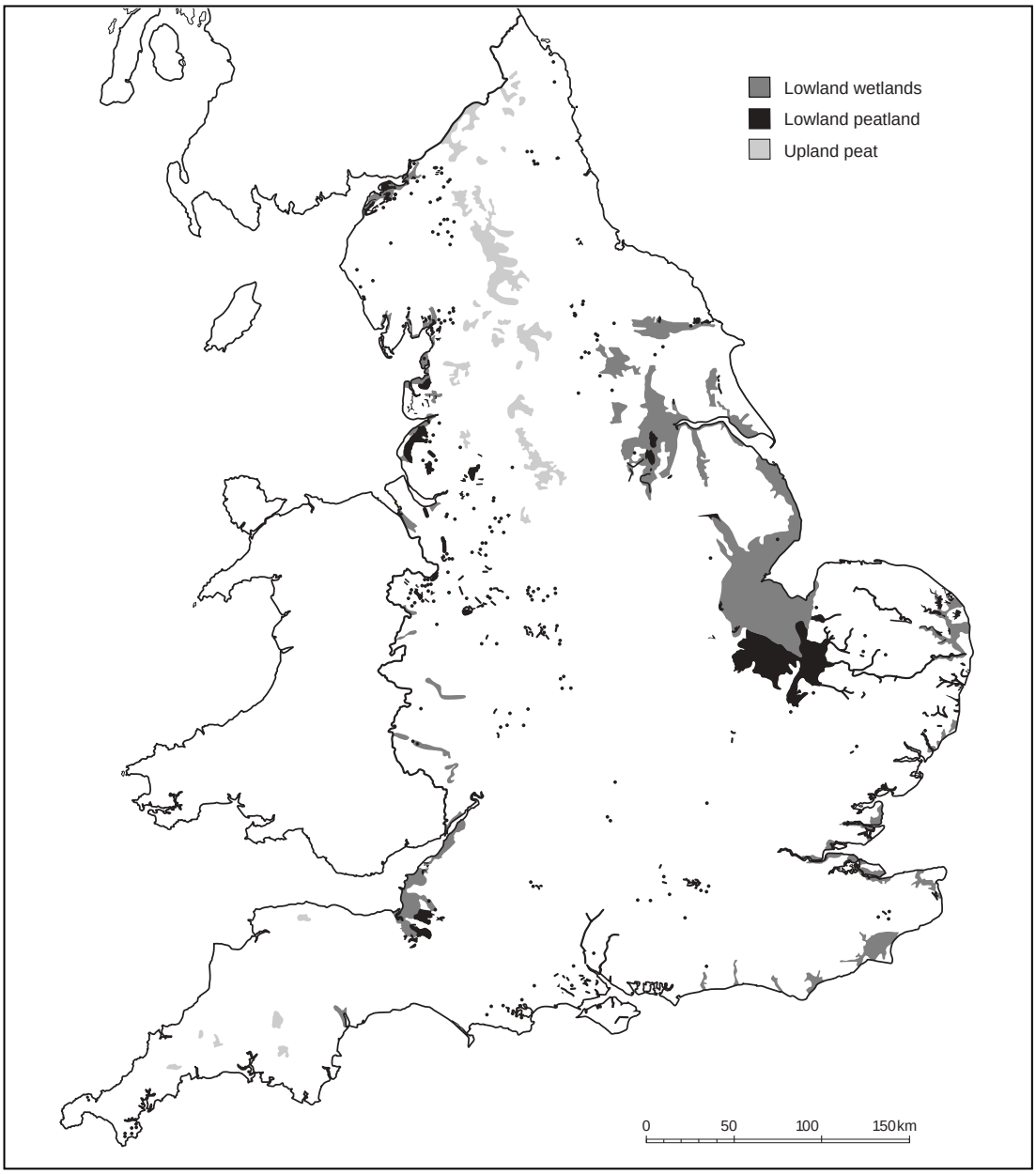
In addition, we are also exploring how to support public participation in wetland research during fieldwork and have commissioned a project from

Exeter University to create GIS-enabled wetland archaeological resource information to support local authority planning curators. Later this year, we will be supporting a pilot project at the Lancaster University Archaeological Unit to explore in more detail the archaeological potential of upland peats and to assess the extent and causes of upland peat erosion.

A European perspective

The problems of wetland archaeology are not unique to England, and we are working closely with our sister heritage agencies throughout Europe to find common solutions to common problems. In 1999 a newly formed network of European state heritage services (*Europae Archaeologiae Consilium* or the European Archaeological Council) held a major international symposium on the archaeological heritage management of wetlands in Europe, jointly organised by English Heritage and the Wetlands Archaeological Research Project (WARP), an international association of wetlands archaeologists.

The symposium included a number of regional reviews of heritage management issues and practices in Europe and explored the nature of the management problems facing European archaeologists working in a wetland context. Speakers showed that, although there are clear similarities in the wetland archaeological resource across the Continent, the critical issues relating to



Distribution map of the wetlands of England

its management vary considerably. The symposium highlighted the importance of national and international nature conservation designation and legislation for wetland archaeology and emphasised the urgent need to forge closer links with nature conservationists. In particular, the symposium promoted the better use of the international Ramsar Convention on wetlands worldwide.

The proceedings of the symposium, published by English Heritage, include a survey of wetland concepts and legislation, regional reviews, case studies and related topics that bring together heritage management and nature conservation interests. It concludes with an overview, recommendations for action and a broad strategy for heritage management of wetlands throughout Europe.

The Ramsar Convention on Wetlands

The Convention on Wetlands (Ramsar, Iran, 1971) is an intergovernmental treaty that provides a framework for national action and international cooperation on the conservation and wise (sustainable) use of wetlands. One of the oldest global intergovernmental environmental treaties, it was set up to safeguard wetland habitats and the species that depend upon both inland and coastal and nearshore marine systems (www.ramsar.org). One hundred and thirty countries are party to the Convention, and 1,129 separate wetlands covering more than 91.3 million hectares have been designated as wetlands of international importance.

The UK signed the Convention in 1976 and has 150 wetlands of international importance. Despite advances made since its inception, however, only a relatively small proportion of the world's wetlands is yet afforded the better protection and management that derives from designation. Many countries still lack adequate information about wetlands.

Ramsar sites are designated for their significance in terms of ecology, botany, zoology, limnology and hydrology. Much of Europe's wealth of archaeological and cultural heritage is closely associated with the great natural richness of our wetlands, and many peoples throughout the world continue to depend on wetland resources for water, food and other materials, as well as for safeguarding human health. However, despite a clear recognition of the importance of the cultural heritage (physical structures and artefacts of the past, palaeontological records of environmental and climate change, traditional water and land-use management practices, religious significance, and 'sense of place' for these often mysterious places and their wildlife), the Convention does not allow for site designation under specifically cultural terms. Because Ramsar sites contain an enormous wealth of cultural and archaeological material, it is vitally important that the cultural heritage of these sites is properly identified, documented and incorporated in management plans. Only in this way will the archaeological heritage gain any advantage from the undoubted benefits of sympathetic management regimes that ultimately derive from Ramsar designation.

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The Biskupin fortified settlement, Poland. In the foreground, Bronze Age wooden posts in situ *being sampled for dendrochronology, and parts of the structures preserved by the surrounding wetland. Beyond, a house and walkway re-created for public display. The site and its wetland are protected by national legislation*

Looking east from Burrow Mump, Somerset. In winter, large parts of the Somerset moors are flooded for considerable periods

English Heritage now works closely with the Ramsar Bureau and is taking the lead in a number of initiatives. We are participating in consultations on the draft Global Action Plan for Peatlands devised by the International Peat Society (IPS) and the International Mires Conservation Group. We are also contributing to a survey of National Wetland Policies in Europe and revised guidelines for management planning on Ramsar sites and other wetlands. We have delivered a keynote paper at the European Regional Meeting of the Ramsar Convention on 'Cultural aspects of wetlands as a tool for their conservation and sustainable use'. Working with colleagues in the EAC, we will also be developing guidance on archaeological heritage management in wetlands for incorporation in the Ramsar Toolkit of management guidance, to be included in a handbook of good practice for use by Ramsar site managers.

The importance of cultural values in wetlands will be highlighted at the next full Ramsar Conference of Parties, on 'Wetlands: water, life and culture' (Valencia, Spain, 18–26 November 2002). English Heritage will organise a major session at the conference which we hope will lead to the formal adoption of management guidelines for the historic environment, together with a resolution confirming the significance of the historic environment in wetlands and the need for sympathetic management. □

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WARP occasional paper 16 is available from the EAC secretariat (Dr. F. Lüth, Archäologisches Landesmuseum Mecklenburg-Vorpommern, Schloß Wiligrad, D – 19069 Lübstorf, Germany; Tel +49 3867 7800; Fax +49 3867 8806; archaeomuseum.m-v@t-online.de) for €15 (£9.27) + packing and postage

COASTAL DEFENCE

Caring for our coastal heritage

Coastal archaeological sites and historic buildings are vulnerable to natural erosion. Without care, they may also be threatened by new developments in coastal defence. English Heritage has embarked on a programme of rapid coastal survey to assess the threat to coastal remains

Climate change is rarely out of the headlines these days, and the potential effects on our coasts are well known. The IPCC estimates that mean global sea level might rise by 0.09–0.88m between 1990–2100, and climate models suggest increased storminess. Already, these processes are causing loss of the inter-tidal zone, increasing erosion of dunes, salt marshes and cliffs and damage to sea walls. Important habitats and historic sites situated at the coast are also actively being destroyed.

The archaeology of the coast includes many well-preserved sites, including former dry-land prehistoric settlements; submerged prehistoric forests; wooden structures such as trackways, fish weirs, houses and burial structures; early sea walls; salterns; oyster pits; duck decoys; shipwrecks and hulks. Most historic buildings along coasts are in towns and villages, where sea defences will be maintained, but vulnerable buildings include isolated military structures and lighthouses.

The wish to protect key habitats and adopt a long-term sustainable approach to coastal defence is changing the philosophy of coastal defence. On lengths of uninhabited coastline, sea walls are being abandoned in favour of a broader zone of natural defence and, wherever possible, the development of new salt marsh is being encouraged. These changes have implications for the historic environment.

Coastal management

Coastal defence policy is now the responsibility of DEFRA. During the 1990s, its predecessor MAFF sponsored groups of local authorities to produce a series of *Shoreline Management Plans* (SMPs). These plans, based on discrete lengths of coast (or 'sediment cells') defined by natural processes, identify a broad coastal defence option for each cell. From these top-level plans, more detailed strategy plans and specific scheme designs will be developed.

These initial SMPs are now being enhanced, with a view to producing a 'second generation', and new data will be incorporated. Consideration afforded to the historic environment, inadequately treated in the first generation of SMPs, will be a more important part of the new generation of plans. The second generation of SMPs will also include data from the Futurecoast Project, commissioned by MAFF from Halcrows. In a move away from the simple sediment cell model, this project will consider 'shoreline behavioural units', defined in terms of overlapping elements of the coastline and based on an understanding of information on long-term coastal changes over the last 10,000 years. At the same time, English Nature's *Coastal Habitat Management Plans* (CHaMPs) are aimed at helping local authorities meet the requirements of the EU Habitats Directive: essentially ensuring that coastal defence schemes take full account of wildlife conservation issues.

English Heritage's initiatives

Since the first generation of SMPs, MAFF and DEFRA have produced a series of guidance notes which should promote far better integration of historic considerations in the next generation of plans and in the coastal defence process generally. This is greatly welcomed.

For this to be truly effective, however, two things are needed: first, more detailed guidance on the incorporation of the historic environment in coastal defence procedures and, second, enhancement of the coastal Sites and Monuments Records (SMRs) on which effective consultation depends. To address the first requirement, English Heritage has produced a draft statement, *Coastal Defence and the Historic Environment: A Policy Statement*, on which it is consulting key coastal stakeholders. At the same

Archaeological wooden structures originally built on dry land – such as the Bronze Age timber circle and inverted tree bole seen here at low tide at Holme Next the Sea, Norfolk, and recently radiocarbon-dated to about 2000 BC – are vulnerable to rising sea levels and natural erosion

time, English Heritage is supporting Rapid Coastal Zone Assessment Surveys (RCZAS) in Norfolk, Suffolk, Essex and North Kent – all areas particularly at risk of coastal erosion. The first stage of survey is desk-based: data from historic maps, aerial photographs and SMRs are being put into Geographical Information Systems (GIS) to National Mapping Programme standards. This will be followed by field survey, to verify these results and detect types of sites that cannot be picked up from a desk-based study. The database obtained from the surveys will allow us to make an informed contribution to the second generation SMPs and resultant scheme design.

On the ground, day to day

There is no realistic prospect of preserving the majority of inter-tidal sites from natural erosion in the long term: all that can be done is to record them. The large numbers of sites involved means they cannot all be investigated. Determining priorities for recording will be based partly on the results of the rapid assessment surveys, which will give an indication of the significance and rarity of site classes, and partly on the rate at which sites are being lost. In addition, EU funding has been obtained via Planarch to provide some base-line data on erosion rates. The destruction of sites in the Blackwater estuary, Essex, is currently being monitored in detail, with reference to tidal flow rates and lengths of exposure. The next stage will be to monitor erosion rates in other, more dynamic, coastal environments. We will then be able to estimate whether and how quickly we should intervene.

Unless carefully planned, the new approach to coastal defence could be equally destructive to archaeological sites. Collaboration between local authority curators, the Environment Agency, English Nature and other stakeholders is essential to develop strategies to minimise the loss of sites and information. Several managed realignment schemes have now been completed in the East of England and others are underway. These schemes commonly involve breaching sea walls, creating lagoons to provide open water for birds, and mechanically re-excavating infilled creeks to drain the new inter-tidal area. Sea walls, of medieval or earlier date, often include timber structures; lagoon digging could damage archaeology; and creeks are exactly the locations where early hulks and fish traps can be expected. Based on the experience gained to date, a collaborative approach is being developed, channels of communication established with key partners and archaeological evaluation techniques improved.

Managing the coastal archaeological resource is challenging, but the initiatives outlined above point the way forward. Loss of sites is inevitable, but loss of significant information need not be. □

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Tollesbury Fleet Managed Realignment Scheme, Essex. The area inundated during the scheme shows as pale land, surrounded by unclaimed salt marsh. The breach in the old seawall is visible adjacent to the sinuous creek in the centre of the picture. A new seawall, further inland, separates the scheme area from arable fields. A Roman Red Hill (salt-producing site) was recorded during its construction

Remains of the Anne, a third-rate English warship of 70 guns, run ashore during the Battle of Beachy Head in 1690. A large number of vulnerable historic wrecks and hulks survive in the inter-tidal zone. Only a handful, including the Anne, are statutorily protected

THE PEAK DISTRICT

Lead rakes project

The lead mining remains of the Peak District ore-field retain many values, although they are vulnerable to modern-day mineral and agricultural activity that places them at risk. The lead rakes project will lead to a greater appreciation of the resource and strengthen conservation measures

Lead has been worked in the Peak District since at least Roman times and the visible remains of the industry are widespread. Lead mining reached a zenith during the 17th to 18th century, vying with iron for second place as England's major export behind wool. The main ore-field lies on the eastern side of the limestone White Peak, adjacent to the Derwent and its tributaries, in a belt a few kilometres wide and about 35km long, between Castleton in the north and Wirksworth in the south, mainly encompassed by the Peak District National Park. Few visitors to the countryside can fail to notice the numerous hillocks that are the legacy of both surface and below-ground lead working. There are (or in some cases were) whole swathes of the Peak's central limestone plateau that have many prominent and distinctive lines of hillocks following the mineral veins (large veins = 'rakes', small = 'scrins') that run across the land. These give the landscape a unique character, which reflects the two main traditional sources of subsistence and income over the last two millennia – farming and mining.

Elton Common lead mining remains (Nat. Mon. No. 29975). Survival of the hillocks is intermittent with 'improved' land

Significance

In addition to the very significant contribution to the historic character and distinctiveness of the landscape, the lead mining remains are of great cultural, historical, archaeological, ecological and geological value. Nevertheless, many surface features have been removed by recent mineral operations and agricultural activity – and the resource continues to play an uneasy bit-part in the economy of the region. Both English Heritage and the Peak District National Park Authority (PDNPA) have become increasingly concerned by the rate of loss and the need to achieve a satisfactory balance with the management of sustainable landscape change. Attention has turned to greater use of the conservation mechanisms of negotiation, designation and grant schemes.

In 1998 English Heritage commissioned a report from PDNPA to review the archaeological issues in detail. The report (Barnatt 2000) examines the significance of the remains and the agencies that place the resource at risk. The extent of loss is quantified by aerial photographic assessment; important sites and mining landscapes are identified; and the report closes with a review of the conservation problems and opportunities.

The visible remains comprise hillocks of waste material associated with features such as mine shafts (there are an estimated 25,000 in the region: Willies 1993, 27), opencuts, gin circles, engine houses, crushing circles and 'buddles' for washing ore (Ford and Rieuwerts 2000). The hillocks contain evidence of significant changes in mining practice, having been re-worked several times as a consequence of changes in smelting technology, each of which allowed different grades of ore to be worked for the first time. The hillocks also seal evidence of the earlier phases of mining along veins: opencuts were worked first with later spoil from depth burying the signs of earlier activity. Although the Peak District Mines Historical Society and others have carried out much valuable research, the archaeological investigation of the industry is currently in its infancy, with virtually nothing yet known of the Roman and medieval mines that are documented (Barnatt 1999).

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Tideslow Rake (Nat. Mon. No. 27217) near Castleton, which marches across the landscape for 2.5 km. The rake is a magnificent example of opencut working, with impressive hillocks and it also a SSSI because of a rich metallophyte flora

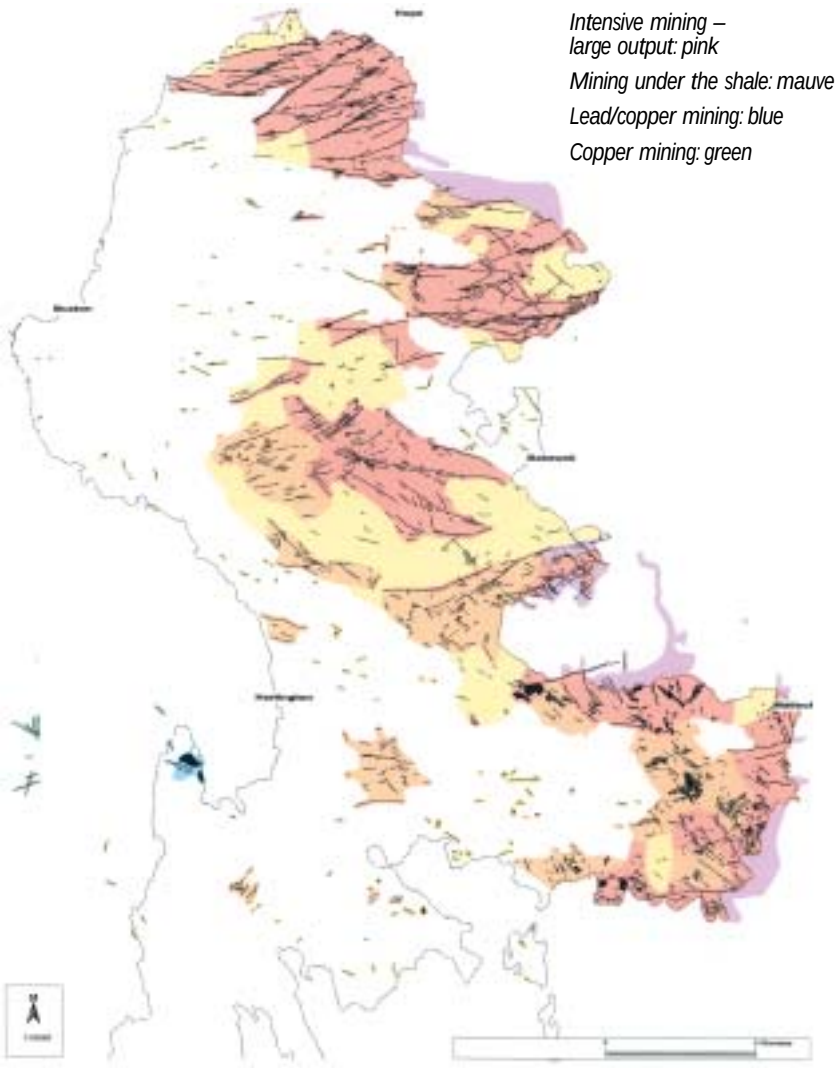
The hillocks are also of ecological value, supporting rare and important 'metallophytes', plants that tolerate the lead-polluted ground, as well as being havens for many wild flowers at a time when traditional habitats such as hay meadow are under increasing pressure. Furthermore, as they contain important evidence for geomorphology, faulting and mineralisation, the hillocks and opencuts are of great geological interest. Moreover, with a wonderfully arcane lexicon of mining-related landscape and technical terms that are often specific to the region (Rieuwerts 1998), the remains are a valued part of the Peak's cultural identity, bearing witness to a once-important industry and many centuries of human endeavour, often in difficult and dangerous conditions.

At risk

Today the hillocks and rakes retain an economic value for mineral companies as they provide a source of fluorspar, barytes and calcite for the chemical industry, and they continue to be re-worked. Mineral removal, however, needs to be balanced with conservation where the importance of the remains should outweigh profit and national socio-industrial need. A compounding factor has been a perception that the removal of hillocks represents the 'improvement' of 'derelict land'. Thus re-working as a form of permitted development has sometimes seemed attractive to the agricultural community for achieving direct economic gain, in addition to a re-modelled 'flat' landscape, that can then be farmed by more intensive methods. Opinions among farmers vary, with some fully acknowledging the conservation value of the hillocks and the problems of contamination that can result from the ground disturbance caused by their removal. Others consider that 'improvement' and intensification is an economic necessity, that can only in some instances be offset by conservation through agri-environment schemes first introduced in the 1980s. Even when in favour of conservation, many farmers do not find the payments made by such schemes a sufficient financial incentive when compared with the prospect of intensification or the income generated by the sale of mineral.

Assessment

Aerial photographs taken by the Royal Air Force in 1995 were used to plot the survival of hillocks on a Geographical Information System (GIS) for comparison with the Geological Survey of Great Britain maps of the ore-field, prepared in the latter part of the 19th century. At that time, wholesale removal of the hillocks had not begun and the maps document the surface expression of veins (linear features) and 'pipes and flats' (mineralised irregular, non-linear features). The assessment has demonstrated that only about a quarter of hillocks that existed in the 19th



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The distribution of mineral veins and pipes in the 19th century, together with the Peak District ore-field historic character types

Key

Vein hillocks: solid black line

Pipe hillocks: solid black area

Limestone outcrop boundary: dot and dashed black line

Character types

- *Small scale mining: yellow*
- *Intensive mining – small output: orange*
- *Intensive mining – large output: pink*
- *Mining under the shale: mauve*
- *Lead/copper mining: blue*
- *Copper mining: green*

Table 1:

	Veins (in kilometres and as % of total within each area)			Pipes/Flats (in hectares and as % of total within each area)		
	Present	Intermittent/ Uncertain	Removed	Present	Intermittent/ Uncertain	Removed
Within National Park	121.1 24%	168.0 34%	210.9 42%	63.6 74%	10.0 12%	12.5 14%
Outside National Park	15.1 18%	23.4 28%	45.1 54%	19.7 100%	0.0 0%	0.0 0%
TOTAL	136.2 23%	191.4 33%	255.8 44%	83.3 79%	10.0 9%	12.5 12%

century now survive in reasonable condition, while about half have gone completely (Table 1).

The results of analysis have confirmed fears that loss has reached a critical stage, where action is necessary to conserve, at the very least, a representative sample that adequately covers the wide-ranging variation in type and character, before irreplaceable examples are lost forever. For some, the hillocks may still seem commonplace, but the underlying trajectory demonstrates that they are a rapidly diminishing resource. This reinforces the importance of analysing and reacting to trends, rather than over-reliance upon study of the range of commonness through to rarity indicated by a snapshot of absolute populations. A review of current conservation safeguards has revealed that only 23% of surviving vein hillocks are designated as scheduled monuments or SSSIs, with a further 11% temporarily protected by agri-environment scheme agreements. Although it is neither desirable nor practicable to fossilise the entire landscape, an inventory of 'Important Lead Mine Sites' has been compiled that lists sites of national or regional importance that warrant forward-thinking conservation. Currently 47% of the vein hillocks that survive in reasonable condition are within identified 'Important Sites' (only 11% of the original total); of those, 77% have no formal protection.

The ruined 1868 engine house and modern head frame of Magpie Mine (County Mon. No. DE 233) being examined by Ken Smith, Archaeology Service Manager, PDNPA. A particularly productive, deep and well-preserved mine complex, Magpie was worked for over 300 years, finally closing in 1959

Conservation mechanisms

The Monuments Protection Programme (MPP) of English Heritage has recently completed a series of schedulings for lead mine-related sites with surface expression (including opencut rakes, mine complexes, engine houses, drainage tunnels and related features), and 36 within the ore-field are now protected. In addition, several smelting sites have been scheduled, but these are generally located away from the mines and present different conservation challenges. The reaction of owners and occupiers to designation, however, has not always been favourable as sometimes it has been seen as imposed rather than negotiated. To safeguard against the likely destruction of nationally significant remains, it has been necessary on occasion to prepare scheduling recommendations at short notice. Scheduling has taken place against a backdrop of MPP-led thematic reviews (Barnatt with Rieuwerts 1995; Barnatt with Stroud 1996; Barnatt *et al* 1996) of the lead industry and the programme of historic landscape characterisation, placing conservation management at the local level within regional and national policy frameworks. Nevertheless, despite the endeavours of best practice, there continues to be a steady trickle of case-work issues arising from unauthorised works which must be addressed as a component of the current project.

Barnatt's archaeological study fits well with English Heritage's programme of 'MARS implementation', and the results will be incorporated in PDNPA's ongoing Lead Rakes Project, undertaken in collaboration with English

Heritage. The ecological, geological and other aspects of the hillocks are currently undergoing analysis by the project team, and a report will be produced on the issues and opportunities for enhanced conservation. In conjunction with a poster, leaflet and media campaign to raise public appreciation of the resource and to explain why we are so concerned by the extent of loss, copies of the report will be distributed to landowners, the minerals industry and the many agencies and organisations engaged in land management within the ore-field. Designation, negotiation, agri-environment schemes and development plan policies clearly have so far been only partially successful and a key feature of the campaign must be persuasion. With the benefit of a much fuller understanding of the extent, significance and vulnerability of the surviving resource, there will also be the need to explore robustly the ways of strengthening the traditional armoury of landscape conservation.

At a national level, lead mining is the most ubiquitous of the metal mines, and in addition to the Peak District, mines are found in practically all counties with upland areas (for example, Cornwall, Cumbria, Devon, Lancashire, Somerset, Shropshire, Yorkshire). In some ways, Peak District mining differs from other regions, most notably in the extensive surface manifestation of veins as rakes. Most ore-fields, however, have surface remains such as hillocks that can be quantified as the Peak District ones have been. It is hoped that the pioneering approach to the identification, characterisation and management of this resource will have implications for the assessment and conservation of the extractive industries elsewhere. At a regional level, the survival and condition of mining hillocks will be used as a 'key sustainability indicator' for the historic environment in the upland zone, as will the survival of ridge and furrow (see Anderton and Went, 52–5) for the southern, lowland areas of the East Midlands. The Lead Rakes Project also highlights the need to address the conservation of subterranean mining remains, and the authors of this paper are currently engaged in a programme of underground exploration, intended eventually to inform policy development within our respective organisations. □

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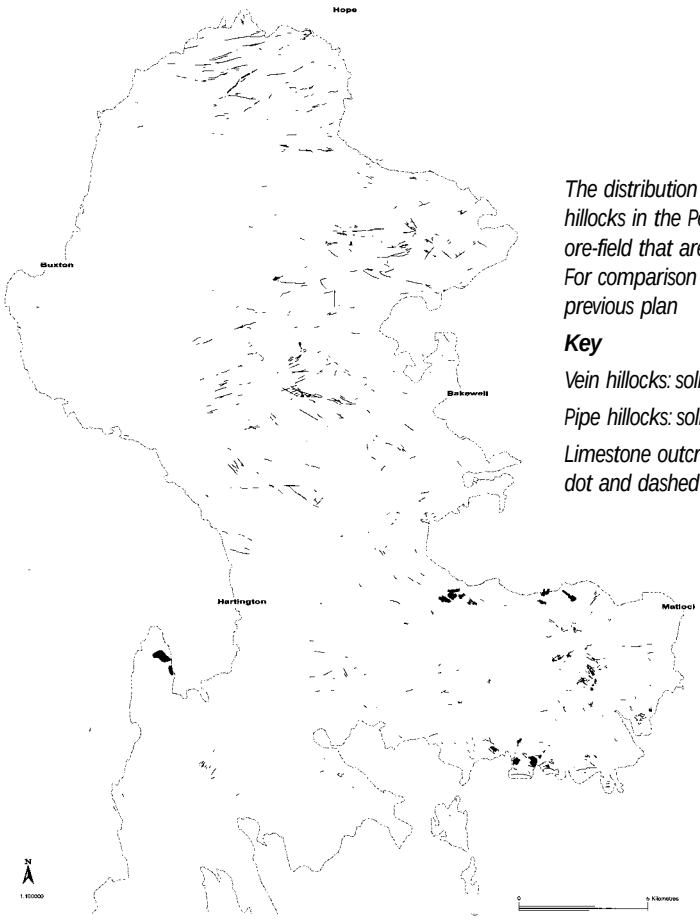

The distribution of lead mine hillocks in the Peak District ore-field that are still present. For comparison with the previous plan

Key

Vein hillocks: solid black line

Pipe hillocks: solid black area

Limestone outcrop boundary: dot and dashed black line

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TURNING THE PLOUGH

Loss of a landscape legacy

Between 1995 and 1999, Northamptonshire County Council and English Heritage quantified the survival of medieval open fields in the east Midlands. The results of this research have now been published in Turning the Plough *and confirm that the loss of these ridge and furrow landscapes is extreme. English Heritage, DEFRA and other agencies are now faced with an urgent task – to combine our efforts in order to create a sustainable future for what little remains*

Ridge and furrow earthworks, the corrugated fields produced by medieval cultivation that were once a familiar sight across many parts of England, are now a rare archaeological resource and becoming more so as each year passes. This loss is not entirely a recent phenomenon. As early as 1818, the poet John Clare in 'The Lamentation of Round-Oak Waters' wrote about the loss of 'gentley curving darksom bawks' following the wholesale division of the open farming landscape into the separate fields we know today. The need to maintain individual narrow cultivation strips was banished by such enclosures; in Clare's words, 'the plough has turned them underhand, and over turnd 'em all'.

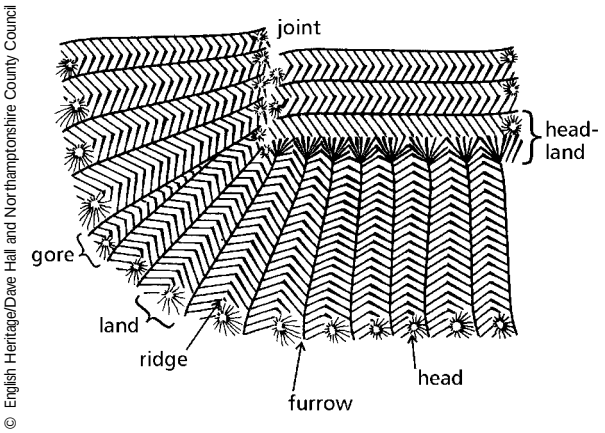
Despite Clare's worst fears, many areas of ridge and furrow weathered the storm of private and Parliamentary enclosure and remained, preserved under pasture, to form part of the characteristic landscape of the English Midlands in the 20th century. This last century, however, saw further major rural changes, spurred on by wartime pressures and economic incentives. The impact of modern agriculture on the last of the medieval cultivation patterns has been severe.

Process of creation

The vestiges of ridge and furrow we see today are the shadows of the past – the scant remains of extensive and contiguous systems of cultivation that once covered most of the Eastern Midlands and existed in a less developed form across many other parts of the country.

The origins of ridge and furrow cultivation can be traced to the 10th century or before. By the 13th century, the countryside had aquired a widespread corrugated appearance as settlement developed into a pattern of 'townships' (basic units of community life and farming activity). The cultivated ridges, individual strips known as 'lands', were incorporated into similarly aligned blocks known as 'furlongs'; which, in turn, were grouped into two, three or sometimes four large unenclosed 'Great Fields'. These fields occupied much of the available land in each township (covering 80–90% of many Midland examples), but around the fringes lay areas of meadow, pasture (normally unploughable land on steep slopes or near water) and woodland – a limited resource, therefore highly valued and closely managed in the medieval period.

The characteristic pattern of ridge and furrow was created through clockwise-motion ploughing. By ploughing from the middle of the 'land' and finishing at the outside, flanking furrows were created. An anti-clockwise ploughing motion, adopted during the fallow period, then ensured that soil was brought back into the ridge. The maintenance of the furrows in this fashion had two specific functions. First, the furrows acted as open drains. Second, and more significant, they served as demarcations of individual plots, or units of production, a number of which, scattered throughout the Great Fields, lay in the hands of each landowner or tenant. This pattern of holdings allowed each farmer to take a share of the various growing conditions. The lands are therefore powerful indicators of social structure, particularly so where late medieval or post-medieval field books survive to detail the allocations. The earthworks alone tell fascinating stories – superimposed, advancing or retreating patterns mark changes in agricultural requirements and even the success or failure of the community which the fields supported.



Schematic plan of two furlongs

The survey

Widespread changes in agricultural practices, such as the enclosure of open fields between the 17th and 19th century, and more particularly the intensification of agriculture following World War II, have left us with a limited picture of the original grandeur of the open field system. Anyone interested in the countryside will be

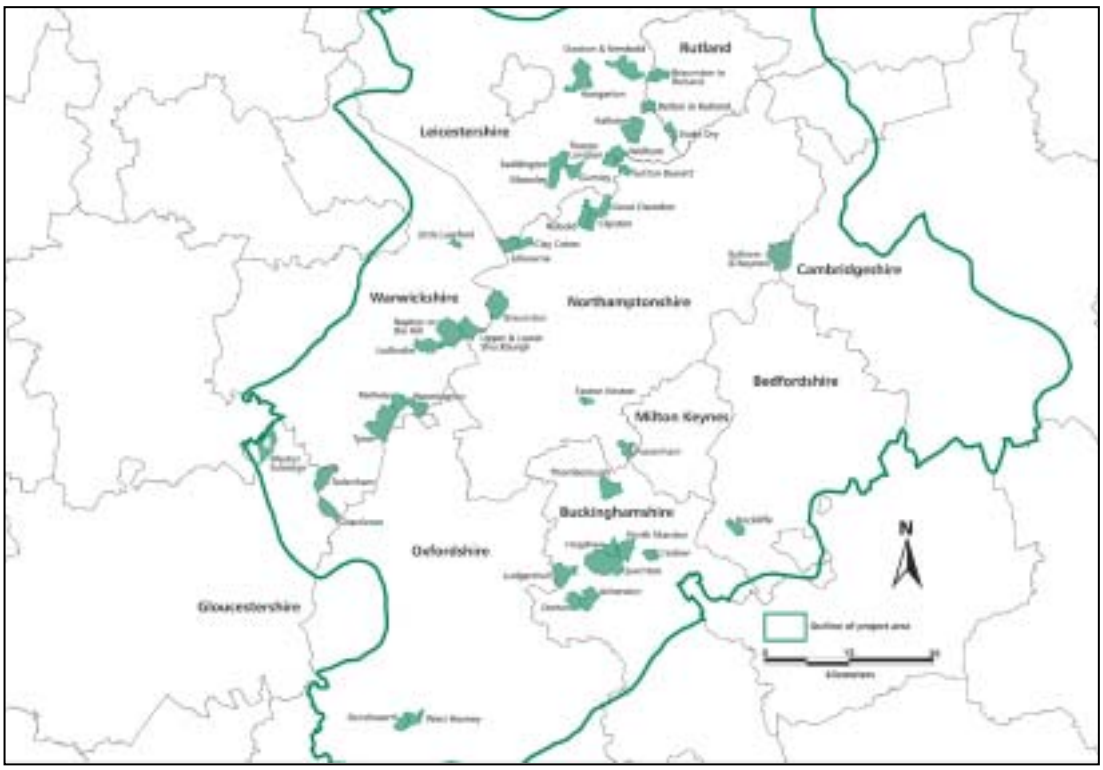
Location of the study area

aware of scattered pockets of well-preserved earthworks. But how rare nowadays are those places in the landscape where ridge and furrow still exists at a scale which truly allows us to appreciate how the medieval countryside worked?

It was precisely this concern which prompted research by David Hall and the report, *Turning the Plough*, recently published by English Heritage and Northamptonshire Heritage on behalf of the nine county archaeological services in the English Midlands. The Midlands Open Field project, funded by the Monuments Protection Programme (MPP), set out to reconstruct the likely extent of ridge and furrow within the context of individual field systems that served the medieval settlements of the East Midlands. This area has long been recognised as the heartland of the open field system of farming – a product of the intense nucleation of medieval settlements which characterised this 'Central Province', as defined in *An Atlas of Rural Settlement in England*, published in 2000 by English Heritage.

The project combined two areas of research. Historic maps and documents were used to define the original extent of individual townships (the basic building blocks of settlement and farmland) and to reconstruct, using historical evidence and terrain modeling, the likely extent of their Great Fields at the height of production. Aerial photographic evidence was then used to map the extent of surviving ridge and furrow within each township (which could be expressed as a percentage of the likely original coverage) and to chart the rate of destruction.

A disturbing picture emerged, confirming what has long been suspected – that ridge and furrow, once ubiquitous in the East Midlands, with vistas stretching as far as the eye could see, is now very rare and becoming rarer year by year. Ridge and furrow, a relic of arable cultivation, survived into the 20th century through management as



Location of Priority Townships

grassland by farmers; modern farming economics, however, favour the reversion of this grassland to arable and represent the single greatest cause of its destruction.

By using aerial evidence up to 1996, the report confirmed that of the 2000 townships identified within the study area, as few as 104 retained more than 18% of their original coverage of ridge and furrow. Of these few, only 43 townships retained significant areas of ridge and furrow – areas which could be considered as outstanding examples.

Comparisons with maps of the 1950s indicated that most of the destruction had taken place in recent decades and, in order to test the rate of this destruction, a further aerial reconnaissance of the 43 best examples was arranged in 1999. The situation had deteriorated still further. Only 20 townships (as opposed to 31) now enjoyed more than 23% survival, and only 6 townships (compared to 9) retained more than 40% of their original coverage. Of the two townships previously thought to have more than 50% survival, one area of concern had fallen from 70% to 52%.

Put simply, the results show that a once commonplace and extensive archaeological monument type is now highly fragmented and disappearing at an alarming rate. Large contiguous areas of ridge and furrow that provide a true indication of the open field system survive in only a handful of places, and even these are under threat. What was once common and often unregarded is now rare and in urgent need of protection.

Preserving medieval field systems

As with all MPP work, the Midlands Open Field project's first objective was to increase understanding of the archaeological resource and to raise awareness of its importance and increasing rarity. This has clearly been achieved, and we now have quantifiable data for the scarce survival of contiguous fields of ridge and furrow in the East Midlands. A further rapid survey of county data sets demonstrates that similar earthworks can be found, in pockets, across other parts of the country, but rarely on the scale of the last remaining areas of articulated field systems in the study area.

So how important are these last representative field systems? At a regional level, they contribute to the character of the landscape, to local identity and to a 'sense of place', and their survival affords a 'key sustainability indicator' for the regional historic environment (see Humble and Barnatt, 48–51). At the national level, these few sites are the last definitive representations of an agricultural system that reached a unique scale of development in the midlands. Taken a stage further, it can be argued, given that very little ridge and furrow survives in continental Europe, that these sites have international significance as the last best examples of an agricultural regime that dominated Northern Europe for a thousand years.

The task now faced by English Heritage and other agencies is to formulate effective means to preserve this vanishing legacy. To a certain extent, the MPP is already addressing this problem by designating samples of ridge and furrow as scheduled monuments (under the 1979 Ancient Monuments Act) where they form integral parts of contemporary settlements, such as medieval village earthworks and motte and bailey castles. While scheduling is the only protective measure with the weight to ensure that any changes – including agricultural change – are considered against the archaeological importance of the site, it is not a universal panacea for the problems of open field preservation. While it will ensure that a consent is required for new ploughing, refusal to grant consent may trigger compensation, which would be prohibitively expensive over the wide areas represented by the 43 priority townships and still might not secure positive management. Nor indeed, might it be appropriate to impose this restrictive form of protection on such a large expanse of countryside – land which needs economic use in order to be effectively maintained – unless it is accompanied by viable management regimes.

Clearly, finding a sustainable future for these precious remains will not be an easy task. Having defined the rarity and value of the remaining open fields, our next step will be to pursue a constructive dialogue with a range of agencies, local and national, who have a part to play in the preservation of this legacy. Open fields under pasture are already valued for many reasons (for public access, landscape character or species diversity) and they are sometimes, in part or whole, recognised by Local Authorities in

landscape plans or conservation areas, or protected within landscape-scale designations such as Sites of Special Scientific Interest. While these designations have objectives other than archaeology, they nevertheless help to encourage (or occasionally enforce) environmentally sensitive farming regimes that benefit ridge and furrow. Potentially, agri-environment schemes, such as Countryside Stewardship and Environmentally Sensitive Areas (managed by DEFRA) could also be more actively used to encourage farmers to manage these earthwork monuments in a sensitive manner. However, as the large majority of the surviving earthworks are within improved pasture of low nature conservation value, these open field systems have not previously been recognised as a high priority for the schemes. For similar reasons, the recent introduction of regulations requiring Environmental Impact Asssessments prior to intensive farming in areas of previously uncultivated land appears to offer only limited protection for open field remains. Unfortunately, by definition under the current scheme, areas of ridge and furrow will rarely qualify for EIA unless abandoned to pasture many years ago, subsequently unimproved and now rich in natural plant species.

Turning the Plough therefore challenges English Heritage and partner agencies to combine efforts and focus resources on policies for the preservation of these nationally or indeed internationally important remains. In the coming months, English Heritage and DEFRA will discuss approaches to providing a sustainable future for this legacy – one which will have the support of landowners as well as conservation bodies and will benefit the whole community. □

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RDS Regional Archaeological Adviser
Department for the Environment, Food and Rural Affairs

Dave Went
Inspector of Ancient Monuments
Monuments Protection Programme
English Heritage

Further information

Turning the Plough (2001), by David Hall, is available as a publication from Northamptonshire County Council, and online (with additional township maps) at: www.northamptonshire.gov.uk/goto/openfields

Aerial photograph of Little Lawford, Warwickshire, 1999. The arrangement of medieval furlongs within the Great Fields is still plainly evident, together with trackways and settlement remains, sometimes superimposed and reflecting changes over time

An Atlas of Rural Settlement in England, by Brian K Roberts and Stuart Wrathmell, may be ordered from English Heritage, c/o Gillards, Trident Works, Temple Cloud, Bristol BS39 5AZ; Tel 01761 452966; Fax 10761 453408; ehsales@gillards.com. Cheques should be made payable to Gillards; Price £25; Product Code 50201. A companion volume by the authors, *Region and Place: A study of English rural settlement*, will be published in Summer 2002; Price to be announced; Product Code 50203

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ADVICE ON ARCHAEOLOGY

Countryside Archaeology Advisors

In 1996, the Monuments at Risk Survey (MARS) report highlighted the threat to archaeological sites from modern-day intensive agriculture. An English Heritage pilot project funding Countryside Archaeology Advisors is starting to redress the imbalance

When faced with the startling statistic that agriculture is the largest single cause of piecemeal loss and damage to MARS monuments in 1995, English Heritage agreed to fund Countryside Archaeology Advisors in seven local authorities. The challenge was to develop models of best practice for managing archaeological sites in the countryside at a local level.

English Heritage is funding my post for three years, in partnership with Worcestershire County Council. Both are seeking increased protection of the historic environment, the archaeology of the countryside that makes up around 70% of recorded sites in the county.

Along with local authority colleagues in the South West Region, we are exploring ways of bringing more archaeological sites, monuments and landscapes into positive management. We are part of a small, but expanding community of archaeologists with this role, representing our profession on partnership working groups, liaison with local conservation groups and national agencies such as English Nature and the new Department for Environment, Food and Rural Affairs (DEFRA).

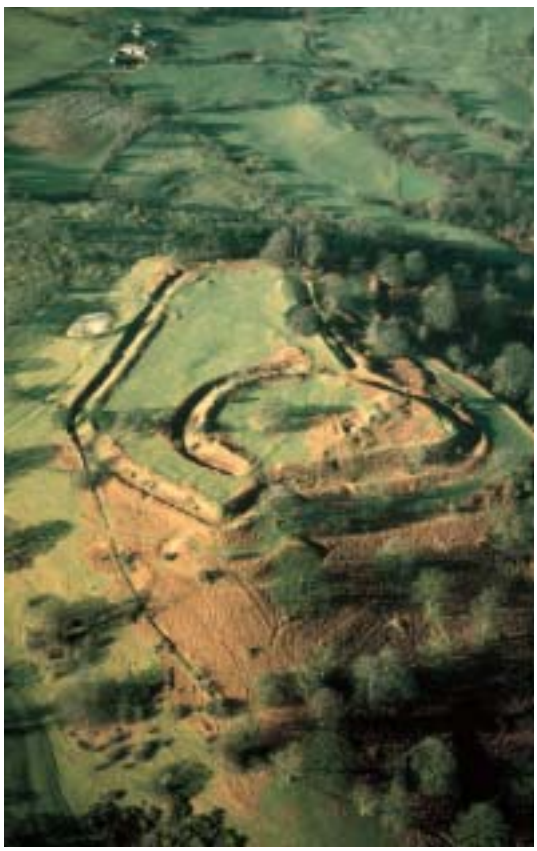
Building positive partnerships

The job of a Countryside Archaeology Advisor must be based on good relationships with landowners and farmers, where few statutory controls exist, in order to provide better information on archaeological sites and improve management of the sites in their care. The emphasis is on demonstrating the value of positive partnerships and avoiding the current impression of archaeology as a negative restraint.

Local authority archaeologists have been consulted on agri-environment schemes, forestry proposals and hedge removal applications for several years. Only a reactive response, however, has been possible to limit damage to sites or advocate enhancements proposed by ecologists.

DEFRA agri-environment schemes such as Countryside Stewardship and Environmentally Sensitive Areas give incentives to farmers to manage habitats, archaeological sites and historic landscapes in a positive way (see Middleton, 16–21). Importantly, these criteria are given equal weighting when applications are considered, but before now the historic environment has often been overlooked. Therefore, one of the biggest challenges facing curatorial archaeologists is to make the best use of today's opportunities in order to influence future strategies.

Farm visits can be spent working through management issues of the archaeology on the farm, then harnessing the farmer's enthusiasm with a whole farm management plan and finding ways of caring for archaeological sites as part of the day-to-day farming activity. Zero-cost options are proposed alongside more holistic opportunities through Countryside Stewardship or County Council subsidised grants. Many of these funded initiatives are more likely to succeed if proposed alongside wildlife conservation measures. While this is beneficial to farmer, archaeologist and conservationist, some conservation schemes do not take account of the historic environment.



Elmley Castle, Worcestershire. Designated as a SAM and an SSSI, the early Countryside Stewardship Scheme missed the opportunity to protect all elements of the parkland and its earlier features under one management plan

Medieval settlement remains, Naunton Beauchamp, Worcestershire. Attention is focused on respecting the grain of the historic landscape through planning control and environmental enhancement schemes, with archaeology contributing to a 'sense of place' in Worcestershire villages

Joining forces with bio-diversity?

Following the Rio Summit in 1992, farmers have recognised the big push to meet bio-diversity goals. Many large-scale habitat creation schemes are forging ahead while paying only lip-service to the historic environment in their written objectives. In reality, some unrecorded sites are suffering from poor management or destruction as a result.

The challenge for the Countryside Archaeology Advisor is to demonstrate the benefits of well-though-out natural environment conservation schemes that take account of archaeology. The potential is undoubtedly there, for example, to incorporate restored historic water meadow and water control features into wetland re-creation schemes before modern hydrological controls are imposed on the landscape.

Risk – target – action

Although schemes to benefit the natural environment are popular, we need to develop our own targets and objectives for the continued conservation of historic sites and landscapes. The first stages of this process are underway, with Historic Landscape Characterisation and MARS suggesting the way forward. The job for Countryside Advisors is to help target those types of monuments at greatest risk from agriculture and develop action plans on a local, regional and national basis.

To help us achieve this goal, we must use our Sites and Monuments Records (SMRs) to collate facts and figures on the condition of monuments that can be used in assessing risk. Not all relevant information is in an accessible format. In Worcestershire, we have gathered this information from meeting landowners during the Foot and Mouth recovery plan.

Government money is providing farmers who had animals slaughtered during FMD with enhanced business support. Critically, this will include advice on environmentally friendly farming from the Farming and Wildlife Advisory Group. By working together on all 120 affected farms in Worcestershire, we are showing farmers the economic gains to be made from producing food with real benefits for the natural and historic environment. At the same time, we will be collecting data for future targeting of sites, while gauging farmers' responses.

In this growing sector of the profession, we are demonstrating the value of such posts in tackling the issues that face archaeology in the countryside. The projects and initiatives that you read about elsewhere in this issue are all invaluable to the practitioner in the field and help support this expanding sector. □

Jez Bretherton
Countryside Archaeology Advisor
Worcestershire County Council

ARCHAEOLOGICAL SITES

Threat of bracken

The impact of bracken rhizomes on Dartmoor's archaeological landscape has been the subject of research which will inform future management strategies

After a few years of preliminary work, a project began in 1999 to examine the impact of bracken on archaeological sites. Early results from the excavation of a prehistoric round house near Kestor on Dartmoor graphically illustrate the physical and chemical impact of bracken rhizomes on sensitive archaeological deposits. Much of Dartmoor's rich archaeological landscape is often perceived as being generally stable, with only occasional damage as a result of visitor or agricultural pressures. The picture is, however, much more complex; in particular, work carried out by botanists indicates that bracken is capable of causing both physical and chemical damage to the areas it colonises. Bracken establishes itself on relatively well-drained ground, and on Dartmoor this often coincides with archaeological remains. Given the nature of this threat to such an important archaeological resource, it is important that the scale of the problem be assessed and quantified.

Research indicates that bracken infestation within the study area is just over 20 years old, making it possible to examine the impact of the plant over a relatively short period of time. Immediately prior to the excavation, a detailed survey of the bracken plants growing within the building was carried out to record the position of each bracken stipe (stem) and the height and number of fronds. This information is being used to demonstrate the character of the correlation between the varying density of plants visible at the surface with the character of any underlying damage caused by the rhizomes.

Careful recording of the bracken rhizomes encountered during the excavation has highlighted the impact of this plant on archaeological deposits and structures. At worst, over 20% of the deposits had been displaced by rhizomes.

Rhizome density is greatest adjacent to the house wall.The variable character of resulting damage could influence and distort archaeological interpretation

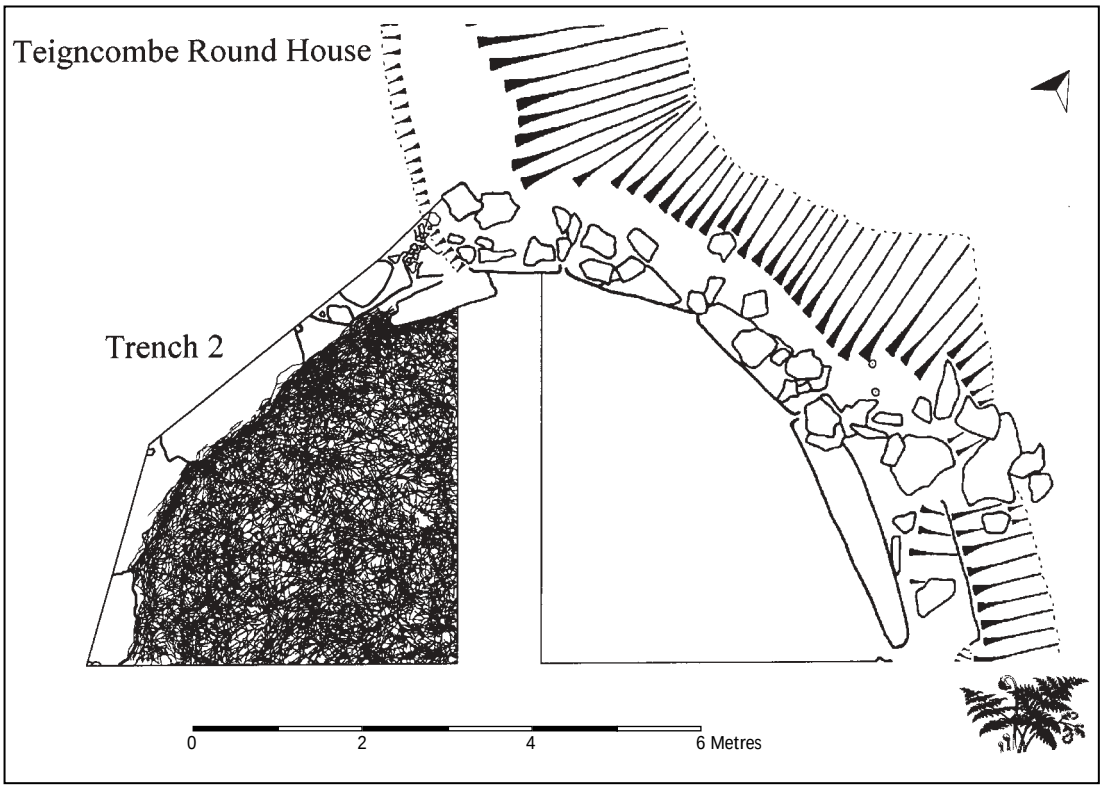


Diagram showing rhizomes so far encountered within Trench 2. The physical disturbance caused by this level of infestation is considerable

Current archaeological management strategies rightly favour the preservation of archaeological structures and deposits. Excavation is destructive and consequently many archaeologists consider it inappropriate to dig unthreatened sites. It is argued that the excavation and consequent destruction of sites should be left until our methods are as near perfect as possible. Until then, all our efforts should be extended to protecting sites for future generations, who will undoubtedly have a range of available techniques to make ours seem primitive. At the same time, we must be sure that sites are truly stable and that we are not merely overseeing the gradual destruction of important evidence that not even the most sophisticated of future techniques will be able to retrieve.

Our excavation has confirmed that bracken destroys archaeological information. Within the current bracken rhizome mat, considerable damage is being caused by 6.45km of rhizomes. Within lower parts of the stratigraphy, there is good evidence to suggest that a significant amount of information has been destroyed by one or more previous infestations. While further work on the character and extent of damage remains to be done, we can be certain that bracken does destroy archaeology. □

Sandy Gerrard
Director
Dartmoor Archaeology and Bracken Project

This work is funded by the Dartmoor National Park Authority and carried out by a group of volunteers.

ARCHAEOLOGICAL LANDSCAPES

Unlocking information for use

Practical developments in integrating the digital mapped record of extant archaeological landscapes with the national archaeological database will result in enhanced public understanding and improved site management

In most rural areas, the sensitive management of archaeological sites is essential to ensure their survival. Earthwork and other visible landscape remains are particularly vulnerable, and their successful management depends on two strands of information: accurate knowledge of their whereabouts and an understanding of their origin, nature and significance. The locational information is typically and most usefully a map-related, drawn or graphical entity; the description and categorisation is text.

These visible remains – and their mapping, recording and interpretation – are the focus of attention of English Heritage's Archaeological Investigation teams (see *Conservation Bulletin* **39**). Their surveys, especially in upland and moorland areas, have covered extensive landscapes with an enormous complexity of remains, such as prehistoric ritual monuments and cultivation areas that are overlain by medieval field patterns, complexes of post-medieval and early-modern industrial remains and military emplacements, some originating as recently as the Cold War era.

Where they have not been levelled by the plough, such landscapes can be described and understood most effectively through archaeological ground survey. The results of these surveys are deposited in the National Monuments Record (NMR) at Swindon and in the SMR.

A prehistoric hut circle and field walls at Kestor, Dartmoor, Devon. So far some 2200 hut sites of an estimated 7000 on Dartmoor have been surveyed. New sites are still being discovered in significant numbers on all parts of the moor

Compiling the archaeological record

The NMR has been on a digital footing since the early 1990s but limited to the non-graphical (text) element of a site's records. In its current form, the digital text record is called the New Heritage Information System (NewHIS). The graphical element – the plan of an archaeological site – is perhaps the most familiar product of the Archaeological Investigation teams, but it has stood apart in the record. This shortcoming has been the more anomalous since modern methods of capture of digital images in the field through Electronic Distance Measurement (EDM) and Global Positioning Systems (GPS), and their handling through CAD drawing routines, have become standard operational tools.

This shortcoming has now been corrected through the development of a link between the text record and the textual information associated with the graphical or photographic record. This seamless link has been created as part of the development and trialling of the Heritage Spatial Information System (HSIS), English Heritage's Graphical Information System. HSIS is an integrated facility, from which digital depictions can be produced at any scale and linked to the appropriate textual information. The advantages of this new integration of text and graphics are obvious – ease, speed and effectiveness of interrogation.

Recording a multi-period archaeological landscape

The development of HSIS can be illustrated by the first use of the HSIS integrated archive: the presentation of the extensive archaeological landscape of Dartmoor, Devon.

The largest expanse of open moorland in the south of England, Dartmoor contains one of the best known though unrecorded archaeological landscapes in the country. Survey work, initially by the RCHME, has been carried out intermittently since the late 1980s, and some 240 sq km (35% of the area administered by the

Dartmoor National Park Authority) have been recorded. Since 1993 all surveys on Dartmoor have resulted in a digital product, initially at 1:10,000 scale and since 1996 as 1:2500 scale depictions.

The route from field survey to digital archive is fairly straightforward. An accurate three-dimensional location for each feature is obtained through GPS equipment. A coding system developed for use during the survey determines the graphical depiction of each feature. Once linked to the relevant NewHIS record number (the associated text), the graphical image is uploaded to HSIS.

Delivering to users

HSIS graphical data can be easily translated into a variety of outputs to suit the needs of both national and local organisations as well as the various types of Geographical Information Systems (GIS) now in use. For example, an important by-product of these new digital graphics will be to furnish the National Topographic Database, administered by the Ordnance Survey, with depictions of archaeological sites. This database uses information from many sources to produce the various scales of Ordnance Survey maps and plans. In addition, the HSIS dataset for the parts of Dartmoor so far surveyed is being integrated into the GIS of the Dartmoor National Park Authority for use in the day-to-day management and conservation of the moorland archaeology. This accurate depiction and description of the archaeology of the moor is also helping the Department of Environment, Farming and Rural Affairs (DEFRA) to evaluate the archaeological resource when compiling Countryside Stewardship Schemes (Middleton, 16–21). The relevant HSIS information will also be loaded onto the GIS systems of the National Trust and the Ministry of Defence, who are major owners or users within the moor. This new dataset will give a more accurate characterisation of the 'ancient moorland' component of the Historic Land Characterisation (HLC) study of Devon, promoted by English Heritage.

© HSIS

Typical 1:10,000 scale HSIS export data. The surveyed archaeology more often visible on an OS mapbase, omitted here for clarity, can be given any number of attributes from the New HIS database

© English Heritage

A prehistoric double stone row at Merrivale, Dartmoor, Devon

The future

Geographical Information Systems undoubtedly represent the future of archives relating to the historic environment. They represent a potent means of disseminating the results of investigative survey work to the widest possible audience. They form a vital component in the range of dissemination options at a time when features of the historic environment, including archaeological sites, are increasingly recorded and presented in digital formats. GIS – in contrast with other publication options that are (properly) selective – affords a key to the total resource. □

Martin Fletcher
Senior Investigator
Archaeological Investigation

Simon Probert
Investigator
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For further information, please contact Enquiry Research Services, NMRC, Kemble Drive, Swindon SN2 2GZ. For details about the work of the Archaeological Investigation team, visit www.english-heritage.org.uk/Archaeological Investigation

HISTORIC CHAPELS

The Cornish chapels survey

A new survey of Cornish chapels has led to improved understanding which can inform decisions about the future of this important resource

Chapels, along with the distinctive buildings that housed industrial activities and their workforces, had become a prominent feature of the Cornish landscape by 1851, when Cornwall had the highest percentage of dissenting places of worship in England. The strongholds of Cornish Methodism, in mining heartlands of the centre and west of the county, found no national parallels – with the notable exception of the mining valleys of south Wales – for the dominance that Methodism held, as a popular evangelical movement, over other forms of Christian worship

Need for dialogue

Over 80% of approximately 700 chapels that survive in recognisable form today are of Methodist origin. They cover an enormous span of architectural types and ambition – far broader than Anglican buildings – from the most modest vernacular to successive levels of aspiration and prosperity within chapel communities. However, historic chapels – particularly in rural areas – now represent one of the most threatened building types in England. The Methodist Church and other denominations have had little choice but to sell off chapels where there are too few members to carry the cost of maintenance. To inform its pastoral strategy for dealing with changing circumstances, the Methodist Church needed clear guidance about how statutory protection through the listing of important chapel buildings might affect its ability to alter, extend or even demolish its properties.

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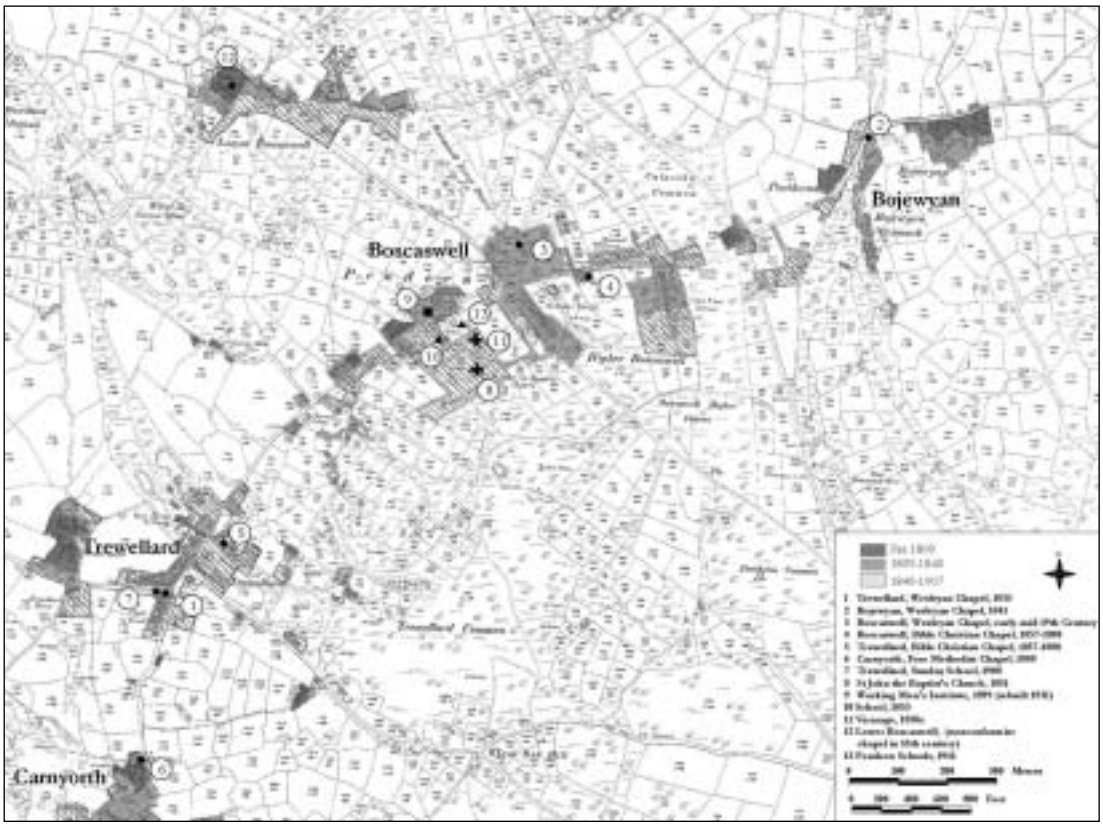
Above and right: Interior and exterior of Penmennor Chapel, Stithians. Built in 1865, this chapel is a remarkably complete example of one of the larger rural chapels, built for 800 seats. One of 23 chapels in Cornwall now listed at Grade II following the chapels survey, it has received a 70% grant from English Heritage towards major works, including re-roofing and repair to windows and the interior

This need for guidance was particularly strong in Cornwall, where many chapels had been listed following the Historic Buildings Resurvey of 1984–8. At that time, English Heritage had become aware of the need for discussion, based upon accurate information, with churches, local authorities and other potential users. The Cornish chapels survey, based on rapid survey of over 90 % of surviving examples, was the first attempt to tackle this problem on a regional scale. The survey also analysed the relative rarity and importance of fixtures and fittings and drafted selection criteria to help secure the proper stewardship and protection of the historic environment. The reasons for the extraordinary architectural diversity and high rate of alteration of the chapels are explored in detail in *Diversity and Vitality: The Methodist and Nonconformist Chapels of Cornwall* (2001), jointly supported by English Heritage and the Methodist Church. Launched in July 2001 at the Truro conference, 'Bane or Blessing: the Future of Historic Chapels in Cornwall', the book covers the importance of chapels to the Cornish landscape and culture, the evaluation of their significance as historical buildings and the dynamic role of liturgical and community change in determining both their historic character and future.



Chapels in Trewellard and Boscaswell, one of Cornwall's distinctive rural industrial landscapes. Over 650 chapels have now been included on a map-based computer database, held at Cornwall Archaeological Unit, that forms the template of the characterisation of both rural and industrial areas. CAU, in partnership with English Heritage, is developing frameworks for managing the historic environment

Managing change

There are now 160 chapels of all denominations in Cornwall that have been listed as buildings of special architectural or historic interest, the chapels survey having resulted in the loss of 28 altered or unlistable chapels from the statutory lists, the addition of 13 at Grade II and the listing of 23 of the most outstanding examples at Grade II*. Cornwall has the highest number of listed chapels of any Methodist District, the Methodist Church owning 92 listed at Grade II and 14 at Grade II*, a total of 12% of all its listed chapels and 42% of its II* chapels in England. For the great majority of chapels that have retained interior features and fittings of interest, their conservation is best managed through their remaining as chapels, in line with advice in PPG 15: Planning and the Historic Environment. This, however, is a difficult challenge for many chapel communities faced with declining financial resources and often prohibitive repair costs. Two examples of II* chapels with a current membership of only 21 are Carharrack, built to seat 530, and Ponsanooth, built to seat 630. For those chapels with larger and more dynamic congregations, there is a greatly increased need to accommodate people with disabilities, to provide lavatories, cooking facilities, new entrance areas and spaces for dance, drama and music.

English Heritage and the Methodist Church will continue to work together to ensure that the greatly enhanced understanding of these chapel buildings and their fittings will continue to inform the process of change. □

Jeremy Lake
Inspector of Historic Buildings
English Heritage Listing Team

Ian Serjeant
Conservation Officer for the Methodist Church

The exceptionally fine interior of the 1863 Bible Christian Chapel at Wheal Busy, Chacewater, now listed at Grade II, one of only six wayside chapels that have retained their original box pews*

DIVERSITY AND VITALITY

Comment

The publication of the Cornish chapels survey, supported by English Heritage and the Methodist Church, should lead to a greater appreciation of the history and possible future of a key element of Cornish culture and landscape

A partnership venture by English Heritage and the Methodist Church, this publication marks a turning point in collaboration and trust (Lake, 62–3). In the preface, both the Chairman of the Cornish District and the Secretary of the Methodist Connexional Property Committee welcome the book as a serious attempt to inform and encourage mutual understanding among those interested in the non-conformist built heritage. The objectives of this venture have been to gain an understanding of the scale and significance of the issues and to build trust through a joint approach.

The Methodists were and are the strongest non-conformist force in Cornwall, effectively its established church for the century of its industrial heyday up to World War II. Their buildings have been a key component of Cornish culture and landscape, especially during Cornwall's extraordinary development in the 19th century. Methodism has strong links with Cornish folk culture and politics. Not just for the disenfranchised, miners and farm workers, it stood also for the powerful forces of liberal and radical protest.

Outside the larger towns, chapels now far exceed need and are faced with rural depopulation and dwindling appeal. Moreover, the preaching spaces, surrounded by pews and frequently with galleries all round, are not always suitable for today's more relaxed style of chapel-going. At the same time, a chapel's use as a social meeting place, which extends well beyond worship, is curtailed whenever a new village hall or centre is built.

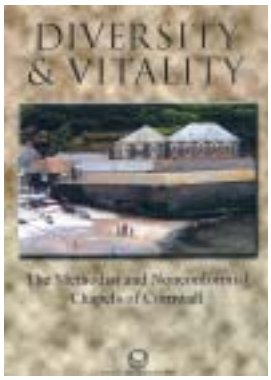
The publication is aptly named. At its heart, the survey is both a celebration and an appreciation. The editor, Jeremy Lake of English Heritage's Listing Branch, has produced a pioneering study commissioned by English Heritage. It includes historical research by Jo Cox of Keystone of Historic Buildings Consultants, field-work and photography by Eric Berry and a frank assessment of the pastoral issues. The tensions between heritage conservation and non-conformist mission are explored. The illustrations reveal the wide diversity – and vitality – of the non-conformist mission and its activities.

The pattern of distribution, illustrated by maps, clearly demonstrates how Methodism flourished in erratic industrial groupings, especially in west Cornwall. A list of chapels (what grade, which district, what 'de-listings') is included in the appendix.

The purpose of the survey is to identify and understand the historically significant non-conformist sites (not just the chapels) in Cornwall, in order to work more closely with the non-conformist, especially Methodist, authorities. It has been written for a wide readership, both specialist and non-specialist. If it succeeds in its objectives, it should be of lasting value.

The book could not have appeared at a more critical time, when Methodists and the Church of England are pooling resources and a number of high-profile cases involving English Heritage needing sensitive handling. Its publication was warmly welcomed at the launch at Truro (Methodist) School by both church and secular authorities. It is hoped that the study will become the corner stone of mutual trust and good working relationships at all levels. □

Francis Kelly
Inspector
responsible for churches
South West Region



To obtain a copy of *Diversity and Vitality*, please contact the Cornwall Archaeological Unit, Kennal Building, Old County Hall, Station Road, Truro, Cornwall TR1 3AY; 01872 323603

HERITAGE HIKES

Getting back to the countryside

The first two of a series of regional volumes of guided walks in the English countryside are available for visitors and ramblers

The timing couldn't have been worse. In February 2001, just as English Heritage was preparing to launch *Heritage Hikes*, our new rural walks guides, the grim news about the Foot and Mouth epidemic hit the headlines and the countryside closed down. Not only were barriers set up across footpaths and the movements of any brave (or foolhardy) walkers severely limited, but many English Heritage properties also closed their doors. Notices appeared reading, 'The Government has appealed to the nation to avoid walking in the countryside' – not perhaps the best moment to encourage people to leave town.

Thankfully, with England officially declared free of FMD in January 2002, walking enthusiasts are once more seeking out their thick socks, rucksacks and binoculars and heading out into the fresh air. Re-launching our hiking series seems like a good way of celebrating the end of the disease and showing support for the rural economy. Rural recovery will be slow but the sooner the traditional visitors, the ramblers and the hikers, return, the sooner it can gather pace.

Heritage Hikes offer a very easy and attractive way of exploring the countryside and combining exercise with culture. The two that have been published so far focus on Yorkshire and Wiltshire and consist of a neat folder containing six pocket-sized walk guides. The folders provide general information about walking in the countryside, as well as specific details of the English Heritage sites encountered en route and the type of terrain to be covered.

The guides themselves – printed on separate laminated cards and tough enough to survive the worst of English weather – include a clear map of the route and detailed, step-by-step instructions for navigation. Varying between six and eight miles in length, the walks have been planned so that the site of special interest, whether it is a castle, an Iron Age fort or a stately home, usually appears about halfway through, just when a diversion might be rather welcome. Refreshment breaks are also anticipated, with information provided on convenient pubs and teahouses, as well as public transport links and the best places to park.

The great advantage of *Heritage Hikes* is that they've been put together to appeal to seasoned walkers and countryside strollers alike. All walks are circular, none very demanding and they all take in magnificent views and a historic site. For those familiar with local monuments, they provide an opportunity for viewing them from a new angle. For tourists, they make it possible to leave the crowds behind. As the archaeologist Julian Richards says, 'You really need to get away from the car park and the souvenir shop and the 21st century to get a feel for the mystical landscape around Stonehenge.'

Our plan is to add to the series gradually over the months to come, covering the country region by region and establishing a high-quality, collectable set of publications to encourage everyone to get to know England's natural and man-made heritage. Highly portable, informative and very accessible, these are trails you can trust. □

Elizabeth Rowe
Publications

Heritage Hikes is published by English Heritage in association with Glenwood Publications. Each priced at £7.95, *South West Vol 1* (Product Code 50341; ISBN 1 85074 798 9) and *Yorkshire Vol 1* (Product Code 50342; ISBN 1 85074 799 7) may be ordered from English Heritage, c/o Gillards, Trident Works, Marsh Lane, Temple Cloud, Bristol BS39 5AZ; Tel 01761 452966; Fax 10761 453408; ehsales@gillards.com Cheques should be made payable to Gillards

MUCHELNEY • SOMERSET

Grass roots conservation

The historic settlement of Muchelney demonstrates in microcosm the potential benefits that the historic environment can deliver to the rural economy. English Heritage has supported several local projects and events

Set like an island in the Somerset Levels and hardly more than a group of hamlets, Muchelney has been the focus of considerable English Heritage interest in recent years. The historic focus of the village is the mediaeval abbey, now in the guardianship of English Heritage, and the village includes a remarkable collection of buildings, the most impressive of which just pre-date the dissolution of the monasteries. Around the abbey, there is an outstanding group of mediaeval structures including the parish Church of St Peter and St Paul, the Priest's House (owned by the National Trust), and the Almonry Barn and associated farm buildings.

The combination of historic buildings and scenic landscape, which attracts many visitors, is enhanced by a number of complementary activities, including a pottery and an arts and crafts training centre combined with a restaurant in the Almonry Barn. The wealth of historic buildings in this part of Somerset has also led to the establishment of many small businesses practising traditional craft skills or producing the materials they require.

Demonstration of the thatcher's craft

Conservation projects

English Heritage grant-aid has assisted with major repairs to three of the mediaeval buildings in Muchelney – the church, Priest's House and Almonry Barn. The church nave was re-roofed to protect an important 17th-century painted ceiling, and the Priest's House underwent major structural works and re-thatching. In addition, comprehensive repairs to the Almonry Barn enabled a threatened redundant building to be brought back into a use that benefits the local economy. Conservation projects of this kind encourage the market for specialist contractors and provide business for numerous local suppliers. Besides providing grant-aid, English Heritage also directly employed a range of skilled craftsmen on its own buildings at Muchelney Abbey.

The Abbey attracts 13,000 visitors each year and runs a series of special events, many of which attract and benefit the local community as much as visitors. A recent innovative Traditional Buildings Fair, one of the most popular to be held at the abbey, combined both the conservation and historic property ownership roles of English Heritage and put into action many of the policies advocated in *Power of Place*. The fair was sponsored jointly by Somerset Conservation Officers Group, the South West Branch of the Institute of Historic Building Conservation and English Heritage, with South Somerset District Council taking the lead in its organisation.

Though similar events had previously been held at the Council's offices, it was felt that an historic setting would complement the conservation skills and suppliers being promoted by the fair and would be more appealing to visitors. Although the Conservation Officers Group had used the abbey as a venue for professional seminars, holding a conservation-related event there for the general public was a new venture. Both conservation and historic property staff within English Heritage's South West Regional Team were keen to see one of its own properties used for this purpose.

© Tim Woodcock Photography

Public participation in applying lime mortar

The aim of the event was to promote awareness among owners of good practice in the care of traditional buildings by demonstrating the range of local skilled craftsmen and specialist suppliers. The Local Authority played a crucial role in using its knowledge of appropriate contractors and traders to ensure the presence of a wide cross-section of skills and materials as well as helping to direct publicity towards those with an interest in historic properties in the area. Since South Somerset contains around 5,000 listed buildings, there was a wide potential audience to attract. In addition to local businesses, the Society for the Protection of Ancient Buildings, English Heritage, the Building Conservation Centre Trust, Somerset Conservation Officers Group and Somerset Building Preservation Trust were also represented at the event and provided much valuable advice and many information leaflets to visiting owners of old buildings. A number of craftsmen, including stone masons and thatchers, demonstrated their skills, even allowing adventurous members of the public to do so too.

The event achieved both its objectives since around 40 specialist stands were present on the day and the number of visitors (1,600) exceeded all expectations. Stand-holders quickly ran out of leaflets and the specialist publishers reported doing better business than at professional conferences. Many local architects, surveyors and contractors could be seen in the crowd and those participating evidently enjoyed the opportunity of mingling with their contemporaries as well as potential clients.

Local press coverage was positive, and the event has led to a series of follow-up articles in one paper on craftsmen who attended the event. Encouraging feedback was received both from participants and visitors. If the fair is to be repeated, useful lessons have been learned about making sufficient allowance for visitor circulation on the site and including more participative demonstrations for younger visitors.

Benefits

The fair demonstrates the benefits of English Heritage's regionalisation – its work in partnership with local communities, its broadening of contacts with local historic building owners and the appeal of its own historic properties in promoting good practice in the care of old buildings. □

Jenny Chesher
Inspector of Historic Buildings
South West Region

© Tim Woodcock Photography

Information panels on local crafts and skills on display in the porch of the abbey

Market Towns

Highlighting the assets

English Heritage's urban archaeological strategy programme and other initiatives are helping to show that the history and historic fabric of market towns can be an asset for the future

The market town is a quintessential part of the traditional image of rural England and a vital part of the English rural economy. Like the countryside, market towns face a wide range of problems and challenges, including the economic and social impact of change; competition from out-of-town shopping; the effect of traffic on the urban fabric and environment; pressure for new housing; and the concentration of certain functions (for example, health care) in fewer, larger, centres.

In response, many smaller towns are assessing what the future may hold in order to adapt to a changing economic and social context. The Countryside Agency's Market Towns Initiative is intended to promote this process.

There is nothing new in this notion of reappraisal and change. As centres of economic, political and administrative activity, towns have always been subject to changes in fortune beyond their control. Many of the planned market towns of the Middle Ages, for example, either never flourished or have now shrunk to little more than hamlets.

Towns are conscious of their vulnerability to change in the wider world and competition from neighbouring towns. As a result, towns – as institutions and communities – have a strong interest in their own antiquity, longevity and durability. This is seen most clearly in roadside signs greeting the visitor: 'Anyborough – market town since 1204 AD'. The message is clear that this town is enduring and worth investing in.

Totnes Castle in Totnes, Devon, is an English Heritage historic property. It is a dominant feature in this historic market town, and the visitors which it attracts help to support the local economy

Today, the history and urban fabric of England's market towns are potentially major assets. They can make a signal contribution to economic prosperity, to the attractiveness of a town as a place to live, work and shop, and – perhaps most important of all – to local pride and identity.

English Heritage supports a number of initiatives that are helping to support these assets. This article describes our current urban archaeological strategies programme and other aspects of our work in English market towns.

Urban archaeological strategies

Since 1992, English Heritage has been supporting urban archaeological strategy studies throughout England (see *Conservation Bulletin* **41**, 16–21). One part of this programme covers major historic centres (including some places that fall into the category of market towns, such as Cirencester or Shrewsbury). A second part covers all smaller towns on a county-by-county basis. About half of the country has now been included. When the programme is complete, over 1000 towns will have been covered.

English Heritage provides grant-aid to local authorities. For county projects, the grant normally goes to the county archaeological service, which carries out the work in-house. The local authorities (both county and district) contributes significant help in kind. At an average total cost of around £5,000 per town, these projects represent remarkably good value for money.

Each town is subject to a three-stage process. First, a database of archaeological and historical information is created that would normally be kept in the County Council Sites and Monuments Record (SMR). Second, an assessment report is made, including the history of the town, its archaeological interest, major monuments and buildings, as well as a map-based analysis of the town's historic topography. Finally, a strategy document is drafted to identify the needs of archaeological protection and possible ways of presenting the archaeology and history to the public, by town trails for instance.

Projects covering Avon, Essex, Gloucestershire, Hampshire, Herefordshire, the Isle of Wight, Shropshire, Somerset and Worcestershire (228 towns in total) have already been completed, and work on a further 15 counties (covering some 350 towns) is now underway. The aim is to achieve national coverage over the next few years.

Attractive historic buildings and spaces are characteristic of English market towns, as here at Leominster, Herefordshire. Pleasant environments of this kind are both socially and economically important

These projects, although initially aimed at the needs of archaeological protection under PPG 16, can serve a wider range of purposes. The assessment reports provide a ready basis for Conservation Area appraisals. The topographical analysis can help to inform future development plans by highlighting the established (and often ancient) urban grain. The assessment reports will also be a valuable source for those who wish to find out more about a town's history, and all reports will eventually be available on the Internet. The strategy document can focus attention both on conservation needs and on the potential for making the town's history accessible to a wider audience of visitors.

This programme is developing to meet current needs. In Cornwall, English Heritage and EU Objective 1 funds are each providing half of the £300,000 cost of the Cornwall and Scilly Urban Survey. This project focuses on 18 towns in Cornwall and will produce frameworks for regeneration that respect historic character and regional distinctiveness.

Important archaeological remains are visible in some market towns. Some of the foundations and mosaic floors of this Roman town house in Dorchester, Dorset, have been displayed under a new cover building, with support from the Heritage Lottery Fund and advice from English Heritage

Consultation and advice

English Heritage is routinely consulted on a wide range of matters affecting market towns, notably planning proposals of various kinds. These include local plans, planning applications for major developments in Conservation Areas, and applications for listed building consent and scheduled monument consent. We work closely with local authorities to reach decisions that meet the needs of the place without comprising its historic value. The surveys described above will be an increasingly important tool for this work.

Grant-aid and assistance

Various kinds of English Heritage grant-aid and assistance can benefit market towns. Notable among these is the Heritage Economic Regeneration Scheme (HERS). HERS is a successor to the earlier Town Schemes and Conservation Area Partnerships (CAPs) which, in their day, resulted in improvements in the character and appearance of many English towns. HERS is designed to stimulate the economy by enabling historic buildings to be repaired and the urban environment to be enhanced.

Almost half of the current HERS are in market towns, and £3.5 million per annum (over a third of the annual HERS budget nationally) is being spent in these towns. Research published in our 1999 report, *The Heritage Dividend*, has shown that £10,000 of English Heritage grant-aid can attract nearly £50,000 of further investment from public and private bodies. The economic benefit to market towns of English Heritage's commitment to HERS is, therefore, considerable.

English Heritage grants and assistance for individual buildings (including places of worship), monuments and archaeological work can also benefit market towns. Such grants will often provide local employment and support for local (and regionally distinctive) craft skills such as thatching and stone-masonry.

Historic properties

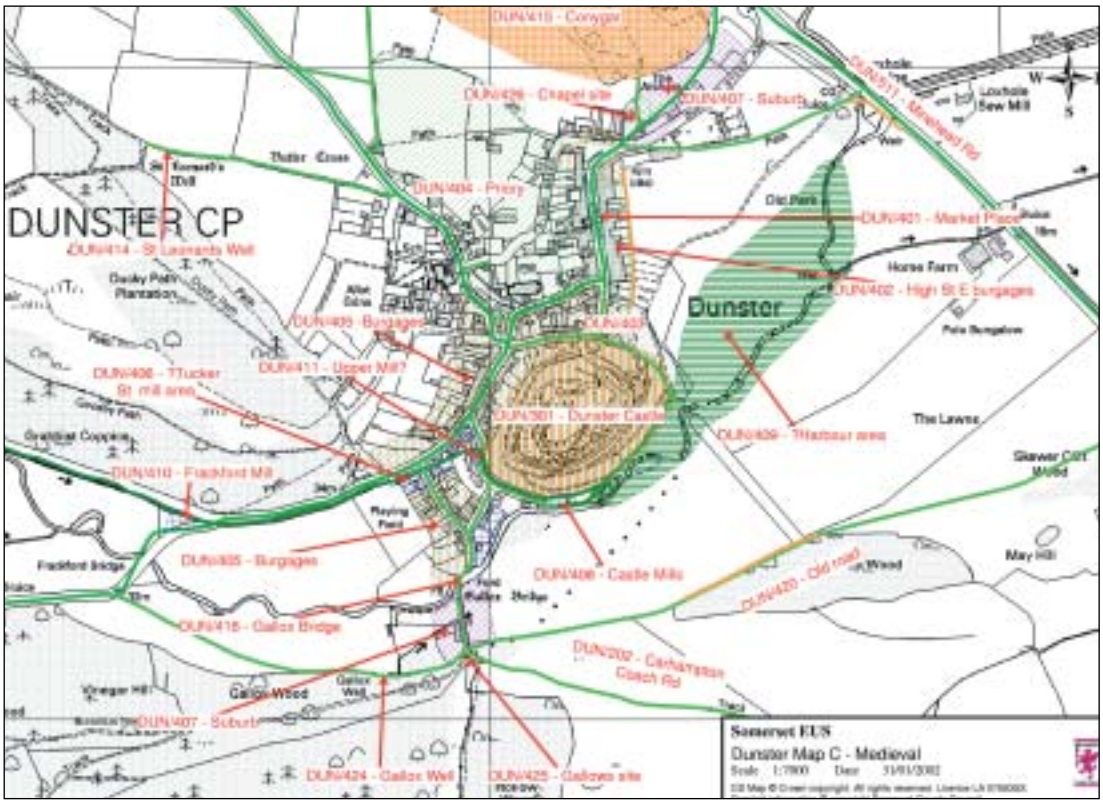
A good number of our own historic properties are in, or close to, market towns. Such monuments as Helmsley Castle (North Yorkshire), Much Wenlock Priory (Shropshire) or Launceston Castle (Cornwall) contribute substantially to the character of those towns and attract visitors, thus aiding the local economy.

In common with their surrounding countryside, market towns have always changed, and will continue to do so. Their long history and often rich historic fabric are assets which, wisely used, can help to produce an agreeable and interesting environment, economic prosperity and a sense of civic pride and identity. □

Roger M Thomas
Head of Urban Archaeology

Downham Market, Norfolk, Bridge Street and Market Place. Grant-aid from the Historic Environment Regeneration Scheme (HERS) has been used for window and roof repairs at the Town Hall (facing Market Place). An enhancement scheme and traffic calming will be carried out later this year

© Somerset County Council



Dunster, Somerset. A survey was funded by English Heritage, and carried out by Somerset County Council?s archaeology service, to analyse the historic topography of this market town. The resultant understanding can help to inform future planning and development

© NMR (21103/12)

Aerial photograph of Dunster

Planning Portal Programme

Easier planning process

The Government is keen to make the planning process easier to use and more open. The Planning Inspectorate is taking the lead in a programme designed to turn this objective into a reality

The Planning Inspectorate is leading a programme of work aimed at making the planning process easier to use, more accessible and transparent. The programme was initially funded by Central Government from the Capital Modernisation Fund, but Lord Falconer, Planning Minister, has announced extra funding for the work. He also confirmed that Sally Keeble MP had been appointed by the Secretary of State as Ministerial champion for the programme.

What is the Planning Portal Programme?

It consists of two main projects:

- The *Planning Portal* will be a general planning advisory service linking all users of the planning system to a wide range of advice, guidance and services on planning and related topics. The service will be accessed via an Internet portal that will link all relevant organisations and will itself be linked to UK Online. It will bring together all services related to the planning process, providing a substantial improvement in the planning service to citizens, business, government and others. All information currently in the public domain will be available free of charge, but where value-added services are provided, the service provider will decide whether or not to charge.
- The *Casework Service* will be an electronic planning casework document handling and tracking facility for the 20,000 or so cases dealt with by Planning Inspectorate each year. Links between all parties will be automated to enable direct access via the Internet to documentation, progress and information on decisions. The service will be one of those available via the Planning Portal. A paper-based service will continue to be available for those people and organisations that prefer not, or are unable, to use the electronic service. A key objective of the programme is to make the electronic service sufficiently attractive to persuade customers to use it, and continue to use it, in preference to the paper-based service.

Single point of access

Access to the planning system will be possible via a common entry point: the Planning Portal. The customer will be routed to the most appropriate source of information or the most appropriate organisation with the aid of a Geographical Information System (GIS). This feature will apply to all matters, such as submitting an appeal or objection, enquiring about progress on a case or finding out what local planning policies are.

Citizens

Citizens will be able to access any aspect of the planning system using the method of their choice: the Internet, traditional correspondence or telephone.

Planning professionals

Advisors and agents of planning, architectural and associated professions, as well as developers, will be able to access any aspect of the planning system using the communication method of their choice. It is envisaged that planning professionals will find the Internet-based Casework Service sufficiently attractive to move very quickly to electronic transmission and receipt of information.

Government bodies

All communication between local government, central government and agencies will be electronic within the Government's timeframe for Modernising Government, i.e. 20% by 2002 and 100% of services available electronically by 2005.

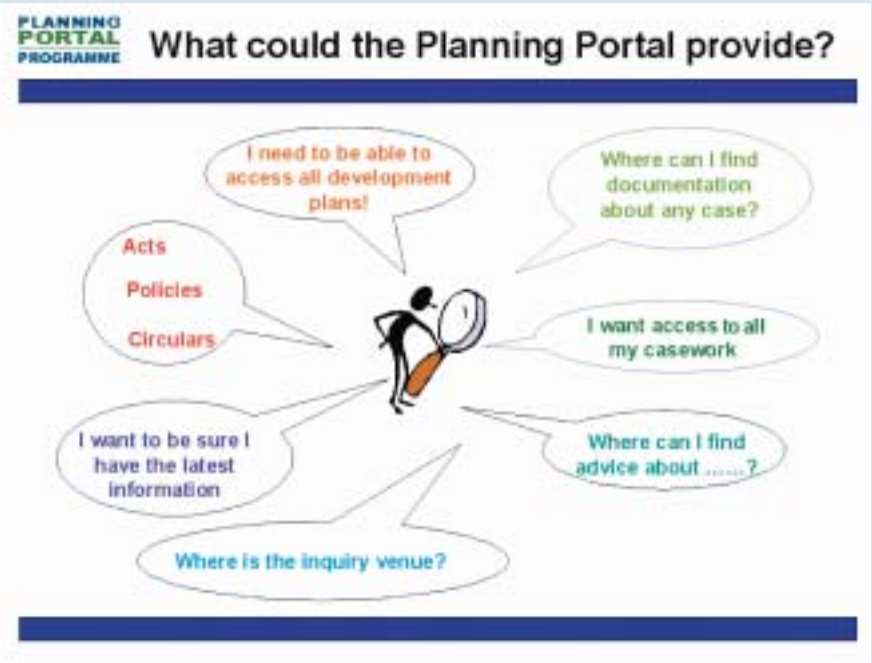
Casework information

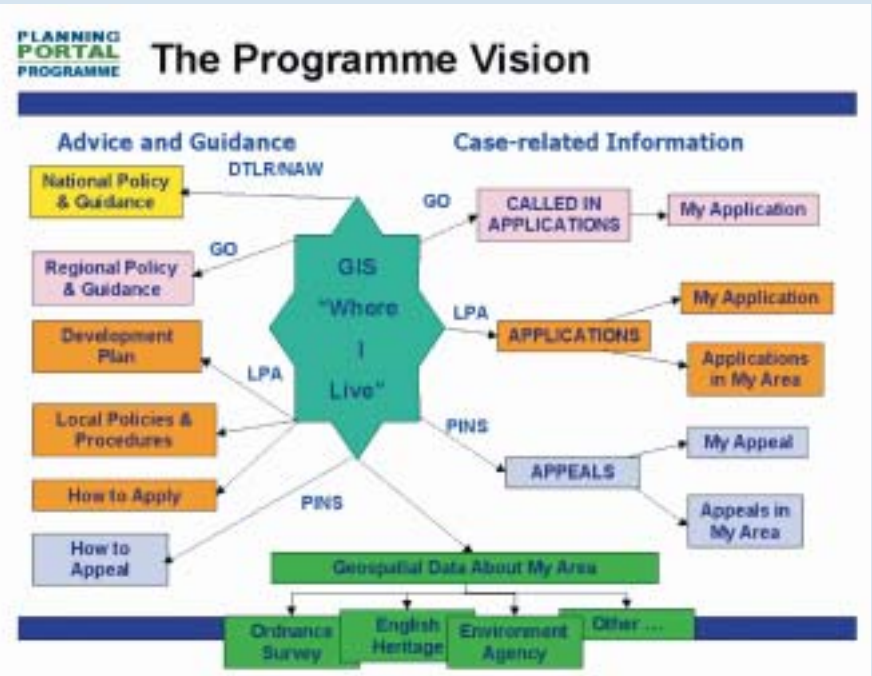
All information will need to be submitted only once and transferred through the system between organisations in electronic form as required. Electronic case management will replace paper-based casework on a rolling basis, and all documents will be stored electronically irrespective of the medium in which they were received.

Local planning authority information

Access to information on planning applications via the Planning Portal will occur progressively through to 2005, by when, if they meet the Modernising Government Agenda, all councils should be able to share such information electronically. It is intended that application information will be transferred automatically to the Planning Inspectorate according to agreed protocols when an appeal is lodged, reducing the work required by both appellants and councils at the start of the appeals process. □

Jo Fox
Planning Casework Project Leader
E-business Branch
The Planning Inspectorate





Further information can be found at www.planningportalprogramme.gov.uk. The teams working on the projects are also keen to receive as many comments, queries, suggestions and bright ideas as possible from all involved in the planning process. If you would like to contribute to the Programme in any way, please contact the Programme Support Office (pso@planning-inspectorate.gsi.gov.uk Tel 0117 372 8470) Room 3/16, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN

Register of parks and gardens

Post-World War II landscapes

A growing understanding of gardens and landscapes designed since 1945 has led to the increased interest of the general public, landscape students and amenities societies as well as plans for a formal survey of identification and assessment by English Heritage's Designed Landscapes Team

During the early years of the *Register of Parks and Gardens of Special Historic Interest*, only parks and gardens laid out before 1939 were eligible for inclusion. After the introduction of the '30 year rule' in 1987 by English Heritage's Building Listing Team, the same rule was introduced for the *Register*, but the inclusion of post-World War II parks and gardens was still minimal. From the 1450 sites now registered, only 12 have a significant post-war element or are completely post-war in design. It is thus clear that further research, identification and, if appropriate, registration of post-war landscapes, is needed.

Assessing post-war landscapes

The National Heritage Act of 1983 allows English Heritage to compile registers of 'gardens and other land of special historic interest in England'. For the purpose of the current *Register*, this embraces gardens, parks, designed ornamental landscapes and places of recreation. Besides this definition, a set of criteria is used to select sites for the *Register*. To date, the assessment of most of the post-war sites recommended to us has shown that the existing Register criteria seem to be satisfactory and that the assessment process is usually no different from that of older sites. That said, English Heritage's Designed Landscapes Team has dealt mainly with smaller gardens and/or architectural gardens that are similar in type and concept to parks and gardens created in past centuries. These include, for example, garden designs rooted in the Arts and Crafts tradition, popular throughout the 20th century, as well as recreational sites for public use such as those created during or shortly after the Festival of Britain or influenced by the Floriade and Gartenschau organised on the Continent.

There are also gardens and landscapes using strong symbolism in their design, such as Geoffrey Jellicoe's landscape at the John F Kennedy memorial at Runnymede in Surrey and Barbara Hepworth's garden in St Ives, Cornwall (Grade II). In the latter, symbolism is explored through the use of sculpture and its careful positioning in relation to light, planting and water. Strong symbolism is also used in the spiritual gardens of Japanese or Asian style first explored by Christopher Tunnard in the 1930s. Strong architectural elements are included in Sylvia Crowe's garden at The Commonwealth Institute, London (Grade II), and Arne Jacobsen's garden at St Catherine's College, Oxford (Grade II). Assessing those types of

The Barbican, City of London. Housing estate including public, communal and private gardens of 1955–59 and 1964–8 by Chamberlin, Powell and Bon and Ove Arup and Partners

By courtesy of Fridy Duterloo-Morgan

The Civic Square in Plymouth shortly after completion in c1962. Designed by Geoffrey Jellicoe as part of the wider urban landscape of Plymouth, based on Patrick Abercrombie's Post War Plan for the city

landscapes under the existing criteria for the *Register* is not so problematic; they all are recognisable 'standard' historic landscape types. Nevertheless, there is still an urgent need to further identify those gardens and landscapes in order to create a better overview and a general framework for their further historical assessment.

Novel landscape types

Some post-war landscapes will be identified that are intrinsically different in type and concept from the more standard types already described. The key to understanding and interpreting these landscapes correctly is to establish the role of the landscape architect or designer. Early members of the Institute of Landscape Architects (now The Landscape Institute), founded in 1929, were influenced by new fashions in horticultural design (for the first two months, the Institute was called the British Association of Garden Architects). However, the Institute, like The Town Planning Institute founded 15 years earlier, was also influenced by Patrick Geddes (1854–1932) and Ebenezer Howard (1850–1928) who envisaged the development of the town and city as a whole with a fully integrated landscape. From the early journals published by The Institute, including *Landscape and Garden* edited by Richard Sudell and the quarterly *Journals*, it is obvious that landscape architects thought increasingly in terms of the wider setting of their designs.

Geoffrey Jellicoe (1900–96)wrote in *The Landscape of Man* (1987) that 'the most significant single factor in land design was the birth of the modern science of town- and country-planning'. This new science increasingly led to the creation of landscapes for architectural projects and large-scale town planning schemes. Examples include civic schemes such as Harlow New Town and the rebuilding of Plymouth and Exeter after World War II as well as housing schemes such as the Alton Estate, Roehampton, and the Barbican, City of London.

Alongside the creation and expansion of these urban landscapes, there was a growing awareness of the fragility of the countryside, as for example expressed by the landscape architect and planner Sir Clough Williams-Ellis (1883–1978). One of the main tasks of the landscape architect became the creation of 'ecological' landscapes, often on a very large scale and designed to ensure the 'natural' integration of new development – housing, factories, motorways, airports, power stations and commercial forestry – into the existing, often rural, landscape. This integration was achieved by creating naturalistic lakes and tree belts, often involving massive earthworks, such as at the Guinness Brewery, Park Royal, London (1959) by Geoffrey Jellicoe and at Rutland Water Reservoir near Leicester by Sylvia Crowe.

The expansion of the professional role of the landscape architect during the 20th century led to the recognition of the term 'landscape' in its broadest sense. It is obvious that these large-scale designed landscapes need further research and interpretation in order to evaluate their historical significance. Subsequently it will be necessary to decide whether we wish to conserve any of them for the future. If so, decisions need to be made about including such sites in the *Register* as well as developing relevant criteria for assessment or considering whether a broader type of landscape designation may be more appropriate.

Post-war landscapes at risk

English Heritage's Post-War Buildings Listing Programme and associated public consultation has created considerable public awareness and appreciation of our post-war heritage. Although focused on architecture, the programme has shown that there is a significant overlap of buildings and designed landscapes. This overlap has occurred also in the Cold War and military sites under consideration by Monuments Protection and Thematic Listing Programmes. Nevertheless, post-war landscapes are still rarely highly valued and are particularly vulnerable to development, inappropriate repair and planting, change or increase of use and general neglect. This seems especially the case with urban landscapes of New Towns and post-war town centres such as Plymouth or Exeter, which consist of interesting municipal squares and walks forming part of a wider urban landscape.

Recently, English Heritage formally objected to the proposals for the relocation of Frederick Gibberd's Water Gardens (II*) in Harlow New Town, as part of an overall re-development scheme for the town centre. The Water Gardens form an integral part of a very fine and early example of post-war new town planning as conceived by Gibberd in the late 1940s and early 1950s. English Heritage believes that relocating the historically significant Water Gardens would damage the overall design concept to such a degree that the proposals could be seen as amounting to demolition.

It is not only through large development proposals such as at Harlow that post-war landscapes are at risk. The change or increase in the use of a site can also cause problems. The Civic Square in Plymouth (Grade II), designed by Geoffrey Jellicoe in the early 1960s, includes

Interior of the former Cake House in St James' Park, Westminster, shortly after completion in 1970, showing the tile mosaic by the artist Barbara Jones (1912–1978), depicting the George III's Jubilee Celebrations held in the park in 1814

The former Cake House in St James' Park, Westminster, by Eric Bedford (Ministry of Public Building and Works), shortly after completion in 1970

© English Heritage

The Water Gardens in Harlow by Frederick Gibberd, completed in 1960 and first conceived by Gibberd in his 1947 Master Plan for Harlow New Town

significant hard landscaping. The decorative paving and concrete seating, however, were not intended for the intensity and range of uses they have today, and after 40 years they show considerable decay. Car parking, the annual merry-go-round, the weight of maintenance vehicles and certain cleaning methods have caused considerable damage to the original fabric. As with many other historic urban parks and squares, a decision needs to be made about preserving the fabric and design of Jellicoe's work and making it a public place fit for safe use and enjoyment.

Eyesore or eye-catcher?

Many historic designed landscapes are multi-phased, and some include interesting mid- to late-20th-century elements that form an important part of the historical development of the site. Often, however, there is debate about the value of recent design. The late 1960s concrete Cake House in St James' Park in Westminster, London, was thought an eyesore by many. It was not widely known that this small building was meant to evoke John Nash's tents in the park erected during George III's Jubilee Celebrations of 1814, an event depicted on Barbara Jones's colourful interior tile mosaics. In this light, the building could have been seen as an important feature in St James's Park (Grade I), celebrating its diverse and significant history. Nevertheless, following proposals to build a new restaurant in St James' Park and given the structural condition of the Cake House, it was recently demolished.

Next step forward

English Heritage continues to be encouraged and inspired by conferences organised by amenity societies, and in particular, the recent workshop organised by the Garden History Society as a result of discussions of the Harlow case described above. Growing numbers of landscape conservation students show an interest in modern landscape research, and some County Gardens Trusts now include post-war landscape design in their surveys and bring them to the attention of local authorities. English Heritage's Designed Landscapes Team, once funding has been secured, will start a formal survey to identify and assess post-war landscapes in England. Alongside this survey, the Team will need to consider the scope of the *Register* and whether it is a suitable designation for large and complex post-war landscapes. English Heritage will continue to discuss the key issues with all those involved in the care and conservation of our historic environment. One of the key messages in *Power of Place*, the recently published review on the future of the historic environment, states that people value places, not just a series of buildings and sites. A more rounded and comprehensive approach in the assessment of the historic environment, without losing the finer details, should result in an integrated designation, which seems to be more appropriate now than ever before. □

Fridy Duterloo-Morgan
Register Inspector
Designed Landscape Team

England's legal heritage

Recording the law court

English Heritage is documenting the history of England's law courts, many of which face an uncertain future

Although law courts are public buildings, many people feel wary of them. They are often seen as dramatic places, an image fostered in television dramas, where the wronged defendant struggles for justice. The reality is that most people have contact with courts by post! Every courthouse, however, is part of the complex history of the English legal system that underpins every aspect of our lives.

The closure of courthouses

The Courts project was undertaken at the request of the Court Service and the Lord Chancellor's Department in the light of a rapidly-changing legal system, with many historic courts becoming redundant. Magistrates' Courts, once a feature of most market towns, are increasingly being concentrated in larger conurbations. In 1945 there were 997 Petty Sessions Divisions, most of which would have had a building in which the court sat. By 2001 the number of courts had been reduced to 394. There are still many small rural courts that are open only for a few hours a month, but these are gradually closing.

The number of County Courts has also decreased significantly, from 493 in 1914 to 248 buildings in 2001. In 1971 criminal trials by jury took place in 144 towns and cities, but today the Crown Court sits in only 82 towns and cities. Only 36 of the current Crown Courts were in use thirty years ago.

In the future, the concentration of legal services in fewer centres will continue. The introduction of sophisticated information technology systems will necessitate the closure of many smaller, occasional courts. Historic court fittings will not be easily adapted to the new technology, and the desire to improve disabled access will place further pressure on historic buildings. Older courts, with their hierarchical, stepped seating, will not be adaptable without significant changes.

Variety in legal architecture

Courts range in date from medieval halls to purpose-built courthouses that opened in 2001. The Great Hall of Oakham Castle has been used for courts since the Middle Ages. As courts sat

Cheltenham County Court, Gloucestershire, 1869–70, by Thomas Charles Sorby, the County Court Surveyor. One of seventeen 19th-century county courts still in use

Nottingham Magistrates' Court, built 1993–6. A huge Magistrates' Court with 18 adult courtrooms. A separate block contains six family and youth courts

only a few times a year, there would have been no fixed furnishings. In the early 19th century, however, permanent court fittings were inserted into the hall. During the 18th and 19th century, the growing complexity of the legal system and increased status of the legal profession meant that permanent, dedicated accommodation was increasingly required. This led to the emergence of the court as a new building type.

In the late 20th century there was a major building programme to provide new facilities for the Crown Court. Thirty-seven Crown Courts outside London are now located in combined court centres where they share accommodation with the County Court.

Although the Crown Court provides the most dramatic architecture, it deals with only 2% of criminal cases. The remaining 98% of cases are handled by Magistrates' Courts. Most of these have been built during the past thirty years, but many small historic courts attached to police stations are still in use. County Courts are also predominantly located in modern buildings,

Oakham Castle, Rutland. Early 19th-century courtroom in the Great Hall (1180s)

usually city centre office blocks rather than purpose-built courthouses. Only 17 of the original 19th-century County Court buildings are still in use, although some may close in the future.

Our response

Since 1999 English Heritage has been documenting the architectural history of law courts. Every working court has been visited, as were a selection of buildings where courts used to sit. A new publication, available after the completion of the project in 2002, will provide the first comprehensive portrait of the architecture of England's legal system and will explain how the system is undergoing significant change. □

Allan Brodie
Team Leader
Architectural Projects

Bodmin Shire Hall, Cornwall, 1837–8, by Henry Burt of Launceston. Used as a court until 1988, it re-opened in 2000 as a museum

For more information please contact Allan Brodie, NMRC, Kemble Drive, Swindon SN2 2GZ; allan.brodie@rchme.co.uk

Liberty Cinema

Architectural paint research in practice

Liberty Cinema, Southall, is a striking Grade II fusion of Art Deco and Chinese style. As part of the Liberty's rejuvenation, architectural paint research has been used to gain an understanding of its past decorative development and inform conservation decisions for its future*

Liberty Cinema is situated in the heart of the predominantly Asian community of Southall, London. Built in 1929 as a sumptuous and unique Chinese-style picture house, it was designed by George Coles, one of the most prominent cinema architects of the time. It has an ornate faience-clad exterior topped with a pagoda roof surmounted by writhing dragons as well as an elaborate moulded plaster interior to match. The quality of the building is reflected in its Grade II* listing. The fortunes of the Liberty mirror those of many traditional cinemas. After successive changes of ownership in the 1970s, it closed for business and was converted for use as an indoor market in 1982. During that time, little or no maintenance was carried out, and the site was placed on English Heritage's *Buildings at Risk Register*. The structure was purchased in 1998 by the present owner, a local businessman, who intended to restore the Liberty as a cinema. Later the same year disaster struck when a fire severely damaged the auditorium interior, placing its future in jeopardy. English Heritage's London Region responded to the crisis by offering a substantial grant-aid package in order to replace the damaged plaster of the auditorium, repair the external faience and recreate the original decorative scheme of the interiors.

Recovering the original scheme

In order to establish the original scheme, the Architectural Paint Research Unit within English Heritage's Building Conservation and Research Team was asked to undertake research into the decorative development of the building. A search for archive documentation, which might shed valuable light on the appearance of the cinema, was of limited success. George Coles' original designs for the site were uncovered in the Cinema and Theatre Trusts' archive. These designs differed from the Liberty, and no clue was given for the original paint scheme. A single photograph of the auditorium dated November 1929 revealed the existence of pagoda-topped wall panels, since lost, but again, it did not establish the original paint scheme.

Initial paint samples were then taken from the ceiling and high-level wall faces of the auditorium, which revealed that the intense heat of the fire had charred both the paint layers and the plaster to a uniform grey. The building was

Detail of the proscenium arch showing damage to the plasterwork and paint caused by the fire of 1998

Redecoration of the auditorium ceiling in progress

then searched to see if any paint had been protected from the ravages of the fire. Fortunately, the foyer was undamaged and provided a wealth of information. The lower areas of the auditorium, which had been protected by the fittings of the indoor market, provided substantial details of the original scheme.

Examination of samples removed from these areas provided startling results: a wide range of bright colours had been used throughout the auditorium and foyer. An integral element of this decorative scheme was the elaborate picking in of the moulded decoration and the use of gold leaf and tinted varnishes, designed to create a lacquered surface finish. Both the colours used and their placement were related to the design and colouring of the external faience. These findings provided evidence for the recreation of the original scheme, essential in establishing an integrated finish for the cinema.

Implementing the research

The paint research had revealed not only the original 1929 scheme but also its subsequent replication using less costly materials: fewer colours, gilding replaced by gold paint and glazed areas covered by matt paint. The project team decided that it was important to recreate the appearance of the lavish original as faithfully as possible with gold leaf and glazed areas. The Paint Research Unit was then asked to prepare the specification for the redecoration scheme. Modern emulsion paints, matched to the original colours, were used in an interior where substantial areas of the original plasterwork had been replaced. In order to ensure that the quality of the redecoration matched the original, tenders were sought from decorating firms with experience in historic redecoration.

While enough evidence survived to allow for the confident reconstruction of the paint scheme in most areas, the paint layers of the auditorium ceiling had been lost. We proposed a simple scheme for this area based on colours found elsewhere in the auditorium to ensure that the scheme would read as a decorative whole, while avoiding the presentation of an elaborate but speculative design as a historic original.

Adding value

Architectural paint research has given us a clear understanding of the decorative development of the Liberty. It has enabled us to undertake the reconstruction of the original decorative scheme and make informed and justifiable conservation decisions along the way. The flamboyant architecture of the cinema stands out in an area lacking in historic buildings of this quality. It can be argued that the conservation and representation of the original scheme adds to the appreciation and value not only of the building but of its location. Most importantly, there is strong support within the local community for the preservation of the cinema and its proposed return to use as a picture house showing both Bollywood and Western films. □

Louise Henderson
Architectural Paint Researcher
Building Conservation and Research Team

Volatile Heritage

St Pancras gasholders

The current dismantling of the celebrated St Pancras gasholders underscores the transience of this functionally obsolete, highly endangered category of Victorian industrial engineering. A pioneering study recently commissioned by English Heritage will help safeguard the future of the most important survivors, both in London – the centre of the gas industry – and throughout England

One of the most striking and remarkable groups of Victorian gasholder frames in the world is currently being dismantled to make way for the Channel Tunnel Rail Link terminal at St Pancras. Fortunately, storage, with the prospect of a new lease of life elsewhere, rather than destruction awaits most of these functionally obsolete structures, including the uniquely conjoined 'Siamese Triplets'. For those gasholders not statutorily protected, the future is bleak – a scenario mirrored throughout the country, with only 22 examples currently listed, scheduled or in the care of museums. Over the next four years, TRANSCO, owner of the great majority of gasholders, will demolish all structures not listed or scheduled, because gasholders have been superseded by modern, high-pressure gas storage technology. English Heritage commissioned the London Gasholders Survey to address this situation by providing, for the first time, the technological and typological understanding to establish criteria for the evaluation of significance leading to the conferral of protection. Derek Kendall (photographer) and Jonathan Clarke (Investigator) from Architectural Investigation recently accompanied London Division caseworkers and representatives from the London Borough of Camden, Railtrack and CTRL to document through photographs the dismantling of the St Pancras survivors.

St Pancras gasholders

The atmospheric backdrop for numerous film scenes, including Hitchcock's early noir-classic *The Ladykillers*, the St Pancras gasholders were always meant to be seen and admired. They were built as the showpiece of the Imperial Gas Light and Coke Company's St Pancras gasworks during its Victorian zenith, in response to London's insatiable demand for heat and light as suburban houses and streets sprawled ever outwards. In common with most other gasworks, components from the first, early-19th-century phase of the industry were replaced later in the century with larger capacity, more technologically advanced structures. The seven surviving gasholder frames at St Pancras all date from the late 1870s and 1880s, although many make use of tanks from the 1850s and 1860s. Collectively they form one of the most extraordinary groups anywhere. They comprise:

View looking south to St Pancras station and hotel through the 'Siamese Triplets', perhaps the most iconic of all gasholders

- Nos 10, 11 and 12 (1879–80; designer John Clark), Grade II. The interconnecting triplet formation of the three-tiered guide frames – an adroit structural response to the problem of building on a cramped canal-side site – is both magnificent and unique. As a result of the London Gasholders Survey, we now know that they are a development of Joseph Clark's earlier two-tiered designs at Bethnal Green (1865–6) and Bromley-by-Bow (1872–82), built for the same company. Similarly, the survey provides an overall typological compass within which to place the guide frames of the 'Siamese Triplets'.
- No 8 (1883; designer John Clark), Grade II. The last surviving example of John Clark's work, this double-order, double-tier guide frame incorporates certain modifications from the 'triplet type', notably octagonal pedestals designed to accommodate external holding-down bolts.
- Nos 3, 13 and 14 (1886–87; designer George Trewby). This distinctive group presaged the introduction of horizontally stiff girders for increased robustness, having affinity with the wind screen of the St Pancras train shed.

All of the St Pancras gasholders have been decommissioned to make way for the rail link. Under the terms of the agreement between English Heritage and the rail link developers, London Continental Railways, the latter are obliged to dismantle the listed gasholders carefully and to hold the component material in store until an alternative use is found. There is no such obligation towards the unlisted gasholders.

The London Gasholders Survey

Undertaken by Malcolm Tucker, a leading engineering historian and industrial archaeologist, the London Gasholders Survey will assist English Heritage in making informed recommendations to the Department of Culture, Media and Sport (DCMS) for the statutory protection of gasholders in London. This work, the first of its kind anywhere in the country, was commissioned in June 1998 by Dr Chris Miele, then of the Historical Analysis and Research Team (HART) of English Heritage, because of a lack of any synthetic understanding of the technological and historical significance of this class of structures. Fourteen intact and unlisted later-19th-century gasholders were selected for detailed study. These fourteen structures, sited at Bethnal Green, Poplar, Hornsey, Kensal Green, Battersea, Kennington and Old Kent Road, form the basis of the survey, but the findings have wider significance because the gasholders are placed within wider historical, geographical and technological contexts. In particular, the establishment of a typology for guide frames – the cylindrical skeleton of columns, girders and (sometimes) diagonal bracing built around the perimeter of the tank – provides a much needed point of reference for comparing these and other structures in relation to both structural and aesthetic criteria. □

Jonathan Clark
Investigator
Architectural Investigation

By 'telescoping' two, three or more concentric cylinders or lifts inside each other, the holders could be made taller and hence of greater capacity without using more ground-space, an especially important consideration for confined, inner-city sites. The introduction of telescopic holders, however, resulted in greater mechanical complexity in the arrangement and detailing of the guidance systems. For three-lift holders, such as No 13, three separate brackets or carriages were required to support the rollers which engaged with the rails attached to the guide frame

The great majority of the gasholders investigated were photographed with a large-format camera by Sid Barker of the London Architectural Investigation team. These photographs, and those of the St Pancras structures by Derek Kendall, can be viewed at the London National Monuments Record, 55 Blandford Street, London W1U 7HN; Tel. 02088200; email london@rchme.gov.uk

National Monuments Record

News and events

ENGLISH HERITAGE

NATIONAL MONUMENTS RECORD

The NMR is the public archive of English Heritage. It includes around 10 million archive items (photographs, drawings, reports and digital data) relating to England's historic environment.

Newly catalogued collections

Nigel Temple Postcard Collection of Parks and Gardens

This collection of 4,256 postcards featuring parks and gardens was amassed by Nigel Temple and acquired by the NMR from 1997 to 2000. The collection spans a century from about 1880, with most cards dating from 1900 to 1910. About half are black and white and the others colour-tinted. There is good coverage of most counties across England, with an emphasis on coastal counties containing holiday resorts.

© English Heritage. NMR (PC07616)

The view towards the harbour from Langmoor Gardens in Lyme Regis, Dorset. Two children with fishing nets pose for the camera. This hand-tinted postcard was produced between 1900 and 1930 by W C Darby of Lyme Regis

© English Heritage. NMR (PC08736)

The lily pond and rose garden in Ashton Gardens, a public park in St Anne's on Sea, Lancashire. The architectural drinking fountain commemorates Lord Ashton's gift for the purchase and development of the park. This hand-tinted postcard was produced between 1916 and 1930

Tate and Lyle Collection

This small collection of 223 items documents the building of the Tate and Lyle Sugar Silo in Huskisson Dock, Liverpool, 1955–8.

Cleggett Collection

The collection focuses on three sites: Crosby Hall in the City of London, Leeds Castle, Kent, and Lapworth in Warwickshire. Views of Crosby Hall show this important medieval building in the City of London immediately before its demolition. Also recorded are the buildings and people of Leeds Castle Estate in the latter part of the 19th century and the Packwood House Estate in Lapworth, Warwickshire, around the turn of the 20th century.

Wrencote Folio

A folio compiled during the 1950s prior to renovation of this important late-17th-century house has been catalogued. Wrencote was said by Pevsner to be the finest house in Croydon.

Eastbourne Originals

This is a small collection of 19th-century photographs of Eastbourne, East Sussex. Of particular interest are photographs showing the building of a new road across the Downs and the construction of Beachy Head Lighthouse.

NMR leads on European data standards

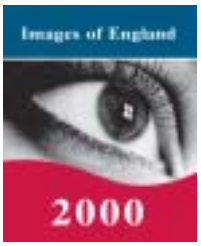
HEREIN2: The European Heritage Net Phase 2

Last year the NMR participated in a European-funded project to develop a website dedicated to European heritage (www.european-heritage.net). The NMR's involvement focused on the creation of a multi-lingual thesaurus (initially in French, Spanish and English) which could be used to search the website. This year, as part of the second phase of the project, the NMR is leading the workpackage dealing with the extension of the thesaurus to the Hungarian, Slovakian and Romanian languages.

HITITE: Heritage Illustrated Online Thesaurus

As part of the Information Society Technologies programme, the NMR, in partnership with Adlib Information Systems, has secured European funding for twelve months to develop an Illustrated Online Thesaurus. Building on the NMR's experience in the field of thesaurus construction, the HITITE project will develop a web-based interface designed to allow users to interrogate the NMR's databases through innovative image searching.

Major new update for Images of England website



The *Images of England* project is just completing the next stage in the development of the prototype website: the Public Access trials. The website being reviewed as part of three trials now offers a much greater range of features than the initial prototype, including a snapshot of the list descriptions for all of England's 370,000 listed buildings, a completely re-designed appearance, much-expanded search facilities and many more photographs.

This enhanced version of the site offers visitors who undertake the appropriate level of registration a much wider range of search facilities than its predecessor. It is now possible, for example, to retrieve details of one or more buildings by specifying a building name or individual building type (for example, a barn or chapel). Searches are also possible based on particular construction materials, date or period of construction, people or organisations associated with buildings. A gazetteer and small-scale map make it easier to identify buildings by location.

Over 700 volunteer photographers have spent the summer and autumn recording thousands of listed buildings across England and will continue to brave the elements this winter. The site already contains thousands of photographs with more being added over the coming months.

The prototype website can be found at www.imagesofengland.org.uk. Visitors to the site can send comments through the project's on-line feedback form and subscribe to the free *Images of England* newsletter.

Pump at Bromley Hall, Hertfordshire (Grade II)

Alistair Nisbet, Images of England *volunteer photographer and Ministry of Defence employee, recording a martello tower on Hythe Ranges in Kent*

Obituaries

Readers will be saddened to hear of the recent deaths of two of the most distinguished staff of the former National Buildings Record.

Cecil Farthing, OBE, FSA, 1909 – 2001

The National Buildings Record (NBR) was established in 1941 to record historic buildings that, it was feared, would be destroyed in air raids during World War II. The Courtauld Institute's collection of photographs of English architecture formed the backbone of the new NBR. As Courtauld librarian, Cecil Farthing transferred with the collection, working under Walter Godfrey, Director of the NBR, and John Summerson, his deputy. After the war, he continued to serve the NBR, effectively managing it until Godfrey's retirement in 1960 when he took over as Director. He oversaw the transfer of the management of the NBR from its trustees to RCHME in 1963. He retired in 1976. Since 1995, the NBR has been managed as part of a unified NMR, which includes archaeological records and air photos as well as buildings records.

Eric Mercer, OBE, 1918 – 2001

Eric Mercer joined the RCHME in 1948, following war service. Eric's specialism was in vernacular architecture, and he served a term as president of the Vernacular Architecture Group. He contributed to the RCHME's Dorset inventory and to *Shielings and Bastles* (1970). His own monograph, *English Vernacular Houses* (1975), was an influential study which brought together the results of two decades of 'emergency recording' of listed buildings by the RCHME. Following private research, he also published *English Art 1553–1625* (1962) and *Furniture 700–1700* (1969). He became Head of Architecture and in 1976 was appointed Head of the NMR and deputy Secretary of the RCHME until his retirement in 1981.

The Gallery, Swindon

Exhibition programme

The NMR's exhibition programme, based at its Gallery in Swindon, is designed to show aspects of the NMR's extraordinary photographic collections. The Gallery is open Wednesday to Sunday, 11am to 5pm. Admission is free.

Henry Woodyer: Gentleman Architect: closes on 7 April
This exhibition illustrates the work of the important, but little known, Victorian architect Henry Woodyer (1816–96). His life and work has recently been the subject of research and publication by a group working under the auspices of the University of Reading Department of Continuing Education.

Portrait: 13 April–30 June
A selection of work by English Heritage photographers.

Study Programme

NMR runs a varied programme of workshops, tours, lectures and evening classes designed to help participants make the best use of NMR resources for work, research or personal interest.

Undergraduate Certificate in Archaeology Level 1
NMRC, Swindon, Mondays 7.00–9.00pm, starting 7 October 2002.
A two-year, part-time modular course organised in conjuction with Oxford University Department for Continuing Education.
For further information and to enrol, please contact: OUDCE, 1 Wellington Square, Oxford OX1 2JA; Tel: 01865 270369
ppcert@conted.ox.ac.uk

For further information on exhibitions, please contact Jane Golding at
The Gallery, NMRC, Kemble Drive, Swindon SN2 2GZ;
Tel 01793 414735; Fax 01793 414606;
jane.golding@english-heritage.org.uk

To make an enquiry about the NMR's holdings, please contact
NMR Enquiry & Research Services, NMRC, Kemble Drive, Swindon SN2 2GZ;
Tel: 01793 414600; Fax: 01793 414606;
nmrinfo@english-heritage.org.uk

Notes

Access to information

English Heritage has a new Access to Information policy regarding information supplied to, and correspondence with, English Heritage. Members of the public, the media and members of staff will be able to obtain copies of records in all forms, including photographs, plans, e-mails, files and even data on computer systems. All records created in the course of English Heritage business, in whatever format and regardless of whether they are part of the 'corporate record-keeping system' will be subject to the principles of the Government's Freedom of Information Act.

From November 2001, English Heritage has followed the principles of FoI legislation for all records created on or after that date. From April 2002, we will operate under a full Access to Information regime before it is imposed by legislation.

According to the Chairman in a press release of 11 October 2001, 'I want us to create a culture of openness and accountability and I want us to do this quickly. There are quite rightly demands for increased transparency and as the Government's lead body for the heritage sector, English Heritage should move publicly, and of its own volition, towards greater access. Today's announcement should be seen as a clear signal that English Heritage is well and truly on the road to transformation from a bureaucratic, regulatory machine to a customer-focused service.'

The FoI principles create a right of access for everyone to information held by public authorities unless the information falls within exemption categories defined by the Act. There are two categories of exemptions: those which are absolute and those where there is a duty to consider the public interest in disclosing the information. The first includes information available to applicants by other means, personal information and information provided in confidence. The second includes information intended for future publication or about commercial interests or policy advice to Ministers, where disclosure would jeopardise a free and frank discussion. Under the second category, English Heritage would release the information unless, when taking into consideration all the circumstances, the public interest in maintaining the exemption outweighs the public interest in disclosure.

English Heritage Commissioners have approved a comprehensive Access to Information Policy and Scheme, covering rights of access, data protection and human rights, the main exemptions and arrangements for appeal and enforcement. The Corporate Records Manager has the role of FoI Coordinator and will deal with all formal applications under the Access to Information Policy.

Muchelney Abbey

Study day

English Heritage will hold a CPD seminar on 16 May 2002 to demonstrate the practical application of survey to the repair and regeneration of historic buildings.

It is aimed at conservation professionals (conservation officers, architects, surveyors, survey companies, archaeological units, project managers) and will include first-hand conservation information from the specialists, a demonstration of modern recording techniques in the field and a rare opportunity for hands-on experience of REDM equipment and applying up-to-date techniques to common survey and analytical challenges. The event conforms to the requirements of the IFA CPD scheme and to those of the IHBC and ATF. The attendance fee of £50 includes a buffet lunch at the Almonry.

For further information:
francis.kelly@english-heritage.org.uk
for booking form:
carol.white@english-heritage.org.uk

Investing in Heritage

Investing in Heritage is an international conference on Regenerating Europe's Historic Cities. Hosted by the Grainger Town Partnership and co-sponsored by English Heritage, it will be held in Newcastle upon Tyne, 3–5 July. Speakers include English Heritage's Chairman and Chief Executive.

For further information:
heritage@benchcom.co.uk.

Our Protected Past

The National Parks contain some of our finest relict landscapes and vernacular buildings. A major international conference at the University of Exeter (13–17 July) will present our understanding of all aspects of the historic environment in National Parks and other designated areas throughout Europe, and will develop ideas for best practice in their management. Originally planned for 2001, the conference had to be postponed because of the Foot and Mouth epidemic.

The programme will include keynote addresses by prominent international speakers, lectures, workshops and displays. Visits will be made to Dartmoor and Exmoor National Parks to present case studies and illustrate conference themes.

Sessions will cover the integrated management of the historic and natural environment; buildings and settlements; landscape identification and assessment; visitor management; agriculture, forestry and other development; industrial remains; coastal and wetlands; traditions, stories and songs associated with the historic environment; managing change; designation practice.

The conference will be pan-European in scope and will be essential to those working in this field – in government, local authorities, universities or the private sector.

Details are available from the Conference Organisers:
Our Protected Past, CEDC,
School of Education, University of Exeter,
Heavitree Road, Exeter, Devon EX1 2LU;
Fax 01392 411274
OPP-Conference@exeter.ac.uk
www.english-heritage.org.uk/OPP

National Heritage Bill

The National Heritage Bill, currently expected to be tabled in Parliament in April, contains a series of provisions which will give English Heritage new key legal powers.

These include a new responsibility for maritime heritage in English territorial waters, new powers for English Heritage to trade overseas and the formal completion of merger with the Royal Commission on the Historical Monuments of England. English Heritage welcomes all these changes.

Responsibility for maritime heritage below the low water mark currently rests with the Department for Culture, Media and Sport, while most similar powers on land belong to English Heritage. While both English Heritage and maritime archaeologists would strongly support a transfer of responsibility, we are expressing concern about funding. Marine archaeological sites are the least well-managed and the least well-understood of all England's historic environments. We believe £1 million a year is needed if we are to tackle the issues associated with this key dimension of our past.

English Heritage currently has no power to trade outside England. This makes it difficult for us to enter into international partnerships or to bid in partnership with others for European funding. It has prevented us from working internationally to promote our conservation and heritage management skills and made it difficult to promote our membership and other services overseas. Power to trade overseas would be a major step forward for us; the bill does not give us power to act within the other home countries of the British Isles.

Finally, while the RCHME operationally merged with us in 1999, the slight differences in the powers of the two bodies have prevented the merger being formalised legally. This part of the Bill will address this question.

The Bill does not cover the more wide-ranging issues raised by *Power of Place* and largely endorsed by the Government in its response, *The Historic Environment: A Force for our Future*, which we believe will be the subject of separate legislation in the future.

New Publications

from English Heritage

The Flag Fen Basin:

Archaeology and environment of a Fenland landscape

by Francis Pryor

The Flag Fen Basin has been the subject of nearly continuous archaeological research since about 1900. Most of the archaeological research described in this book took place in a response to building development during the past 30 years. Between 1971 and 1978 the Fengate Project revealed two Bronze Age ditched field systems laid out for the management of large numbers of livestock. At the centre of one field system, a complex pattern of droveways, yards and paddocks has been interpreted as a communal 'marketplace' for livestock exchange and regular social gatherings. A major droveway linked this area to an enigmatic wooden platform and to a post alignment, which runs for more than a kilometre across the wetland.

While there is no doubt that these structures were a route across wet ground, it is not fully understood why the Bronze Age people who built them deposited 'offerings' of spears, daggers, swords and jewellery into the associated lake. Nevertheless, it is believed that religious rituals were involved. The excellent conditions of preservation have enabled the excavators to undertake detailed examinations of the woodworking and associated archaeological remains, and to discuss the nature of the remains, their ritual significance and the possible social implications.

The report also includes a detailed summary of recent commercial excavations at Fengate. In particular, this research sheds new light on the Neolithic landscape, on the Iron Age and Roman landscapes, and on the changing environmental conditions since the earlier Neolithic.

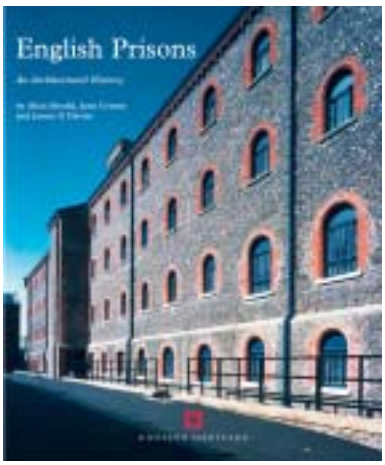
PRICE ***£75***
ISBN ***1 85074 753 9***
PRODUCT CODE ***50091***

475 pages, 83 b/w photos and 234 line drawings, 13 microfiche figures, hardback, 297 x 210mm

English Prisons:

An Architectural History

Allan Brodie, Jane Croom and James O Davies



For most of us, the prison is an unfamiliar institution and life 'inside' is beyond our experience. However, more than 60,000 people now live in our gaols, some serving their sentences in buildings with Victorian or more ancient origins, others in prisons dating from the last twenty years.

This publication is the result of the first systematic written and photographic survey of prisons since the early 20th century. It traces the history of the purpose-built prison and its development over the past 200 years. Over 130 establishments that make up the

current prison estate and over 100 former sites that have surviving buildings or extensive documentation have been investigated, institutions ranging from medieval castles and military camps to country houses that have been taken over and adapted for penal use.

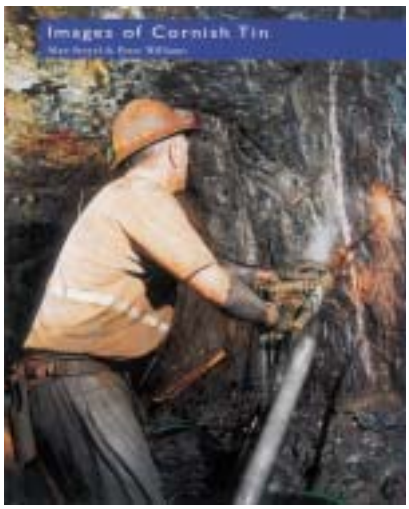
The Prison Service granted the project team unprecedented access to all its establishments, allowing the compilation of an archive of more than 5,000 images and 250 research files. The team was allowed to go anywhere, to photograph almost anything (except where this could compromise security) and to speak to any inmate. A selection of the images from the archive illustrates this book.

PRICE ***£40***
ISBN ***1 873592 53 1***
PRODUCT CODE ***50211***

297 pages, 91 b/w photos, 194 colour photos and 28 drawings, hardback, 276 x 219mm

Images of Cornish Tin

by Alan Stoyel and Peter Williams



This book is a personal overview of an historic industry - tin mining - which has now ceased. It is a portfolio of images compiled by the two authors and reflects their interests and their backgrounds. Both have had many years of experience in their respective fields of metal mining and photography. Here they have been able to share their special interest in south-west England and enthusiasm for recording aspects of past industry. This volume is directed equally towards those who know nothing about the subject as well as its devotees. Throughout runs a deep sense of respect for what has been achieved in the past, above and below ground, by ingenuity, risk and sheer hard work.

In association with Landmark Publishing

PRICE ***£29.50***
ISBN ***1 84306 020 5***
PRODUCT CODE ***50667***

191 pages, 232 colour and 31 b/w illustrations, hardback, 276 x 219mm

'One Great Workshop':

The buildings of the Sheffield metal trades

by Nicola Wray, Bob Hawkins and Colum Giles

In the past, Sheffield's 'light trades' (cutlery and edge tools) and 'heavy trades' (steel production, armaments, etc) were of international significance, dominating the local economy and giving employment to thousands of men and women.

Today the great industries remain, and steel and cutlery are still produced in large quantities. In their halcyon days these trades created a distinctive industrial landscape, both urban and rural, and the legacy of this period survives at every turn.

This can be seen in the form of a unique industrial heritage and in the continuing local pride in the tradition of craftsmanship and enterprise. This book summarises the history of Sheffield's metal trades, describes the processes involved and illustrates the special environment produced by the buildings of the industry.

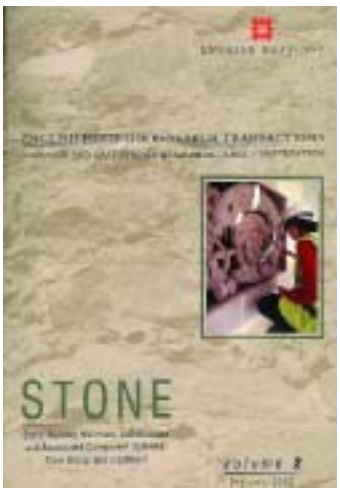
PRICE ***£5***
ISBN ***1 873592 66 3***
PRODUCT CODE ***50214***

54 pages, 71 colour and 13 b/w illustrations, 2 maps, paperback, 210 x 210mm

Stone

Stone building materials, construction and associated component systems, their decay and treatment

edited by John Fidler



Volume 2 of the English Heritage Research Transactions is devoted to investigative work on the repair and conservation of historic stone masonry.

Papers on research, development and case studies cover topics on systems of protection, the use of organic and inorganic masonry consolidants, wax defences in sacrificial graffiti barriers and the employment of soft wall cappings. In addition, papers on the retention of historic masonry cover the use of keyhole or microsurgery techniques in situations where large-scale, costly replacement of historic fabric would otherwise be necessary.

In association with James and James (Science Publishers) Ltd

PRICE ***£30***
ISBN ***1 873936 97 4***
PRODUCT CODE ***50182***

110 pages, 38 colour and 153 b/w illustrations, 30 tables, paperback, 297 x 210mm`

Integrated Pest Management for Collections

Proceedings of 2001: A Pest Odyssey

edited by Helen Kingsley, David Pinniger, Amber Xavier-Rowe and Peter Winsor

English Heritage, the Science Museum and the National Preservation Office have joined forces to expose the silent creatures that thrive on materials found in museums, libraries, archives and historic houses.

This new publication – preprints of the first European conference on pests held in London, 1–3 October 2001 – covers a range of conservators' experience in controlling or eliminating pests which are a major cause of deterioration of collections world-wide. Beetles, moths and termites damage a wide range of materials in objects and buildings.

The reactive approach of the past is no longer acceptable and many of the treatments that were used are now illegal or undesirable. Damage to collections and buildings can be avoided by using IPM (Integrated Pest Management) which includes understanding the environment to make it less amenable to pests, monitoring and trapping to find out the identity of pests and where they are and using acceptable control strategies.

Effective IPM will contribute to a successful preventive conservation strategy. This book is an essential reference for conservators, archivists, conservation consultants, curators and collections managers.

In association with James and James (Science Publishers) Ltd

PRICE ***£30***
ISBN ***1 902916 27 1***
PRODUCT CODE ***50354***

158 pages, 59 b/w illustrations, 46 tables, hardback, 297 x 210mm

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Publications may also be ordered from www.english-heritage.org.uk

Building in Context

New buildings in historic surroundings

A new publication, produced jointly by English Heritage and the Commission for Architecture and the Built Environment, examines the contribution of good design to the historic environment

English Heritage has joined forces with the Commission for Architecture and the Built Environment (CABE) to produce a report on new buildings in historic areas, written by Francis Golding and illustrated with photographs by James O Davies.

The publication aims to stimulate a high standard of design when development takes place in historically sensitive places. It includes 15 recent projects in which achievement is far above the ordinary, and it draws some lessons about the design and development process. The case studies cover a wide variety of places, from cathedral cities such as Chester, York or Hereford, to suburbs and villages. They span a wide range of uses, including shops, offices, a supermarket, a library, a cinema, low-cost housing and a church extension. Architectural style was not so much a consideration in the selection as response to historic surroundings, and the examples include vernacular building as well as vigorous modernity.

English Heritage and CABE hope that readers of the report will be inspired by the commitment and experience of the clients, architects, planners and committee members involved in these projects.

Geoff Noble
Deputy Director
London Region

Examples of case studies showing the range of uses and styles

Copies of this free publication (Product Code XH20186) may be obtained from: English Heritage, Customer Services Department, PO Box 569, Swindon, Wiltshire SN2 2YP; customers@english-heritage.org.uk The report may also be found on www.english-heritage.org.uk and www.cabe.org.uk

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