

ENGLISH NATURE
Magazine

Issue 82

November 2005



Beach babes

See the seal pups of Donna Nook

Taking stock

How farmers are adapting
to change

The Euro-stars

Global glory for Limestone
Country

Christmas birds

Nick Baker has some seasonal tips

Natural England

Major changes are currently taking place within Government about the way England's landscapes and nature are managed, protected, funded and enjoyed in the future.

A new independent body – Natural England – to be created in October 2006, is bringing together the current roles of English Nature, the Landscape, Access and Recreation division of the Countryside Agency and the environment activities of the Rural Development Service.



Cover picture by Paul Keene



A grey seal pup from last year's new arrivals at Donna Nook National Nature Reserve. Find out more about the beach babes on page 13.

If you have any views or comments which you feel would be of interest to our readers, please contact **Amanda Giles**, at English Nature, Northminster House, Peterborough PE1 1UA, or at amanda.giles@english-nature.org.uk

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Crackdown on wildlife crime



English Nature

The effects of illegal off-roading on an SSSI

Wildlife crime is to be dealt with quickly and simply as a result of a new partnership approach announced this autumn.

English Nature, the Countryside Council for Wales and the Association of Chief Police Officers have issued a joint Statement of Intent pledging to work together more

closely to tackle damage to Sites of Special Scientific Interest (SSSIs) and threats to important species like bats and great crested newts.

The Statement was launched at the 17th Annual UK Police and Customs

Wildlife Enforcement Officers' conference in Tulliallan, Strathclyde, in October, after English Nature announced a 100 per cent increase in wildlife crime in the year spanning April 2004 to March 2005. The partnership will target offences like illegal off-roading, illegal burning and the persecution of hen harriers. (See page 20).

A mark of success



Haydn Pearson/English Nature

English Nature Chair, Sir Martin Doughty, and Dr Andy Brown plant one of the trees

English Nature has been awarded its fourth successive Charter Mark in recognition of its excellent customer service.

The Charter Mark is awarded to public sector organisations by the Government, and English

Nature has now held it for ten years. The assessor concluded in his report that our service is much appreciated by our customers, that staff are motivated and enthusiastic about the work they do and that partnership is the key and works well.

A cluster of native Wild Service Trees was planted in Stanley Park, Peterborough, in October, to mark the success.

English Nature's Chief Executive, Dr Andy Brown, said, "To win four successive awards is a great achievement, particularly as the Charter Mark process is based on continuous improvement. It is a tribute to the dedicated staff throughout English Nature who work hard to provide excellent service."

brief update

In this issue

Alien invaders logged

The threat to biodiversity in England from non-native species is on the increase, due to the growth of worldwide travel and trade.

non-native species including 1,798 flowering plants which have spread from gardens.

The study concludes that the economic and environmental impacts of introduced species is generally unfavourable. Nineteen species were identified as having strongly negative environmental impacts, including the American mink, grey squirrel, signal crayfish, Chinese mitten crab and giant hogweed. Some are aggressive predators or simply out-compete the native species, some carry diseases or even health risks to humans, while others can damage buildings or the environment.

Only four animals were rated as having a positive economic effect. These were mainly birds used for shooting – the common pheasant, greylag goose and red-legged partridge.

English Nature Research Report 662: available from the Enquiry Service Tel: 01733 455100 or email enquiries@english-nature.org.uk



Terry Whittaker/English Nature

The American mink has a negative impact

Although many introduced plants and animals have become established without causing any problems, the invasive ones are considered to be the second most significant cause of global biodiversity loss. Now a comprehensive audit has been carried out for English Nature to assess the threat to English wildlife. Researchers recorded 2,721 terrestrial, freshwater and marine

Celebration uncovers peatlands past

Local craftsmen who used to hand-cut peat on Shropshire's turf banks before peatlands became so rare, were remembered during a celebration marking the declaration of an extension to Fenn's, Whixhall and Bettisfield Mosses National Nature Reserve (NNR).

A display commemorating the life and times of the peatmen was unveiled at the late Albert Allmark's renovated peat mill on the reserve's Mosses Trail, along with 10 oak plaques

carved by the British Woodcarvers' Association. The plaques depict the wildlife found on the Mosses – including adders, brimstone butterflies, nightjars, raft spiders and short-eared owls.



Chris Hogarth/English Nature

Unveiling the hand-peat cutter's memorial

most of the land covered by the extension and this is the first of its properties in England to be declared as part of a National Nature Reserve.

Integrated landscapes

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Hen harriers

Protecting one of our rarest birds of prey 20



Editorial

Climate change is one of the big issues of the 21st century. The question facing conservationists today is how to help our native plants and animals survive and adapt to inevitable change.

A group of experts met in September to discuss how we can best provide "assisted passage for species," a concept used to explain the need for increased connectivity across the country, vital for wildlife on the move (see pages 4 and 5).

CAP reform has a crucial role to play in helping to create a welcoming wider environment for itinerant species. The new Higher Level Stewardship scheme can help farmers re-introduce traditional grazing schemes, the ideal management option for many of our most special areas of countryside (see pages 6 and 7). We also look at how valuable native breeds can be in these schemes, helping a project in the Yorkshire Dales win the top 2005 Eurosite award (see pages 8 and 9).

Geology comes to life in the Pennines on pages 14 and 15, and mosses help solve a mystery on page 17. And if our beach babe on the

front cover hasn't already touched your heart, turn to page 13 to find out where to see the real thing.

Amanda Giles



Taking the heat off our wildlife



Cooling towers with grass in front

Research into climate change is indicating a northward and uphill movement of climatic zones. This is impacting directly on our wildlife, changing the natural ranges of some species and disrupting migration patterns of others.

Factfile:

- There is clear evidence that global average temperatures have increased by 0.7C over the last 100 years.
- Already, birds like the redstart and 19 other UK species are laying their first eggs nine days earlier.
- Frogs, toads and newts are spawning nine to 10 days earlier.
- Sharks and sting ray are heading into our coastal waters, while warmer waters are reducing cod numbers.
- There is a growing threat from insects carrying diseases, like malaria or Denque fever from mosquitoes

In England, migratory birds like swallows are already arriving earlier and leaving later and the lesser horseshoe bat is likely to be driven further north as warmer winters disrupt its hibernation patterns.

Experts from across Europe met together to discuss what measures will be needed to ensure that wildlife is able to adapt to the impacts of these changes.

A conference hosted by English Nature and its UK partners on behalf of the European Environment and Sustainable Development Advisory Councils (EEAC) network, brought together 140 people from 20 countries in September to look at biodiversity, adaptation and climate change.

"The concept of 'assisted passage for species' summarises the increased connectivity which will be crucial to the recovery of biodiversity in the face of climate change," said Mike Harley, English Nature's Climate Change Adviser.

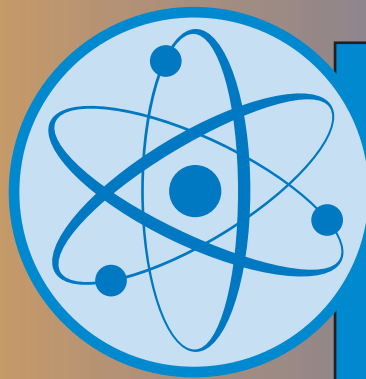
Delegates at the conference *Climate Change and Biodiversity – Meeting the Challenge*, discussed how this might work in practice across different business/land-use sectors, such as agriculture, energy and marine.

Land management

With agriculture and forestry taking up between 70 and 90 per cent of the European landscape, the management of farms and forests will have a huge influence on how well our wild plants and animals can respond to climate change.

Predicted changes in the natural ranges of many plants and animals mean they will have to colonise new areas to survive. Looking after protected areas with high nature conservation value is important, as is enhancing natural links across the wider countryside, so wildlife can move freely.

Crop growers are expected to respond by altering what, and how much of a product is grown – rising temperatures and longer growing seasons will give the opportunity to produce a wider range of crops. But this will also be influenced by markets, with shifting demands for farm produce, and by mechanisms such as the Common Agricultural Policy (CAP). Well-designed and targeted agri-environment schemes can help, but the conference heard that having enough of these on the ground will depend on the success of plans to redirect existing resources within CAP.

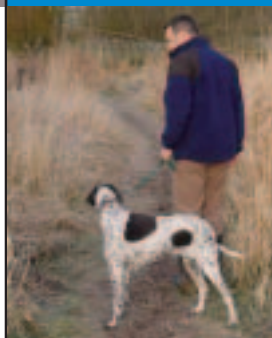


Science update

One way we share our scientific knowledge with others is through a series of English Nature Research Reports (ENRRs). Here are some of the current hot topics.

ENRR 649 Dogs, access and nature conservation

Many people love to walk their dogs in the countryside but this can affect wildlife. This report helps land managers make the right decisions on access and management of people and dogs on sensitive nature conservation sites.



Joanna Davidson-Watts/English Nature

Walking the dog – on a lead

A leaflet for dog owners is also available via the English Nature and Countryside Agency websites.

You and your dog in the countryside, has been produced in partnership with the Countryside Agency, the Kennel Club and the Rural Development Service, with support from Panacur.

661 Development of good practice guidelines for woodland management for bats

This report looks at bats in forests, illustrating the various ways in which they use trees for roosting. The conclusions highlight how important it is to understand the ecology of each species when developing conservation plans. The report was



Brown long-eared bat looking out from woodpecker hole

commissioned by The Bat Conservation Trust, the Countryside Council for Wales, English Nature, the Forestry Commission (England) and the Forestry Commission (Wales) to provide the scientific knowledge for developing new conservation guidelines.

The ENRR has been used as the basis for an attractive good practice guide to woodland management for bats, available from the Forestry Commission (ref FCFC212).

For a full list and electronic copies of recently published ENRRs, visit the publications section of our website on www.english-nature.org.uk or contact our Enquiry Service on 01733 455100/01/02, or email enquiries@english-nature.org.uk for a printed version.

Fuelling the energy debate

There is already conflict in the countryside between growing monocultures of cereals and biodiversity conservation. The EU's target of producing 5.75 per cent of diesel and petrol from biofuels by 2010 is likely to increase this pressure on the landscape.

Concerns were raised that our countryside would be unable to accommodate both intensive food and intensive energy production. It was agreed that we should explore better ways of reducing energy consumption and improving energy efficiency. Land use options for energy and food should be chosen on the basis of cost and efficiency in the widest, and most sustainable, sense.

Sea changes

Our oceans cover around 70 per cent of the planet and are home to the greatest variety of animals and plants, with many of them adapted to live in a narrow range of conditions. A rise of just one degree in the winter temperature of the North Sea has already seen southern species migrating to higher latitudes.

Oceans regulate our climate regionally and globally as huge amounts of heat stored in our seas are transferred by currents from the subtropics to the poles. They provide a massive sink for carbon dioxide, but higher levels of carbon dioxide in the atmosphere and in the oceans will increase the acidity of the seas, reducing their absorption capacity, so contributing to further climate change.

So the marine environment is not just affecting and affected by global climate change. It is also driving local changes through rising sea levels as sea water expands due to higher temperatures. To cope with this, we need to build resilience in the coast itself, as well as implementing integrated coastal zone management policies.

Elliot Morley, the UK's Minister of State for Climate Change was at the conference. He said, "Tackling climate change and its effects has been one of the key priorities for our G8 and EU Presidencies. The UK's country strategies for areas such as agriculture, forestry and planning already take account of biodiversity. We are now reviewing our policies as well as our species and habitat action plans to take account of climate change impacts."



Highland cattle grazing in the Yorkshire Dales

Robert Goodison



Traditional breeds like the Blue Grey help to maintain habitats

Livestock farming is entering a period of significant change in the wake of CAP reform. There's likely to be a knock-on effect for the natural environment.....

Taking stock as new era dawns for farming

It will be those farmers who are ready to adapt and plan ahead who are most likely to do well out of the changes and whose businesses will remain profitable into the future, says a new report commissioned by English Nature.

Agri-environmental schemes, diversification, outside work and "added-value" initiatives like on-farm processing, all figure prominently in farmers' business strategies. Taking full advantage of ideas like these will help farmers to adjust to the new system. However, getting good advice on the best way forward will be important to ensure the long term viability of many of these businesses and to make sure they make the most of their environmental assets.

The study, *The Economics of Extensive Livestock Grazing after CAP Reform*, shows that there could be significant changes to

livestock numbers in both upland and lowland areas. With payments no longer linked to the number or type of animals owned, farmers are likely to reduce unprofitable stock. As a result, the study predicts that cattle numbers will be most affected, as they have been heavily reliant on subsidies in the past.

Changes in management practice at this level will undoubtedly impact on the natural environment, particularly on the many important habitats and species associated with traditional and extensive grazing in England. Moorland, heathland, unimproved grassland, chalk downland, traditional hay meadows and grazing marshes all require some management by grazing.

Livestock grazing plays a key role in maintaining species-rich

habitats by controlling more aggressive species which would otherwise become dominant and by holding back scrub encroachment. Grazing by cattle is often particularly desirable.

Fewer animals grazing upland areas should help to reduce pressure on a variety of upland semi-natural habitats and should be good for wildlife. But on the flip side, financial considerations could lead to under-grazing or farmers moving out of livestock altogether. This could be a particular problem in the lowlands and lead to a loss of habitat diversity with knock-on effects for important groups of farmland birds and mammals.

The report highlights the growing and important contribution that agri-environment schemes can make to many livestock farms. In particular, the Higher Level

Factfile: Cap Reform

- The Common Agricultural Policy (CAP) has undergone a series of reforms changing the way in which farmers get support payments.
- The CAP reform agreement of June 2003 simplified the subsidy system by replacing 10 major schemes with one new single payment scheme.
- From 2005 onwards, farmers will no longer get payments based on the number of animals they own or what they produce.
- “Decoupling” breaks the link between subsidies and production and should give farmers more freedom to work to market demands.
- To receive the new single payment, farmers will need to keep their land in good agricultural and environmental condition.

Scheme (of Environmental Stewardship) will help sustain valuable extensive grazing systems by rewarding farmers for the management they provide and covering the costs associated with keeping livestock, such as fencing and handling facilities.

It is, therefore, crucial that the scheme is adequately funded in order to allow increased uptake over the next few years.

The Economics of Extensive Livestock Grazing After CAP Reform by Dr Janet Dwyer of the Countryside and Community Research Unit, University of Gloucestershire, is available on www.englishnature.org.uk/pubs/publication/PDF/SummaryLivestockReport.pdf

It summarises two surveys carried out on our behalf by rural consultants ADAS.

Find out more from the English Nature leaflet *The Importance of Livestock Grazing for Wildlife Conservation* available on www.englishnature.org.uk/pubs/publication/PDF/SummaryLivestockReport.pdf

Balanced grazing

An innovative method of achieving the right grazing levels and the most suitable livestock on important wildlife sites is through Local Grazing Schemes (LGS) which are springing up across the country.

These area-based partnership projects advocate an integrated approach, grazing whole suites of sites in a consistent way. The idea is to match the management objectives of each site to the animals' needs. For example, grazing animals are over-wintered on a site where wildlife will benefit from winter grazing and where the right type of forage and shelter is available for the livestock.

The LGS will always take account of the need to achieve economic viability to ensure the long-term survival of these grazing systems. There are already more than 30 schemes underway, all at different stages of development.

The LGS network is co-ordinated by the Grazing Animals Project (GAP), a partnership formed to support the development of conservation grazing across the UK. The group offers advice and practical support to graziers, wildlife site managers and conservation advisers to overcome any obstacles which are making it difficult to hit biodiversity targets.

GAP's work is currently co-ordinated with the support of English Nature funding. Its work is defined, prioritised and assisted by a steering group made up of representatives from 27 partner organisations.

English Nature's Senior Land Management Officer, David Burton, chairs the GAP steering group. He said, “The Grazing Animals Project is an invaluable source of advice and support for wildlife managers and graziers involved in conservation. The LGS

can help by pooling expertise on livestock management, habitat management and community engagement to achieve a common aim – successfully demonstrated by the Limestone Country Project in the Yorkshire Dales.” (See page 8 and 9.)

The fourth FACT/GAP conference on landscape-scale conservation held in Bangor in June explored what's involved in delivering multiple land management objectives – environmental, economic and social – on a landscape scale.

Paul Glendell/English Nature



Native breeds of sheep grazing

A full report of the conference and other GAP publications can be accessed via the download/print centre on the GAP website. For further information about the project and grazing on a landscape scale visit: www.grazinganimalsproject.org.uk

FACT (Forum for the Application of Conservation Techniques) is a partnership, convened and co-ordinated by English Nature, that operates through a series of projects and initiatives, the largest of which is the Grazing Animals Project (GAP).

We're Euro-stars!

Nature conservation projects in the Yorkshire Dales have been acclaimed the best in Europe.

Work underway on the Ingleborough National Nature Reserve (see page 12), and the wider Limestone Country LIFE Project (see adjacent),

won first prize in the 2005 Eurosite Awards announced at the European Nature Conference in Apeldoorn, Holland, in September.

Eurosite is the largest network of organisations devoted to nature conservation management across Europe, with 80 members from 21 countries. The awards honour inspirational work on internationally-important Natura 2000 sites.

The judges praised the project for the high quality of its interpretative material, its education work and its success in liaising widely with the farming community, both on the reserve itself and on the limestone pastures between Malham and Wharfedale.

The award also recognised the work of the *Learning in Limestone Country Project*, a Heritage Lottery-funded education programme, which has already helped over 1,000 children to find out about the wildlife and landscapes of the Dales.

A cash prize of 3,000 Euros will fund additional conservation work and enable more schoolchildren to visit. Plans are in the pipeline to bring youngsters from Eastern Europe to experience the magic of the Yorkshire countryside.



Blue Grey cattle on Limestone Country

Native breeds re

The innovative Limestone Country Project was chosen for a prestigious European award because it is a model for conservation-based farming in England's uplands.

This five-year project is protecting and enhancing some of our most important wildlife sites, by borrowing what is best about traditional farming practices and promoting the re-introduction of native cattle breeds across the internationally-important areas of the Yorkshire Dales National Park.

The initiative, now in its fourth year, is backed by £550,000 of European Union LIFE funding and led by a partnership of nature conservation interests including English Nature. It covers 11,000 hectares of upland limestone around Ingleborough, Malham and Wharfedale, designated as Special Areas for Conservation (SACs) for their important lime-loving grassland species and unique limestone pavement geology.

So far, 16 farmers are involved, managing more than 2,000 hectares of Natura 2000 land. They have been encouraged to return to

mixed livestock farming, using hardy native cattle breeds like Shorthorn, Galloway and Blue Grey, which would have been a common sight on the uplands only 40 years ago.

In recent years, the numbers of cattle grazing the high limestone pasture have decreased. Sheep have taken precedence and their selective grazing has adversely affected the diversity of plants on the once wildflower-rich grasslands.

Reducing the numbers of sheep and introducing hardy cattle is expected to bring an increase in plants like bloody crane's bill, small scabious, rockrose, and early-purple orchids in the grasslands and rare species like limestone fern, baneberry, globeflower, and rigid buckler fern on the limestone pavements.

Already there has been an overall increase in flowering orchids, including fragrant orchid and dark red helleborine. In some areas there has been a desirable decrease in blue moor-grass where, without cattle grazing, it had been swamping some wildflowers. Trees and shrubs have sprung out of the limestone pavements, along with ferns and wildflowers which had previously been confined to the deep grikes or rock crevices.



Bill Wilkinson



Peter Wakely



Yorkshire Dales Millennium Trust

Neil Heseltine on his Dales farm

Recovering – early purple orchids

The Learning in Limestone Country Project

store limestone country

It is the first time an initiative of this type has been attempted on this scale and, to succeed, it had to win the full support of local farmers by taking into account their business needs. Part of the £1.2 million budget helps offset increased costs, contributing towards new stock, cattle-shed conversions and transporting animals and water supplies to remote areas. It also helps fund extra work required to manage the cattle.

But the Limestone Country partners have taken a bold step further into the business world. The project has supported the formation of a farmers' association co-ordinated by the local food and drink company FEAST to market their products under a *Limestone Country Beef* banner. The farmers are working with the project on agricultural and environmental criteria, entitling members to sell under the trademark. The group is also negotiating with butchers and supermarkets to find specialist outlets.

Joint Project Manager, Paul Evans, of English Nature, said, "By working together we achieve the best of both worlds. The farmers end up with a high quality product which they can market with both the local and

environmental brand and, at the same time, they are managing the sites for nature. This is a perfect example of how conservation of the natural environment and appropriate livestock farming can go hand in hand."

Dales farmer, Neil Heseltine, had a dream of bringing back cattle to Hilltop Farm in Malham, which was grazed by Shorthorns in his father's day. He said, "The hills were being grazed with nothing but sheep which was unhealthy for the grassland. I wanted to encourage a greater diversity of species. This is a beautiful landscape with a unique situation for plant life and it is sad to see things disappear just because of farming methods."


Neil entered into the scheme 18 months ago, introducing 19 Belted Galloway heifers and a bull and has just been rewarded with his first generation of calves. By the time the Project comes to an end, he expects to have a thriving breeding herd. He added, "The incentives available allowed me to go ahead by helping me over the start-up period. These hardier breeds can be kept more extensively without affecting their welfare and I believe this is the right way to go, for farming and the environment."

Factfile:

- The European Union LIFE (Nature) fund is specifically allocated to Natura 2000 sites.
- This is a series of wildlife sites across Europe protected under the Birds and Habitats Directive.
- The Yorkshire Dales Limestone Country is eligible for the funding as the Ingleborough Complex SAC and the Craven Limestone Complex SAC are designated as Natura 2000 sites.

A research and monitoring programme is now being carried out by experts from Newcastle University and Askham Bryan College, to assess how the new regime is benefiting wildlife and impacting on farm businesses. The results will be published at the end of the five-year period.

The project is led by a partnership of English Nature, the European Union LIFE fund, the Yorkshire Dales National Park Authority, the National Trust, the Grazing Animals Project, the Rare Breeds Survival Trust, the National Beef Association and the Dales farmers.



Looking towards The Stiperstones from the Long Mynd, Shropshire

Recreating landscape links

In the hills of south-west Shropshire, a landscape-scale approach is being used to enrich two wildlife 'super sites'.

The *LongStones Project* seeks to recreate natural links between the dramatic hill ridges of the Long Mynd Site of Special Scientific Interest (SSSI), and The Stiperstones National Nature Reserve (NNR), and incorporates the rolling hills of the Upper Onny Valley inbetween.

The project's vision is to treat this 16,000 hectare area as a single landscape. Any existing initiatives in the area will be integrated within an holistic approach, linking cultural, recreational and economic considerations alongside the more obvious nature conservation aspects.

In the 1940s, there would have been uncultivated heath and unimproved upland pastures on the smaller hills and slopes within the valley, as well as on the ridges themselves. Re-establishing such habitats across the area will provide 'stepping stones' for upland wildlife such as red grouse and whinchat. The project also targets other important Shropshire Hills species such as curlew, otters, holly blue butterfly and harebell, found across a range of habitats.

It is early days, but the gathering momentum of *LongStones* is helped by the involvement of such a wide range of organisations. The project is co-ordinated by the Shropshire Hills Area of Outstanding Natural Beauty (AONB), supported by the Natural England partners – English Nature, the Countryside Agency and the Rural Development Service – as well as the National Trust, Shropshire Wildlife Trust, Environment Agency, Farming and Wildlife Advisory Group (FWAG) and Shropshire County Council.

Tom Wall, English Nature's NNR manager at the Stiperstones, said, "This expansive area encompasses a variety of habitats – the rocky ridges, the river valley, heathland, scrub woodland and the river itself, so it is not a case of 'one approach fits all'.

"What is different, is that we are adopting an organic approach. The project will build up, step by step, harnessing a series of individual initiatives. As we learn to work together, these initiatives will reinforce each other and this will lead, in time, to a landscape-wide approach. Rather than appointing project officers and seeking major funding, the project aims to achieve its objectives by promoting and prioritising its vision through the policies and work programmes of all the partners."

LongStones is building on existing initiatives. One key element is the high-profile work to uncover lost sections of The Stiperstones ridge, a 10 kilometre upland landmark of heathland and quartzite, which was partially cloaked by conifers for nearly 40 years. *Back to purple* has seen the Forestry Commission and a private landowner clear trees from about 70 hectares of the finest rock scenery and best heathland in the area, with sustainable grazing now being introduced to manage the recreated habitat.

Other features include restoring traditional dry-stone walls at Norbury, sustainable transport schemes, conserving curlew and lapwing and replanting Linley Beeches, a historic beech avenue on a ridge between The Stiperstones and Long Mynd.

As the project develops, it hopes to show how rural livelihoods can benefit from wildlife and landscape improvements. It will also be creating opportunities to learn about upland farming, local wildlife, geology, landscape, history, myths, legends and literature through visits, walks, talks and on the internet. A guide book on the area has recently been published and the Upper Onny Wildlife Group will soon embark on its third year of surveying, monitoring and conserving curlew and lapwing.

A common cause

The return of grazing cattle to the wet heathlands of Beaford Moor has brought new hope for rare culm grassland in central Devon.

The purple moor-grass and rush pasture habitat is found only in Devon and Pembrokeshire and takes its name from the underlying carboniferous shale geology. "Culm" is a local vernacular meaning coal. Culm grassland has been declining fast since the 1950s due to agricultural intensification, with losses of around 80 per cent recorded.

Beef and arable farmer Michael Underhill owns the 30 hectare Beaford Moor Site of Special Scientific Interest (SSSI) in Torridge, in the centre of Devon. He had long been convinced that the right grazing regime could halt the onslaught of shrub encroachment and give native plants a chance to regenerate.

But here, it was ancient commons laws which prevented Michael from pressing ahead with his conservation ideas. The site is bordered by two busy main roads, but as a registered common, with local grazing rights, it could not legally be fenced off.

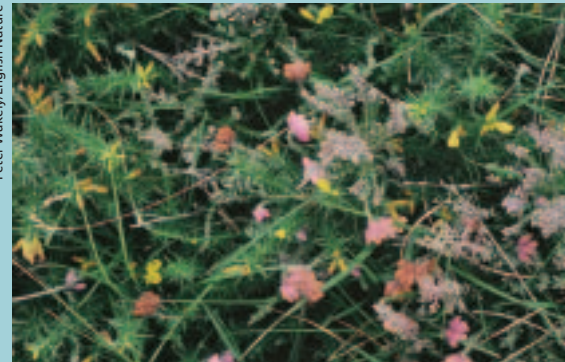
Back in 1987, when the site was notified as an SSSI, English Nature stepped in to support Michael's efforts. After years of meetings with the Beaford Parish Council, to ensure local access rights were protected, an application to the Secretary of State was made and permission was finally granted this year to fence off the moor. Around 25 of Michael's herd of Simmental cows and calves have been grazing the grassland throughout the summer.

He said, "We've been trying for 20 years to find a way to control the scrub which was destroying the native plants, and we could only use controlled burning as a way of keeping on top of it. I take a great interest in the flora and fauna on my

land and I was keen to re-establish the marsh fritillary butterfly, which thrives on grassland plants like devil's-bit scabious."

English Nature Conservation Officer, David Appleton, said, "Although the site had been notified as an SSSI, it continued to decline in condition because the required management couldn't happen.

Peter Wakely/English Nature



Culm grassland sward.

"Now the site has every chance of recovering. The early indications are that some species which were lost have started to return and we have already seen increased numbers of bog asphodel and saw-wort."

Michael's main farm, Upcott Barton, which adjoins the common, has Countryside Stewardship agreements with arable margins, ponds and other areas set aside for wildlife, and he is about to enter into the new Environmental Stewardship programme. So it is now easier to manage the two areas, moving cattle around to suit the prevailing conditions. The family uses traditional rolling machinery to control any encroaching bracken.

Michael said, "My task now is to maintain the right balance of stock to open up the sward to allow native plants to come through. In future years it would be nice to see some indigenous cattle grazing the site, which would be in keeping with the whole ethos of what we are trying to achieve."



Conserving curlew, one of the *LongStones* projects

Landowners are being encouraged to embrace the *LongStones* ideals as Higher Level Stewardship (HLS) is rolled out across the area. A stewardship workshop was held to outline the concept and the benefits of Environmental Stewardship.

As *LongStones* really gets into gear, the dividends for wildlife, landscape and public enjoyment should start to become evident across this beguiling corner of Shropshire.



FOCUS ON... Ingleborough NNR

A dramatic landscape of rocky limestone pavements, gritstone-capped peaks and underground caverns attracts over 100,000 visitors a year to Ingleborough.

Paul Evans/English Nature



Limestone pavement at Scar Close, Ingleborough

The reserve has some of the best limestone pavements in England and Ingleborough Hill is one of the famous Three Peaks within the Yorkshire Dales National Park, an area well-loved by serious hikers and tourists alike.

The 1,014 hectare site is one of English Nature's "spotlight" National Nature Reserves, which means it is recognised as one of the best places to enjoy wildlife and geology. The wide range of rock types, soil and altitudes have been influenced by years of human management and a rich variety of plants, insects, birds and animals now live here.

Rocks laid down 300 million years ago, have been scoured by glaciers and dissolved by rainwater to form clints and grikes – expanses of level rock surfaces fractured into deep crevices. One of the best examples can be seen at Scar Close and Southerscales above Chapel-le-Dale. These areas support specialist plants like Yorkshire sandwort, baneberry and limestone polypody fern, while sheltered conditions in the deep grikes encourage wildflowers normally seen in woodland, like bluebells and wood anemone.

The rocky pavements are surrounded by rich limestone grassland where early purple orchids, salad burnet and rock rose thrive. Visitors may spot curlew, lapwing and, occasionally, lizards and roe deer. Remains of an Iron Age fort on the summit offer an added attraction.

The international importance of the area has been recognised with its designation as a Natura 2000 site.

Much of the reserve is open access land under CROW (the Countryside and Rights of Way Act 2000) and English Nature has set up information boards, maps and safety advice to help visitors enjoy the reserve, while protecting wildlife and retaining the area's wild character.

Where to walk

For those who would rather not venture off the beaten track, there is limited waymarking and free walks leaflets. Some circular trails include previously unexplored areas like the wild South House Moor with its ungrazed moorland habitats or the limestone grasslands of High Brae:

- Ribbleshead Quarry Walk: An easy to medium 5km trail through an old limestone quarry, up onto open limestone country, visiting a Viking-age farmstead.
- Limestone Walk: An easy to medium 5km trail through stunning limestone scenery, with views down glacial valleys and up to Ingleborough summit.
- Sulber Nick Walk: An easy to medium 9km trail through vast open landscapes viewing flower-rich grasslands and primeval juniper thickets.
- Summit and Ridge Walk: A medium to difficult 15km trail visiting Ingleborough Summit, wild open moorlands and flower-rich meadows.

How to get there

- Ingleborough is in the south west of the Yorkshire Dales off the A65 Settle to Kirkby Lonsdale Road.
- There are no bus services, so visitors are encouraged to arrive by train using Ribbleshead or Horton-in-Ribblesdale stations on the famous Settle-Carlisle railway.
- Why not make the experience complete by combining a visit to Ingleborough with a trip on this scenic line?

Boom time for beach babes



Paul Keene/Avico

The grey seal colony at Donna Nook

On the sandbanks of a coastal nature reserve in Lincolnshire, one of the most enchanting events on the wildlife calendar is unfolding.

At Donna Nook NNR, November sees the start of the breeding season for England's largest land mammal, the grey seal. The reserve is reputedly the best place in the country to observe and photograph seal families during this crucial time, as it has one of the largest and most accessible colonies.

Large bulls usually arrive at Donna Nook in early November and head ashore to establish their territories. The cows follow shortly and gather together in harems among the sand dunes, where each gives birth to one cream-coloured pup. For the following three weeks, they can be seen suckling the pups, which triple in weight and lose their pale coats.

Once the pups are weaned, the mothers are free to get back into the mating game – which sparks competition between the bulls. “Beachmaster” bulls have to fight off challengers for their harem and this can end in vicious brawls usually peaking around mid-December.

Rob Lidstone-Scott, coastal warden for the Lincolnshire Wildlife Trust,

which manages the site, said, “Here at Donna Nook we have the second largest breeding colony in England, second only to the Farne Islands with 998 pups born here last year. The seals have an ideal place to breed and are increasing their population while we enjoy the privilege of witnessing one of the best wildlife spectacles in the country. We just have to make sure we manage the visits in a sensitive way so we don't damage the very thing we have come to see.”

There is a viewing area for visitors alongside the Stonebridge car park through the village of North Somercotes. An information hut is open during daylight hours through November and December, when the seals are on shore.

The advice is that anyone who can visit on a weekday will avoid the crowds and get a better view. Dogs are not allowed during the breeding season and visitors are

reminded to be careful, as seals, no matter how cute, are wild animals and can be dangerous.

There is lots more to enjoy during a visit to the reserve. The dunes, slacks, saltmarsh and inter-tidal areas support a wide variety of birds. In winter the mudflats are home to brent geese, shelduck, twite, Lapland bunting, shore lark, knot and dunlin.

While most of the dune area is accessible, the Ministry of Defence, which owns the site, uses most of the area as a bombing range, so always stay outside the area marked by danger notices when red flags are flying.



The beach provides a perfect playground for a growing pup

Paul Keene/Avico

FACTFILE:

Donna Nook NNR:

- is believed to be named after a Spanish Armada ship, *The Donna* which sunk off the Nook in 1588
- covers 10km of coastline immediately north of the Saltfleetby-Theddlethorpe Dunes NNR.

Grey seals:

- are also known as Atlantic seals *Halichoerus grypus*
- males are up to two metres long and weigh up to 300kg
- the UK has 35 per cent of the global population



Walkers on the AONB Partnership's 'Roof of England Walks' event, at High Cup Nick



On the wild moorlands of the North Pennines, a relatively new conservation concept is helping people to enjoy and understand geology.

A rock-solid plan for Geopark's future

The North Pennines Area of Outstanding Natural Beauty (AONB) is Britain's first UNESCO European Geopark, a predominantly Carboniferous Limestone landscape spanning 2,000 square kilometres of Co Durham, Cumbria and Northumberland.

It has a host of impressive geological features, including High Force, Teesdale, England's biggest waterfall, cutting across the Great Whin Sill, an outcrop of intrusive igneous rock which can be tracked from the Farne Islands through Northumberland to the North Pennines and North Yorkshire.

But it is the area's lead mining history which has it hailed as one of the birthplaces of geological science, in that our initial understanding of geological processes grew out of early exploration by the mining industry. The parallel stories of developing landscapes and settlement patterns are central to the area's heritage appeal.

With this relationship in mind, the AONB partnership and British Geological Survey have drawn up a Local

Geodiversity Action Plan (LGAP) which provides a framework for conserving and enhancing the valuable geology and landforms of the area, while recognising the importance of making geoconservation relevant to people. This approach has led to the North Pennines plan being held up as a model LGAP.

It centres on achieving geoconservation through partnership and developing a wider understanding and appreciation of the geology of the area through educational initiatives and geotourism, contributing directly to the economy of the region.

It has already helped to attract £400,000 in Heritage Lottery Fund cash towards delivering the objectives of the LGAP over three years, including funding for an innovative geological project. It features new interpretation trails, educational material, children's geology clubs and a range of other activities. An annual Festival of Geology and Landscape takes place in the summer in celebration of European Geoparks week and includes over 50 walks, talks, children's activities and other events.



High Force, Teesdale, with a dramatic exposure of Great Whin Sill

Chris Woodley-Stewart, North Pennines AONB Officer and manager of the Geopark, said, “Our aim is to maximise geotourism in the North Pennines for the benefit of the local economy and to help people to understand the evolution of their local landscape. Geoparks are not just about rocks – they are about people. It is crucial that they get involved – we want to see as many people as possible getting out and enjoying the geology of the area.”

“Geoparks are not just about rocks – they are about people. It is crucial that they get involved – we want to see as many people as possible getting out and enjoying the geology of the area.”

The LGAP notably features a comprehensive geodiversity audit, carried out by the British Geological Survey. “Before you can decide where you are going, you have to know what you have got,” explains Chris. “As well as cataloguing an extensive list of geological features, the audit enables us to assess any issues facing the conservation of our geological heritage and also takes a strategic view of the opportunities for tourism and education.”

LGAPs began to take shape in 2003 and there are now 24 at various stages of development across the country. They set out overarching aims, endorsed by all the geoconservation partners and others interested in the wider development of the area.

The areas tend to mirror administrative boundaries such as those of counties, AONBs or National Parks. Typical partners include conservation and geological organisations, local authorities, local community representatives, businesses, industry and education.

The plans are expected to take a holistic, landscape-scale approach, linking SSSIs and local sites, putting into context factors like landscape, building stone, research and planning systems. They provide a basis for identifying or attracting funding and for involving and consulting with the community.

English Nature’s Senior Geologist and Palaeontologist, Dr Jonathan Larwood, said, “LGAPs encompass the tradition of site conservation but also place the area in its wider context. Importantly, they engage a wide range of organisations, groups and individuals in development and delivery. Establishing an LGAP creates a process and provides a shared framework for the delivery of geoconservation that didn’t previously exist.”

The North Pennines AONB was awarded its European Geopark status in June 2003 and is now one of two in England along with the Abberley and Malvern Hills. They sit alongside 23 other UNESCO European Geoparks as part of the UNESCO Global Geoparks Network.

This network of territories was created to recognise areas across the continent with a significant geological heritage. They are important for their scientific quality, rarity, aesthetic appeal and education value and other related features which may be archaeological, ecological, historical or cultural.

It is a relatively new initiative, which started in 2000, but the Geoparks are already seeing the benefits of a raised profile boosting nature-based tourism and creating wider funding opportunities.

Chris said, “The Geopark status recognises our world-class geological heritage and has provided extra impetus for our work to conserve and promote the area and to produce the first Local Geodiversity Action Plan for UK protected landscape.”



The group gathers around the stone

A walk into the world of a founding father

A party of England's top ecologists gathered at Kingley Vale National Nature Reserve, in West Sussex, to celebrate the life and work of one of conservation's famous forefathers.

A commemoration day, in August, marked the 50th anniversary of the death of Sir Arthur George Tansley, who developed some of the earliest concepts of ecology and is regarded as one of the 20th century's most important conservationists.

Representatives of the British Ecological Society, the New Phytologist Trust and English Nature rededicated Tansley's memorial stone and unveiled a plaque to replace the original, which had become worn and scarred over the years since his death in 1955.

English Nature's Forestry and Woodland Officer, Keith Kirby, was among the group. Here, he takes up the story:

“Our party walked up through the reserve in glorious weather. The cool mystery of the ancient yew groves contrasted with flower-rich chalk grassland and attendant butterflies.

“At the stone, Sue Hartley (vice-president of the BES) spoke of Tansley's role in founding ecology as a discipline, as well as the society.

“Many of the issues he was concerned with are still relevant today but, in particular, he stressed the importance of field work.

“Ian Alexander, for the New Phytologist Trust, noted how, in setting up the New Phytologist, Tansley had wanted it to reflect the full breadth of botanical research, a tradition that is still maintained.

“Keith Duff, English Nature's Chief Scientist, pointed out that Tansley had recognised that, while science must form the basis for nature conservation, it is equally important to involve the public and politicians.

“We were pleased that Sir Arthur's grandson and two of his great-grandchildren were able to join us and add their recollections, while stories of other sorts came from John Sheail, ecological historian, and Richard Williamson, site warden for many years.”

Sir Arthur was one of the founders of the British Ecological Society and editor of

the *Journal of Ecology* for 20 years. He championed the term *ecosystem* as far back as 1935. He always retained an affection for what he called the ‘great hills of the south country’ and reportedly considered the view out from Kingley Bottom (as it was then called), one of the finest in the country. He ensured that the site became one of the first National Nature Reserves in England in 1952, having proposed it as a reserve some 40 years before.



The commemorative plaque

Mosses map out Iceman's story



Andrew Harrington

Ron examines Britain's only known population of *Didymodon glaucus*

When a 5,000-year-old body was uncovered, preserved in a glacier on the Italian/Austrian border, it is no surprise that both countries were keen to claim this significant find.

But who would have thought that tiny, unassuming plants would reveal the truth about the mysterious "Iceman"? An international team of scientists examined mosses found on the body and, by studying the present-day distribution, they were able to trace the provenance of the

Iceman, showing he came from the south – or what is now Italy.

Among the team was Ron Porley, English Nature's Vascular Plant Botanist and Bryologist. The Iceman Project was one of Ron's most exciting assignments, but his daily work is fascinating too. Ron leads on many Biodiversity Action Plan (BAP) species and advises on all aspects of conservation of bryophytes (mosses, liverworts and hornworts – all tiny plants which reproduce through spores).

He goes out and about, assessing sites for their interest and advising on appropriate management. His monitoring projects often involve hi-tech methods like microchipping to mark a population, so it can be traced with hand-held detectors.

Ron's work has taken him as far afield as the African forests of Uganda and Malawi. He is the co-author of a new book on his favourite plants, **reviewed below**.

Little green gems

Dr Jill Sutcliffe, English Nature's Botanical and Mycological Unit Manager, reviews the book:

The long-awaited New Naturalist volume on *Mosses and Liverworts* has just been published. I say just, as the idea first appeared on the list of desirable titles 60 years ago.

In 1993, the late Harold Whitehouse recommended Ron Porley, who leads on bryophytes for English Nature, to write it and, in turn, Ron obtained the assistance of Nick Hodgetts, then plant adviser at the Joint Nature Conservation Committee.

They have written a sparkling text which grips you from the start. What I particularly like is the way in which the profiles of the many people who have played key roles in the moss world are woven into the text and the quotes at the start of each chapter.

A wonderful lino print by Robert Gillmor adorns the cover, the book design is part of the "new style" of the series and there are lots of excellent colour photographs. It would not have done these most ancient of our plants, which can so easily be

overlooked, any favours to be illustrated in different shades of grey.

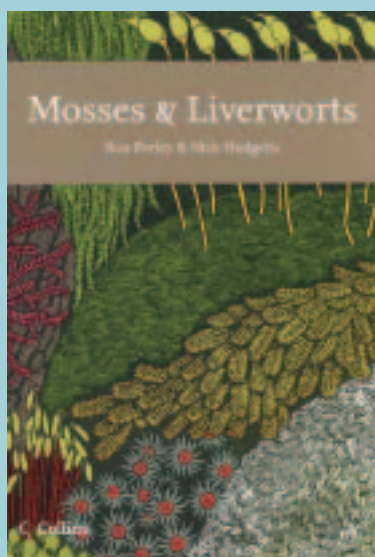
The importance of this component of our flora is demonstrated by their international status, and

England alone contains 953 of the total of 1,055 bryophytes in the British Isles. The role played by the UK Biodiversity Action Plan has undoubtedly helped in stimulating conservation action. Plants such as thatch moss, Cornish path moss and lead moss have become more familiar to us. This is one issue where I do differ from the authors, as they insist on using only Latin names.

Ron's interest in mosses was sparked one winter, when their diversity and beauty was revealed as the flowering plants died back. While getting to grips with mosses does involve a bit of an initial steep learning curve, the authors

have shown how absolutely fascinating these little green gems are.

Mosses & Liverworts, Ron Porley and Nick Hodgetts, New Naturalist 97 (HarperCollins, 2005)





At a school with Nick Baker, President of RSPB's Wildlife Explorers

A NICE BIRD FOR CHRISTMAS

Christmas birds? What species spring to mind? Maybe a robin on a sprig of Holly, a partridge in a pear tree or, of course, an unfortunate ex-turkey sitting in a carving dish!

Well, I have to say, for me winter is unashamedly birdy, with most of the

Due to the diversity of the species you can see feeding in their own unique ways out on the mud, it is an inherently interesting place to be. It's also a great place to go for beginners as you are not chasing small birds around in bushes. Everything is out

Never mind a murmuration of starlings – when they wheel around before settling down at dusk they positively seethe with an energy and noise that makes the hairs stand up on the back of my neck. These flocks really are in sum greater than their parts, and their sheer numbers almost invariably attract the attentions of the local predatory birds too. To watch a peregrine falcon, owl or sparrow hawk slice through the smoking birds as they react to the impostor with a surreal collective conscious is like nothing else.

I could go on and on, listing reason after reason to go coastal, but one I simply cannot get out of my mind, and one I am going to repeat this year, is that of seeing short-eared owls hunting. Living on a West Country moor I see the odd short-eared owl out hunting, but it really is a hit and miss affair and if you go out specifically looking for them you will never be rewarded.

So when I was tipped off to go to one of the Essex salt marshes with a guarantee that I would see owls, I was a little sceptical. But owls I saw, and in the bright afternoon light! I arrived at the location, saw some rough grazing marsh, and thought to myself, in a postcard scenario, the owls would be quartering just that sort of a habitat. So, I lifted my binoculars to my eyes and no sooner had the eye cups touched then I was viewing not one, but eight!! What a rare privilege to be able to sit and watch these birds for several hours going backwards and forwards. I was even able to predict their patterns and get in position to have them fly straight over my head!



Istock images

Our feathered fauna are pretty much the only visual and active creatures moving around our countryside during the winter months.

Short-eared owl

other wild things having shrivelled up, burrowed away or flown off. Our feathered fauna are pretty much the only visual and active creatures moving around our countryside during the winter months.

And I'm talking about spectacular birds here and birds doing spectacular things. For the best of this, you need to head in a coastward direction which is, for many people, the last place they would want to spend a winter's afternoon! But, trust me on this one, wrap up warm, grab a pair of binoculars and go.

Let's start with estuaries. We have lots of them and wherever you are sitting right now, you are probably no more than 150 miles from one. These places where rivers meet the sea and drop all their nutrients in the form of sediment, are some of the richest ecosystems on earth, up there with coral reefs and tropical rainforests for productivity. It is on these smooth slicks of mud flats that watching birds can get addictive.

there in the open for all to see and all you have to do is identify them.

This, of course, can be a bit of a challenge but nothing a good field guide, some patience and a chat with local birders won't sort out. Having said that, it can be a challenge for those more experienced too. Just make sure you do your research first before you set off, aim for a good low tide and try to arrive an hour or so either side. Find out if there are any hides nearby and be aware of where the sun is likely to be. You need it behind you, if you are to avoid a lot of squinting and birds that are dark silhouettes.

Reed beds are really productive at the moment too, especially for that bird that individually rarely attracts much attention at all – the starling. When these birds collect together in their thousands and communally roost of an evening, they provide what is arguably the best British wildlife spectacle there is!



Robins and hedgehogs can benefit from some untidy corners

Gardening with wildlife in mind

Late autumn is when gardeners for whom neatness is a chief goal must spend long hours burning or removing leaves, cutting back perennials that have gone to seed and generally trimming and tidying up, writes **Steve Berry**.

The wildlife gardener, in contrast, takes a far more relaxed approach, knowing that dead and dying hollow plants, stems and seed pods may house ladybirds and can be left until spring. Leaves will rot down of their own accord and, in doing so, can provide homes for a host of creatures, large and small.

Invertebrates over-wintering in leaf piles will sustain birds like robins, wrens, dunnocks and blackbirds, while large stacks of leaf and other garden litter can shelter desirable creatures like slow-worms, hedgehogs and harvestmen, small, long-legged arachnids which are often mistaken for spiders.

So, if you haven't already done so, set aside one or more areas in the garden which can remain undisturbed, not just throughout the winter but all year round. Here, you can helpfully amass not just

leaves, but logs, woody cuttings and those irritating large stones which seem to emerge mysteriously from the soil at regular intervals in even the best-tended garden.

If you must tidy somewhere, concentrate on the shed or greenhouse and get rid of those



Harvestmen shelter in garden litter unused pesticides and herbicides. (Do this responsibly, by contacting your local authority on safe means of disposal). Why not resolve to have an organic garden next year?

November and December are good months to put up nest-boxes. In really cold weather, these could make the difference between life and death for small birds like wrens and great tits.

WHAT'S ON? GUIDE

NOVEMBER 2005 – FEBRUARY 2006

Dec
11

Castle Eden Christmas

10.00-12.00 (children)

13.00-15.00 (adults)

Castle Eden Dene NNR, Durham

Craftswoman Maid Marion demonstrates making quality Christmas decorations using natural materials.

Adult session includes willow wreath making, with mulled wine and mince pies.

Contact Steve Metcalfe
0191 518 2403

Dec
04

Come and cut a Xmas tree

10.30-13.00 Fenn's Whixall and Bettisfield Mosses NNR, Shropshire

A volunteering event to celebrate International Volunteers' Day.

Advance booking essential.

Contact Joan Daniels
01948 880362

Dec
18

Trees in winter

13.00-16.00 Roudsea Wood & Mosses NNR.

Learn how to identify our native trees in winter with English Nature's Site Manager Rob Petley-Jones.

20 places

Contact Roudsea Wood NNR base
01539 531604

Feb
18-19

Lee Valley Birdwatching & Wildlife Fair

9.30-16.00 Lee Valley Park Farm, Waltham Abbey, Essex

England's third largest bird fair for everyone from the novice to the serious birdwatcher. Sponsored by English Nature.

Get close up to bitterns, and up to 100 other species with guided birdwatching tours and field watching stations.

Visit indoor exhibitions and trade stands in heated marquees. Enjoy a two-day programme of stalls, lectures and presentations including information about English Nature projects.

Contact: Lee Valley Park information service
01992 702200

Hatching hope for hen harriers

The plight of the hen harrier is possibly the most difficult issue in British conservation.



A young English hen harrier

It is one of our most spectacular birds but, unfortunately, remains one of our rarest. Fewer than 20 females attempt to nest annually on moorland in northern England and many fail to produce young, despite the availability of large areas of apparently suitable habitat.

Hen harriers feed on a wide range of prey and will catch whatever is most readily available. Where birds breed and forage over grouse moors, this brings them into conflict with commercial grouse moor managers. If hen harrier numbers build up on a single estate they can threaten the driven grouse shooting which funds the moorland management. As a result, hen harriers are highly persecuted and are virtually absent from England's grouse moors.

The Hen Harrier Recovery Project (HHRP) was launched in 2002 to improve the hen harrier's status and prevent its extinction as a breeding bird in England. The initial results were encouraging, with a population increase in 2002 and 2003, but this trend did not continue. The number of breeding pairs and their distribution decreased to 10 breeding attempts at just one site in 2004.

Monitoring results from 2005 were more encouraging. Nineteen breeding attempts resulted in 15 successful nests, producing a total of 36 birds – the highest number of successful nests and

fledglings recorded since the project began monitoring in 2002.

However, the English population remains very low and the bird's vulnerability is increased by its limited distribution. English hen harriers are still more or less confined to one breeding area, the Bowland Fells in Lancashire, which supported 100 per cent of the breeding attempts in 2004. Despite attempts to breed at four other locations in 2005, 80 percent of the successful nests were still in Bowland. There, gamekeepers from the shooting estates work side by side with English Nature staff. With their co-operation, the whole range of moorland wildlife is being conserved.

During the first four years, the Project has gained a detailed knowledge of the problems affecting these birds and the problems they can potentially pose. This knowledge is being used to shape its work for another four years. An important element will be working with all the people and organisations closely involved with hen harrier conservation, particularly moorland managers.

This will inevitably be a long-term process, but without their co-operation the number of breeding hen harriers in England cannot be increased.

“One of the difficulties we have faced has been to highlight the ongoing illegal persecution that continues to threaten the species, without heightening tensions between conservationists and grouse moor owners,” said HHRP manager, Richard Saunders. “This could polarise views about raptor conservation and hinder the progress of hen harrier recovery. We hope that,



Richard Saunders

Hen harrier in flight over the Bowland Fells

by continuing to highlight the positive contribution of grouse moor owners, the successes in Bowland can be repeated elsewhere across the country.

“A sky-dancing male hen harrier indulging in its acrobatic tumbling display flight over its moorland haunts is arguably the finest sight in the English uplands. Hopefully our ongoing work will give more people the opportunity to judge for themselves, as we continue to secure the future of this magnificent bird.”