ENGLISH NATURE

ENGLISH NATURE Magazine

Issue 72 March 2004

Our future landscape

Finding a way forward

Nature on your desktop

Making nature accessible via the English Nature website

A fine balance

Managing wildlife, people and farming at Butser Hill NNR

Issue 72
March 2004

brief update

ENGLISH NATURE

English Nature is the statutory body which achieves, enables and promotes nature conservation in England.

We do so by working in partnership with individuals and a wide range of organisations including Government, representative bodies, agencies and voluntary organisations.

English Nature Magazine is published six times a year to promote nature conservation in England and make people aware of the latest developments. The views expressed in it by individuals are not necessarily those of English Nature.

For further information contact any of our offices. English Nature's National Office is:
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We operate a number of other offices across the country, from where our staff deal with local nature conservation issues.

Details of your nearest office can be obtained by phoning Northminster House, or by requesting a copy of English Nature Facts and Figures Information guide, free from the Enquiry Service at Northminster House, Tel 01733 455100.

You can also learn more about us via the Internet. Our address is:
www.english-nature.org.uk

CHARTER MARK

Awarded for excellence

Cover picture

Cover photographer: Peter Wakely/English Nature

The *State of Nature: Lowlands* report sets out a vision for protecting landscapes such as the lowland chalk grassland found at Lewes Downs NNR.
(see the feature beginning page 4)

Protecting island life

English Nature has been working in partnership with the East of England Development Agency (EEDA) to help get the best of both worlds for wildlife and jobs on a brownfield site in Essex.

The efforts of both organisations mean that the very special wildlife of the area, including an exceptional array of rare insects such as bees, wasps and beetles, will now be protected. But they also mean that development will take place alongside protected areas to provide hundreds of new jobs.

Around a third of the 30 hectare site that EEDA owns on Canvey Island will be developed for commercial premises. The aim is to use sustainable construction principles, including green roofs and brownfield landscaping, to create an exemplar development at the heart of the Thames Gateway growth area.

The remainder of the site will be turned into a community nature reserve, with a range of facilities including a visitor centre, giving people the opportunity to better understand the wildlife there.

"We are delighted with this outcome, which is good for the local community, good for wildlife and good for the local economy," said Greg Smith, English Nature's Area Manager.

"This is a striking example of how economic objectives can be met alongside environmental ones without compromising either. Indeed, the fantastic wildlife which this area supports will help to enhance the development."

Wildlife and GM crops

Farm-scale testing of genetically modified (GM) crops has sparked fresh interest in the issue of farmland biodiversity research.

Over the course of three years, researchers carried out intensive monitoring of oilseed rape, beet and maize fields across England and Scotland to investigate the effects of genetically modified herbicide-tolerant crops on farmland wildlife.

For English Nature the results are the culmination of several years hard work to ensure full assessment of the impacts on biodiversity of GM crops. They provide clear evidence that the new herbicide regimes associated with GM crops have important effects on biodiversity in and around fields. In two of the GM crops studied, spring oilseed rape and beet, significantly lower numbers of arable plants, seeds, and pollinators were recorded compared with conventionally grown rape and beet, while GM maize proved better for wildlife than its conventional counterpart.

The Farm Scale Evaluations (FSEs) have been invaluable for regulators of GM crops. Belgium announced in February its rejection of Bayer Cropscience's application to grow GM oilseed rape commercially in Europe, a decision based largely on the FSE results. Meanwhile, the UK Government has agreed in principle to commercial cultivation of GM maize on a limited timescale, subject to certain conditions on herbicide use and environmental monitoring.

As the largest ecological study of its kind, the FSE experiment has revived investigation into farmland biodiversity. Ideas for future research include comparing biodiversity in hay and silage-based grassland systems, and in winter and spring arable cropping. This could eventually encourage moves towards more sustainable production methods.

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Although English Nature magazine does not have a regular letters page, I am always interested in receiving feedback about the magazine, or letters on subjects that may be of interest to our readers. If there is a subject that you feel would be relevant to our readership, please write to me or email me, and I will certainly consider publishing your letter in the magazine.

Contact me, Amanda Giles, at English Nature, Northminster House, Peterborough PE1 1UA, or at amanda.giles@english-nature.org.uk

If this copy of English Nature magazine is not your own, and you would like to go on our mailing list to receive the magazine regularly, please contact Alison Eley, IMT, English Nature, Northminster House, Peterborough PE1 1UA.

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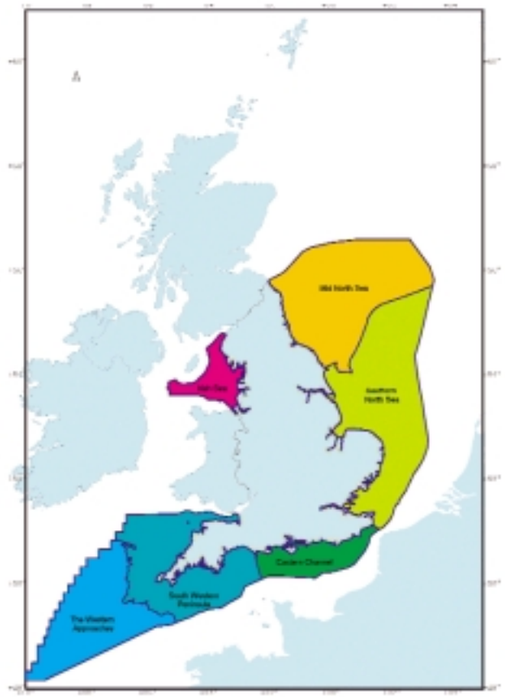
Marine natural areas

The characteristic nature of England's 'regional seas' are detailed in six Marine Natural Area (MNA) profiles to be published next month.



Marine Natural Areas will improve the management of specific sites and nature conservation in the wider sea

The profiles include information such as the physical and chemical characteristics, natural features of interest and relevant human activities of each Marine Natural Area. They provide an essential context for managing specific sites and to emphasise the nature conservation value of the wider sea.

"The aim is to bring together relevant information for decision-makers on a regional level," explained Project Officer, Leigh Jones.

"In this way, Marine Natural Areas offer a biogeographic framework at a regional scale within which to develop and implement an ecosystem approach, that is one that recognises the whole of the environment. We hope the profiles will be useful to a range of organisations including local authorities and emerging regional bodies."

Paul Gilliland, Marine Policy Advisor, added, "English Nature regards Marine Natural Areas as an important contribution to the wider debate about marine stewardship and our evolving Maritime Strategy. We hope to build on them in conjunction with key stakeholders and Government."

The profiles will be available on the English Nature website from the end of April.

The Haskins Report – update

Lord Haskins launched his Rural Delivery Review at a press conference back in November last year. The Secretary of State, Margaret Beckett told reporters that the Government expected to report to the recommendations in the Spring.

Since the November announcement, a specially assembled team from English Nature has started to work with staff from Defra, the Rural Development Service and the Countryside Agency on a range of practical issues to help the Government shape its response.

English Nature's Council met in December and expressed its view that any integrated body should ensure that biodiversity was included as a core and equal component of the remit, alongside access and recreation. The body should also embrace all the current functions of English Nature, including marine and urban work, whilst integrating the access, landscape and biodiversity functions to maximise the benefits to society.

In the meantime, conservation officers and area teams will continue to support owners and occupiers of SSSIs working to protect and enhance some of the best wildlife sites in this country.

EDITORIAL

England is one of the most densely populated areas in the world, with most concentration in the lowlands.

We have just published *Lowlands – future landscapes for wildlife,* the third in our State of Nature series (see pages 4 to 9). The common thread through all the reports is people. The decisions we all make, where we choose to live, how we travel, what we buy, and what we do in our spare time, all affect the environment. Many of the pressures on wildlife in lowland England are directly due to the choices we make.

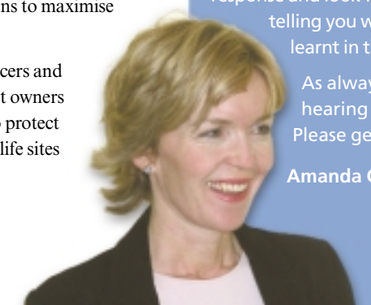
This report looks at where we are now, and the challenges we face. But most importantly, it looks to the future, and explores how we can all work together to create and manage future landscapes which are good for wildlife and for people. We are not trying to recreate the past, but want to achieve sustainable countryside in a modern context.

The English Nature website has had a face-lift (see pages 10-14). Now, at the click of a mouse, you can find yourself underwater on a virtual tour of Lundy Marine Nature Reserve or looking at fossils and wild flowers on Lathkill Dale National Nature Reserve. The website also now gives you instant access to information on any SSSI in England. Please do take a look.

Thank you to everyone who completed and returned their questionnaire. We had an excellent response and look forward to telling you what we've learnt in the May issue.

As always, I enjoy hearing from you. Please get in touch.

Amanda Giles



Future landscapes – what will wildlife need?

The English lowlands are internationally renowned for their beautiful and diverse landscapes, yet wildlife here declined significantly during the 20th Century due to human activity. Now efforts to stop and reverse the trend are bearing fruit and there is the blueprint of a way forward.

The colourful heathlands of the New Forest and Dorset, the rolling downlands of southern England and the windswept peatlands of Yorkshire are all key examples of English lowland habitat. Over the last 20 years there has been a considered effort to protect these treasures. Strong legislation, new partnerships, ideas and strategies, such as the UK Biodiversity Action Plan (UK BAP), have been put into effect and the result has been significant gains for wildlife.

But this is one of the most densely populated countries in the world and the lowlands are where most of us live, work and travel. They are where the infrastructure that supports our modern way of life has been developed – not without cost to wildlife.

Unsustainable modern society is putting a strain on the environment that isolated conservation projects alone cannot tackle.

It is these pressures that English Nature's third State of Nature report, *Lowlands – Future landscapes for wildlife*, considers, suggesting a new way forward that is compatible with modern life, rather than demanding a return to the past. "If we're to move forward," said English Nature's Chief Scientist, Keith Duff, "we must bring together socio-economic policies and environmental goals. If people have a better understanding of the benefits that a healthy environment can bring to their quality of life, they can make more informed choices as consumers and citizens."

We must take a landscape-wide approach if we are to solve these issues."

Although losses have slowed in recent years, wildlife remains under pressure from human activity. Here we look at the relationship between habitats, species and the needs of people.

The 20th century was a period of massive change in the lowlands. A prosperous and growing population brought with it great demands on the landscape, not least the need for food, building and access to cheap goods. More land was farmed, much of this intensively, wetlands were drained, conifers planted in woodland and on heathland, and raised bogs were destroyed for peat extraction. The result was massive loss of wildlife habitat.

Wildlife gains, but not enough

There have been losses and gains for wildlife in recent years as illustrated by the UK BAP 2002 report. Agriculture, changing management practices and structural development were highlighted as the most significant causes of declines in BAP species and their habitats in England. Indeed, 25 % of BAP species are in decline. However, thanks to conservation efforts, 6 % have shown significant gains including cirl bunting, field cricket, red-tipped cudweed and ladybird spider.

The evidence is well documented and includes:

- A 97 % loss of unimproved lowland grassland between 1930 and 1984 in England & Wales
- An 84 % loss of heathland between 1800 and the late 1980s
- 44 % lowland raised bogs drained for agriculture or cut for peat

Many of the natural processes that support wildlife also underwent change. The natural water system was adapted to meet the needs of agriculture, water supply and flood alleviation. Chemicals have been used extensively in modern agriculture, replacing the natural cycles of decomposition. And the structure of the countryside has become less varied through the loss of small copses, hedgerows and field corners, severely restricting the movement of wildlife. When habitats become fragmented, they can no longer support such diversity of wildlife.

In the last 20 years, however, there has been stronger protection for wildlife against such effects. Habitat loss has declined and there have even been some wildlife gains.

But the decline of once-common species and loss of habitats is only part of the problem. The condition of these habitats also remains a major concern.

A recent English Nature report on the condition of habitats in Sites of Special Scientific Interest (SSSIs) showed that 69 % of lowland SSSIs by area are in favourable condition – well short of the Government's target of 95 % in favourable condition by 2010.

THE WATER VOLE

Once a common inhabitant of watercourses and the inspiration for 'Ratty' in Kenneth Grahame's book *The Wind in the Willows*, the water vole has declined markedly over recent years – current numbers are now only 20 per cent of what they were in 1989-90.

"River canalisation and the intensification of farming since the 1950s encroached on and removed the bankside vegetation on which they are so dependent," said English Nature mammals specialist, Tony Mitchell Jones. "The escape of American mink in the 1980s only made the situation more critical as water voles are highly vulnerable to predators." Indeed, a breeding female mink and her young can completely hunt out all water voles in their territory within two years.

English Nature and its partners are now working with landowners and farmers to ensure that conditions to support recovery are in place.


Hugh Clark/English Nature

Water vole

BREEDING WADERS

There has been an alarming decline in the numbers of waders breeding on England's lowland wet grasslands. Species such as lapwing, redshank and snipe were once common on floodplain meadows and coastal grazing marshes, but many sites have been severely degraded or lost altogether as a result of land drainage and conversion to intensive agricultural use.

"The declines in our lowland breeding waders give us great concern," said Phil Grice, Senior Ornithologist at English Nature. "These birds were once widely distributed across England, but a recent survey of lowland meadows has shown that over half of all snipe, redshank and lapwing were recorded in just six designated areas, where most of the birds occur on nature reserves. Safeguarding these places is clearly vital for the future of these species, but we must also seek to secure favourable management at the other remaining sites and seek to create new areas of wet grasslands in suitable parts of England."


Nicholas Watts/English Nature

Lapwing

Wildlife under pressure

Further habitat and species loss has been much reduced thanks to conservation work, stronger legislation, changes to grants and payments, and habitat re-creation. But those that do remain are suffering from the cumulative effects of a number of pressures. Among these are the intensification of agriculture, the lack of appropriate management, water quality and quantity problems, the effects of development, invasive species, atmospheric pollution and climate change.

Agricultural intensification

The intensification of agriculture has had a direct impact on wildlife.

For example, traditional farming practices have been replaced by more intensive activities such as the shift from hay to silage making. This has resulted in the loss and degradation of traditional hay meadows and pastures, and associated wild flowers.

Arable plants have been confined to the field margins and species such as the corncockle are now extinct in the wild. This in turn has affected those farmland birds that rely on these species – and the insects they attract – for food.

Other negative impacts include:

Diffuse water pollution
Diffuse agricultural pollution is defined as all pollution from agricultural land that does not come from a single, isolated source. This includes livestock manures, fertilisers, pesticides, and soil washed into streams from ploughed land.

Neglect
Without appropriate grazing or active management, wildlife sites fall into neglect, causing further decline in quality and the loss of characteristic species. Other habitats formerly within agricultural systems are also suffering from a lack of appropriate management.

DORSET HEATHLAND

Dorset heathland now fragmented by housing development

Lowland heathland is one of the most threatened habitats in Europe, and the UK supports 20% of the world total. Dorset has traditionally been rich in this habitat with as much as 400 km^2 at the end of the 18th century. Now the habitat covers just 14 % of this area and is highly fragmented by urban development. Other losses are due to agricultural reclamation, forestry and the invasion of scrub due to neglect.

The loss of heathland continued until the mid-1990s. An improved legislation and planning system has meant that development, agriculture and forestry are no longer a direct threat to heathland.

"We are now seeking to link existing heathland and expand them through restoration and by recreating adjoining fragments," said Isabel Alonso, English Nature's heathland specialist. "We're about mid-way through the Hardy's Egdon Heath Project, one of many within the Tomorrow's Heathland Heritage Programme, and last summer celebrated the restoration and recreation of the 1,000th hectare in the county."

GREEN-WINGED ORCHID

Green-winged orchids

The green-winged orchid has suffered from the loss of traditional management of hay meadows and pastures. Once familiar and widespread throughout the lowlands, it has declined steadily over the last 60 years due to the ploughing and improvement of species-rich grasslands.

"The development of the Higher Level Environment Stewardship Scheme coupled with the recent introduction of the Environmental Impact Regulations for semi-natural and uncultivated land should help to safeguard and improve the management of flower-rich grasslands," said Richard Jefferson, English Nature's grassland specialist. Green-winged orchids will also benefit from these measures, although expansion of the species will be more difficult as it is extremely slow at establishing in new sites.

Development

Direct losses to development have reduced since the 1980s, thanks to stronger regulatory protection and positive conservation measures. Yet expansion of the road network, new housing, and mineral extraction still threaten semi-natural grasslands, ancient woodlands, heathlands and raised bogs, many of which are located on the edges of urban areas.

Housing construction
Major housing developments will maintain pressure on the environment with the number of households expected to rise to 3.8 million by 2021. This is as much a problem for brownfield sites as rural areas, since such habitats can also support nationally scarce and rare invertebrates.

Transport
New developments mean more transport. Road traffic continues to grow, resulting in congestion, demand for new roads and by-passes, and pollution from emissions.

Aggregates
Construction increases the demand for sand, gravel and other aggregates. Their extraction and processing lead to further losses of valuable semi-natural habitats and deterioration of water quality.

Water management

"Wetland sites such as rivers, lakes, fens and bogs are particularly vulnerable to external pressures that affect both the quality of the water and its quantity," added English Nature's Chief Scientist, Keith Duff. "These pressures include pollution, abstraction and drainage. Hence the health of wetland habitats for wildlife depends not just on site action, but also on the management of the whole catchment."

Water quality
Despite a welcome trend towards cleaner rivers, phosphorus and nitrogen levels are still high and are a major cause of poor habitat condition in the lowlands.

Water quantity
Drainage and water abstraction are drying out many of the wetland habitats of lowland England.

Drainage
Drainage of wetlands and canalisation of rivers has increased run-off and peak floods. Flood defences, built to reduce the risk locally, confine rivers within fixed channels, damaging natural river systems and preventing natural migration of water across the floodplain.

LIFE IN UK RIVERS PROJECT

Freshwater pearl mussels

English Nature has just completed a four year partnership project, supported by the EU LIFE Nature fund, to establish comprehensive guidelines for conservation of rivers in England and the European Union.

Involving landowners, fisheries groups, local authorities, conservation bodies and others with an interest in river management, the project set about identifying the ecological needs of key aquatic plants and animals, and pioneering new monitoring methods and conservation techniques.

One example has been the captive breeding of the endangered freshwater pearl mussel, which has had poor reproductive success in the wild.

"The juvenile mussels, just millimetres in diameter, spend several months lodged safely in the gills of salmon and trout before dropping to the river bed and maturing into adults over 30 years," said English Nature's freshwater specialist, David Withrington. "The project demonstrated that fish density is the key factor to success or failure for mussel beds."

Unimproved chalk grassland at Deep Dean in Wilmington Downs SSSI, part of the South Downs Lifescape Project

Malcolm Emery

The way forward

Many of the pressures on wildlife do not have an impact in isolation, but act in combination.

"There are many examples, such as those sites located on the urban edge, where the pressures of atmospheric pollution are compounded by management neglect," added Keith Duff. "Other examples include sites that require grazing, but which are located in largely arable areas where there are too few grazing animals, or which suffer periodic flooding by nutrient-enriched water.

"We cannot counter these pressures, reverse the fragmentation of wildlife areas and improve the condition of habitats by protecting special wildlife sites alone," said Keith, "The only way forward is to improve the quality of the wider countryside too – take a landscape-scale approach to land use management. That means ensuring that policies are developed with conservation and economic interests in mind and by involving people – Government, business, communities, individuals – in the task."

"The only way forward is to improve the quality of the wider countryside"

We need to continue protecting wildlife sites as they will be the basis of recovery for the surrounding landscape. By working at landscape-scale, we will not only support these sites, but will sustain the wildlife outside them and its movement across the landscape in response to climate change and human pressures.

In order to improve the whole landscape for wildlife, we need to adopt an inclusive approach, making these future landscapes relevant to all sectors of society. "That means building understanding and co-operation between all those involved," continued Keith, "to harness their enthusiasm and commitment, and reach agreement on actions that will shape the wildlife landscapes of the future. The aim is to find ways to accommodate a mosaic of rich wildlife habitats, supported by and integrated with environmentally sustainable economies and communities, throughout lowland England."

Simply put, there is a need to re-connect people and nature. People need to understand and value the essential contribution that nature makes to the quality of their daily life. The connections between a healthy environment and people's economic well-being, environmental rights and opinions, social equity, quality of life, and health, need to be made clearer. An outcome of this will be to make the countryside better for people.

There are many examples where people are involved at a variety of levels. "Individuals can make lifestyle choices that can have a direct or indirect impact on the environment, and they can make a difference by volunteering, gardening, and contributing to planning decisions that affect their local environment," added Keith.

"There is a role for local communities, particularly using the mechanism of Community Strategies, and for business through, for example, corporate biodiversity action plans and habitat creation during development projects."

Future landscapes for wildlife will need:

- Investment in environmental quality and biodiversity recovery
- A landscape-scale approach to nature conservation
- Greater recognition of the value to people's well-being and to the economy
- Integration of environmental goals within key economic sectors

The sustainable use of land, water and other environmental resources also needs to be considered at the start of all policy making. The first step, however, should be to integrate the ways in which various bodies make policy as it is this which is hampering efforts to promote sustainability.

We all need to protect our natural heritage, for its own sake and for future generations. Habitats and species have taken a long time to evolve, but can be lost quickly, sometimes before their potential value is realised. It is the responsibility of everyone, therefore, to ensure that land use and policy decisions do not compromise future access to nature, or a healthy and resilient environment.

State of nature: Lowlands – future landscapes for wildlife can be viewed on the English Nature website, www.english-nature.org.uk, or can be ordered from TwoTen Ltd., tel: 0870 1214 177, email: press@english-nature.org.uk

THE GREAT FEN PROJECT

The Great Fen Project will create 3,000 hectares of fenland habitat and link Woodwalton Fen and Holme Fen National Nature Reserves. In doing so it will combine nature conservation, tourism, education and local access.

"This has been a long-running project in the minds of English Nature site managers," said Alan Bowley, English Nature Site Manager of Woodwalton Fen National Nature Reserve and Holme Fen National Nature Reserve.

The Project is a partnership between English Nature, the Wildlife Trust, Huntingdonshire District Council and the Environment Agency. "The partners are consulting and involving the local community to make the vision become a reality," said Project Manager Chris Gerrard, from the Wildlife Trust. "The Great Fen will link and enlarge the reserves to create new habitats in the wider countryside so that wildlife can spread. At the same time it will provide increased flood storage for farmland and property. The scale of the project will ultimately create jobs and new forms of revenue, benefiting the local economy."

English Nature

Through local partnerships, the Project will be able to create 3,000 hectares of fenland habitat

RECOVERY OF THE CIRL BUNTING

Mike McKavett/Windrush photos

Cirl bunting

A close relative of the yellowhammer, the cirl bunting was once widely distributed across southern Britain, but suffered a steep decline to just 118 pairs in 1989, with all but a handful in south Devon. The species requires a mosaic of overgrown, bushy hedges for nesting, pastures and field margins rich in invertebrates to feed to its young, and weedy winter stubbles to provide food for the adults – a landscape-scale approach was therefore essential. Numbers have increased steadily since recovery measures were implemented in the early 1990s and a survey in 2003 estimated that the population has increased to nearly 700 pairs.

"The success of this recovery project shows what can be achieved when our knowledge of a species' ecological needs is translated into action on the ground through partnerships," said Phil Grice, Senior Ornithologist at English Nature. "Of particular importance has been the relationship between the dedicated RSPB/English Nature-funded project officer and local farmers and landowners. This has made the most of a special project supported by Defra through its Countryside Stewardship scheme."

MINERAL VALLEYS PROJECT

The Mineral Valleys Project is a bold and imaginative partnership programme. Funded largely by the Heritage Lottery Fund, it brings together the communities, businesses and local and statutory organisations of West Durham to sustainably regenerate the natural, social and industrial heritage of the area. The vision is that it will then be valued and interpreted by all.

14 individual projects are tackling issues such as enhancing the habitat value of derelict areas, including the creation of new wetlands, regenerating nearly 350 hectares of woodland, and improving the area generally for otter, water vole, juniper and barn owl. Local people will play a key role throughout, helping in the planning and development process while gaining new skills and knowledge of the area.

"If you count all the volunteers involved we've got a cast of thousands," said Communities and Communications Officer for the project, Tony Devos.

David Long/OWT

Volunteers building an otter holt

Technology for the future

The improved English Nature website reminds me of the huge impact that technology has had on environmental conservation. Television, computers, satellites, and the Internet bring images and information to our offices and homes. But how can we harness these resources to help wildlife?

In my five years on English Nature's Council, England's special wildlife sites have become better protected and managed, and English Nature is increasingly involved in the wider countryside. It is here where the biggest challenge lies – how to re-build our degraded countryside, where once common wildlife has become rare. What is our vision of England in 30 years time? We are beginning to articulate it in words, but what could it look like?

With modern technology we can begin to map the countryside of tomorrow. What would the effects be of restoring 2,000 more hectares of reedbeds or bringing another 10% of farms into environmental stewardship schemes for bitterns or farmland birds? Modelling could help us identify new options for recreation, agri-environmental or rural enterprise schemes.

Our colleagues in the Netherlands have already developed such maps and they are proving to be a powerful tool in planning and targeting of resources. It's time we did the same. We need to be visionary, to demonstrate what could be achieved for wildlife, the economy and for our well-being, encouraging like-minded organisations to work together with local communities towards a shared and sustainable future.

Mike Moser

Council Member

Delivering nature to your desktop

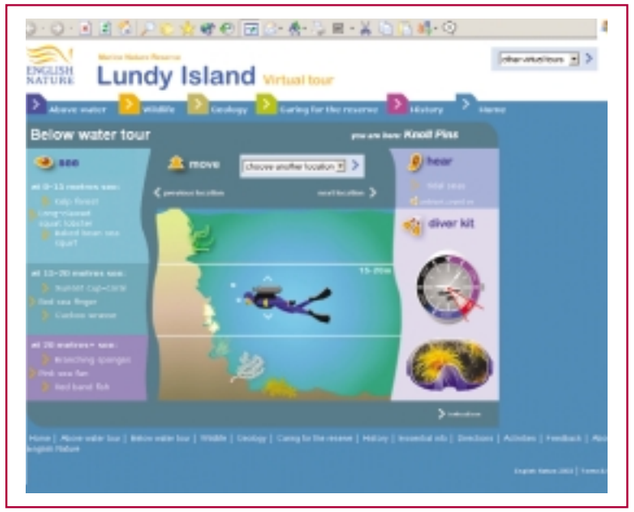
Through an on-going enhancement programme, the English Nature website is being transformed into an exciting, informative, state-of-the-art experience, delivering nature to your desktop at the click of a mouse.

For the virtual diver, the mask, wetsuit and flippers may be no more real than the depth gauge on the side of the computer screen. But the new all-media tour of Lundy Marine Nature Reserve (MNR), now on English Nature's website, does provide some genuine surprises for site users.

The view through your diving mask is limited, but surprisingly clear. What you can see of the underwater world is rather a surprise too: bright yellow, electric blue and many other vivid colours.

English Nature Marine Protected Areas Officer, Ian Reach has been closely involved in developing the Lundy tour pages. He said, "Marine biology here in the UK suffers from the general perception that under the sea it's all grey, green and brown and gloomy. In the case of Lundy that's just not the case – there is the full range of tropical colours to be seen."

Challenging the all-grey assumption is just part of the job that Ian and his colleagues are trying to do with the new pages, which follow a first tour – of Lathkill Dale National Nature Reserve – onto the website earlier this year. Ian added, "It has been a great opportunity to share our enthusiasm about the topic, but also to say that reserves like Lundy are places where we can do the science that feeds back to improve the management of fragile habitats."



Cuckoo wrasse

Paul Kay/MVPA

Sunstar

Paul Kay/MVPA

Lundy MNR is made up of the shores and sea around the island and contains some of England's rarest and most spectacular marine plants and animals all highlighted during the tour. During the tour you are also introduced to the island itself, which is managed by the Landmark Trust and home to a unique community of animals and plants.

Together the tour's imaginative use of photographs, graphics, video footage and sound gives website users the chance to explore an internationally important site only a minority are likely to be able to visit for themselves. It also manages to convey the wonder and complexity of Lundy's habitats.

The Lundy and Lathkill tours are the most striking of a range of changes now being made to the English Nature website through an on-going enhancement project, one part of English Nature's Nature for People programme, which has been partly funded by a grant from the Treasury's Capital Modernisation Fund and aims to give the public better access to England's wildlife.

"The changes involve using the latest technology to deliver easy and timely access to data, analysis and interpretation of wildlife, geology and other natural heritage information," said Project Manager, Karen Mitchell. "New pages range from areas that will be a boon to professionals from partner organisations to the fun, informative style of the new wildlife gardening section. We are trying to appeal to the general public by making the site as accessible and engaging as we can. The great thing about the web is that there is no limit to the space available, so as well as the fun stuff, people can also delve deeper to find as much information as they need."

"The new pages, especially the virtual tours, extend people's access to nature," she said. "The exciting thing is that we can actually give people the chance to experience something they might not otherwise be able to. In the case of Lundy, the underwater world that the tour opens up is not an environment most people are ever likely to have, but we can bring that world to see, for them."

"The exciting thing is that we can actually give people the chance to see something that they might not usually get to see."

nature *on the* map

If you want to find out about National Nature Reserves (NNRs) or other protected sites anywhere in England or to find out what areas in your neighbourhood contain important habitats, Nature on the Map can provide the answers.

Launched on the English Nature site last December, Nature on the Map lets you find important nature sites and habitats simply by searching via a postcode or place name or by clicking and zooming in to a spot on a map.

Protected sites covered include NNRs, Sites of Special Scientific Interest (SSSI), areas of international conservation interest as well as Local Nature Reserves. There is also a map showing sites of geological interest where the public can go to explore rocks, fossils and landforms. The locations of these sites are displayed on an Ordnance Survey map.

Once you've found the site or habitat you're looking for, Nature on the Map provides links through to more detailed information about the site.

You can visit Nature on the Map either by clicking on the link from the English Nature homepage www.english-nature.org.uk or at its own address www.natureonthemap.org.uk

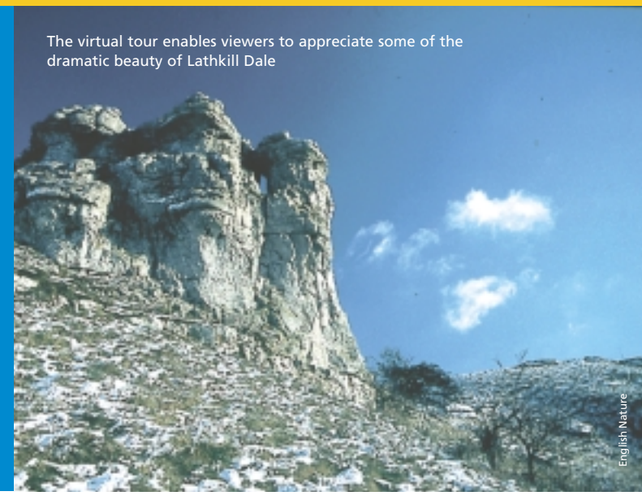
Something special

One of the most important developments has been the on-line publication of information about the state of England's 4,113 Sites of Special Scientific Interest (SSSIs). Users have the opportunity to read about the condition of an individual SSSI, the threats it faces and what English Nature thinks of the way the land is being managed.

Full details of SSSI condition reports are now available for England as a whole, by region and by county as well as by individual site.

"Publishing and releasing information about SSSIs is a major responsibility for us," said English Nature Chief Executive, Andy Brown. "Making this important data available on-line, as well as publishing reports, gives the public instant access to information about nature. By doing this we are acknowledging the enormous efforts many owners and land managers make to look after these sites and encourage others to meet their high standards.

Virtually real


The virtual tour enables viewers to appreciate some of the dramatic beauty of Lathkill Dale

English Nature

The first virtual tour of Lathkill Dale National Nature Reserve (NNR) was launched on the English Nature website in January. It was joined by the Lundy Marine Nature Reserve in February.

There are also plans for a third tour that will allow website users to explore Chippenham Fen NNR in Cambridgeshire. That will include being able to see the small herd of Asian Water Buffalo that work there keeping fen vegetation in good condition.

The tours use innovative technology and design, combining text, photography, sound and video clips to deliver an experience that educates users about an NNR and provides something of the special feel of the place.

As well as providing very full information about animals and plants, the tours also explain the geology of a site and tell visitors about how a reserve is managed.

Lathkill Dale NNR's Site Manager, Ben Le Bas, is enthusiastic about the tour. "It is a great new way to introduce people to the Dale. They can get a really good idea of what is here and why it is so special and we hope they will be inspired to come and visit in person."

Lessons on-line

The new Nature for Schools pages offer material that has been designed to support National Curriculum units that have a link to nature conservation.

Topics are covered that provide something for pupils at different stages of their school careers, from lessons on the food chain for primary age children to units on sustainable development for secondary pupils.

The pages provide ideas for classroom projects and outdoor activities that all schools can get involved in on their doorstep. Nature for Schools also encourages visits to nature reserves and environmental education centres.

The new area also provides links to more than 500 other websites covering the environment and nature conservation.


Nature for schools encourages visits to nature reserves

Paul Glendell/English Nature

Doug Simpson

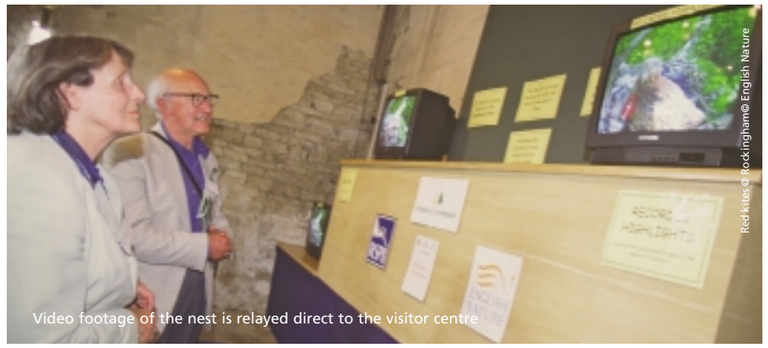
A red kite at Rockingham's sister project in Harewood, West Yorkshire

Bird's eye view

Over the last three summers, live webcam coverage of a nesting pair of red kites at Rockingham Forest, Northamptonshire, has proved to be a popular feature of the English Nature website.

The two kites that have been the stars of the show have now raised seven youngsters during their time 'on camera', a valuable contribution to the effort to re-establish red kites in the region. The Red Kites @ Rockingham project, in association with Forest Enterprise and RSPB, has provided web users with this very intimate insight into the family life of a very charismatic bird of prey.

The kites are expected to feature on the website again this year and the English Nature web team are now hoping to provide new on-line footage of other wildlife highlights. Among the locations being considered for the webcam treatment are a bat roost and a seal colony.



Red kites @ Rockingham© English Nature

Video footage of the nest is relayed direct to the visitor centre

In touch

A range of enhancements to the website aim to improve the way English Nature keeps in touch with the public and partner organisations.

In March, two services – Land Purchase Grants (LPG) and Species Licensing – are going to be available on-line as part of a move to replace paperwork with electronic communication.

English Nature's photo library is also going on-line to give users the opportunity to browse the collection for the picture they are looking for. Around 16,000 photographs have been digitized, so they will be available free to download straight from the website.

The website also has pages for volunteers. They offer useful information for people who are interested in volunteering, as well as providing practical supporting information for existing volunteers.

Growing nicely

The site's upcoming Gardens section has to be a good bet for 'most visited' status during the coming year.

Gardens Initiative Project Manager, Fiona O'Mahony said "English Nature has been going to the Gardeners' World Live show for the last few years and we've been astonished by the depth of interest there is in gardening for wildlife. The new web pages will tap into that interest and, hopefully, enthuse people to take a greater interest in nature. Everyone can do something positive for wildlife."

The pages have a lively, sunny look that emphasises that gardening with wildlife in mind doesn't have to mean that your garden ends up looking neglected. There is information that is relevant to all types of gardens and also to community projects, allotments, public gardens, even window boxes.

WHAT'S ON? GUIDE

MARCH

MAR 27-28 — **Grey Heron Day**

Regents Park/Kelsey Park/Walthamstow Reservoirs/The Wetland, London

A great chance for people to have a close-up look at grey herons on the nest at a range of sites across London.

Contact: Valerie Selby on 020 7223 5831

APRIL

APR 4 — **Community day at North Meadow**

10.30, North Meadow, Cricklade NNR, Wiltshire

Activities will include talks in Cricklade Town Hall and a guided walk around the reserve in the afternoon to see the snake's head fritillaries and other wildlife.

Contact: Judi Elliot on 01980 620485

APR 24 — **Reptile ramble**

9.00, Hartland Moor NNR and Stoborough Heath, Dorset

A guided walk to hunt for Britain's rarest reptiles, including the sand lizard and smooth snake. Meet at English Nature Dorset team office, Slepe Farm near Arne, Wareham.

Contact: Andrew Nicholson or Nick Squirrell on 01929 5574505

MAY

May 2 — **Moth trapping**

8.30 – 12.00pm, Wyre Forest NNR, Worcestershire

Part of Worcestershire Wildlife Week, an evening catching and learning about moths with expert Dave Grundy.

Contact: Chris Chambers/Tim Dixon 01531 638500

May 7 — **A half-century of bird song**

7.00 – 9.00pm, Lullington Heath NNR, East Sussex

An evening walk across the heath for nightingales and other bird song, 50 years on from the establishment of the Reserve.

Contact: Malcolm Emery on 01273 476595

May 9 — **Way-mark wood sculpture**

10.30 – 3.30pm, Langley Wood NNR, Wiltshire

Another chance to be creative and design your own wood sculpture to mark the woodland paths.

Contact: David Burton on 01980 620485

May 15 — **Rock pooling**

12.30, Osmington Mills, Weymouth, Dorset

A family day out and the chance to explore the shore and rock pools at Osmington Mills to look at how plants and animals cope with beach life. Meet at Osmington Mills car park. Bring suitable footwear for wet, sharp and slippery rocks.

Contact: Sue Burton on 01929 557450

For information on more events, visit:
www.english-nature.org.uk/events.asp

Now is the time for… amphibians

Trees and flowering plants have something of a monopoly on spring as far as the casual viewer is concerned. But it's in the water that the real action is taking place. Jim Foster explains.

Jim Foster/English Nature

Common frog

Visit your nearest pond and you shouldn't have to look too hard to find massed ranks of frog or toad spawn. The common frog will lay its spawn in a gelatinous mass close to the surface whereas toad eggs are laid in long strings. If you're lucky, you may find tadpoles. From here it's a short hop of two to three months before they become froglets or toadlets. At this point they emerge from the pond, and feed in preparation for hibernation.

Unlike frogs and toads, smooth newts lay their eggs over a period of two or three months, one at a time on leaves under the water. Visit the pond on a warm night, torch in hand, and there, in the shallows, you may well see a male newt, waving its tail and displaying its crest as part of an intricate courtship dance. Surely worth intriguing the neighbours with.

Rare breeds, including 200 Beulah ewes and 45 organic rare breed cattle, are now grazing the land at Butser Hill.

A protective partnership

Conservation, commercial activity and large numbers of visitors needn't be mutually exclusive interests. Experience at Butser Hill National Nature Reserve (NNR) has proved as much, under the management of Hampshire County Council and English Nature. Now they can extend their plans with the purchase of adjacent land.

Previously used for growing arable crops, the new 38 acre site was bought by Hampshire County Council last year, helped by funding from English Nature, the Countryside Agency and the Heritage Lottery Fund.

"Butser Hill is internationally important for its yew trees, as well as for its lowland chalk grassland," said English Nature Assistant Conservation Officer Rachel Urwin. "Not only does the purchase of this extra land provide a buffer, helping to protect the NNR from the fertilisers and pesticides used on nearby arable land, it also has the potential to be restored to chalk grassland of a comparable quality."

Butser Hill NNR

To this end, the area has been entered into the South Downs Environmentally Sensitive Area scheme. This 10-year Defra project has provided grant aid and guidance allowing the new land to be fenced and a water supply laid on.

Butser Hill is particularly unusual for its position right within a country park – the Queen Elizabeth Country Park. Over 250,000 visitors a year use a large network of over 20 miles of trails and bridleways to explore the site.

"There is a delicate balance between welcoming visitors and protecting the environment, " says Park Manager Tim Speller. "This is achieved through careful visitor management by the site team of Hampshire County Council staff. The 1,400 acre country park is part of a holding of 2,100 acres. This large land area allows us to zone the recreational activity in a way that maximises access and minimises its impact."

The rangers have a high profile at the park, taking visitors on guided walks and carrying out a variety of practical tasks. There is also a visitor centre with a shop and cafe, and an education officer who provides a service for over 9,000 schoolchildren each year.

Hampshire County Council maintains the protected grassland habitat by the traditional method of sheep and cattle grazing. The livestock are owned by the Council and managed in partnership with a local farmer. The NNR was designated an organic site in June 2003 and Butser lamb, wild rabbit and venison are sold in the country park shop.

Research has shown that as many as 40 plant species can grow in a single square metre of lowland chalk grassland, such as found at Butser Hill.

"This whole project is important because we are able to demonstrate how managing the area as lowland chalk grassland makes good sense from a variety of perspectives, with conservation, recreation and access combining to improve the quality of life and economic prosperity of the local community," added Rachel. "This means that habitats such as this can have a valued place in modern society."