ENGLISH NATURE

Annual Report

1 April 2005 – 31 March 2006

working today
for nature tomorrow

Contents

More information about our work, including statistics on subjects in this report can be found on our website.
www.english-nature.org.uk

Foreword

As Acting Chair since November 2005, I am privileged to present the last full Annual Report of English Nature, before we formally join Natural England in October 2006.

My predecessor, Sir Martin Doughty, made an immense contribution to English Nature. During his period at the helm, the organisation enjoyed consistently strong development and excellent external relations. Sir Martin worked tirelessly to ensure that Natural England will be a fitting successor for English Nature and we warmly congratulate him on his appointment as the Chair of the new organisation – it is in good hands.

This is also my formal chance to thank all our staff for another successful year and for their outstanding contributions that have made English Nature the organisation of which we are so proud. I would particularly like to acknowledge Andy Brown, our Chief Executive, for his enthusiastic and determined leadership. His guidance to me and my Council has always been wise, and his advice to the Department and others has been measured and based on sound judgement. English Nature owes him a huge debt of gratitude.

Together with colleagues from the Countryside Agency and Rural Development Service, our Council has also played a crucial and very active role in shaping Natural England, both through the legislation and the development of the organisation's strategy and first corporate plan.

Our solid progress towards the Government's Public Service Agreement target of having 95 per cent of the SSSI area in favourable or recovering condition by 2010 is evidence of a very successful year. On 31 March our progress was on track at 72.3 per cent. This outstanding achievement was only possible with the support of our partners – all those organisations, landowners and individuals with whom we enjoy such productive co-operation. I particularly thank our increasing band of volunteers (now numbering 1,865) for their hard work, goodwill and enthusiasm. They will be a great asset to Natural England.

English Nature has continued to advise Government on environmental policy – on subjects ranging from avian influenza to climate change, wind power to badgers (and bovine TB) and sustainable housing, to the future of the CEH research stations. We helped draft *Planning Policy Statement (PPS) 9: biodiversity and geological conservation,* which represents a significant policy advance for conservation, reinforcing the need to integrate biodiversity and geodiversity in all planning considerations.

To support our advisory role we lead a wide range of research projects such as the multi-partner Monarch project that models how wildlife might respond to climate change in Britain and Ireland over the next 50 years. One of this year's research reports, *Long-term change in woodland vegetation 1971–2001* (ENRR 653) documents changes in British woodlands and highlights how factors such as diffuse pollution and climate change have affected our habitats and wildlife. Maintaining such long-term studies remains crucially important.

English Nature has given increasing focus to enthusing people about wildlife and helping them to engage with the natural world. A greater appreciation of nature through healthy activity will benefit everybody and, together with our media partners, we have helped to spread the word through initiatives such as Breathing Places and SpringWatch. Since Natural England's brief includes promoting countryside access and recreation, projects such as these will undoubtedly increase.

So, what does the future hold? In 1959, the Nature Conservancy asked: "Will wild nature be once more a partner, understood and valued by all, or become a mere doormat worn down to shabbiness?" As we prepare to pass the baton to Natural England, I believe nature conservation in England is moving firmly in the right direction. Wildlife is valued by millions of people, but increasingly we are realising the additional social and economic benefits that a healthy environment can provide. Whilst our terrestrial protected areas are being brought back to favourable condition, there remains a huge task to rebuild nature across our towns, countryside, coasts and seas! This is an urgent task if nature is to adapt to climate change – which is why the creation of a strong Natural England is so important.

Mike Moser Chair

Introduction

and Chief Executive's Statement

Welcome to this, the last Annual Report and Accounts of English Nature before the transition to Natural England in October 2006. The first part of the report outlines our aims and achievements in the past year, while the remainder details English Nature's income and expenditure, together with related information. Each element of the Report and Accounts has been signed off by me, in my role as Chief Executive and Accounting Officer for English Nature.

A great deal has happened in the past year, and the achievements of English Nature's staff are all the more noteworthy for being accomplished against the background of preparation for Natural England. The fact that we have managed to meet, and in many cases exceed, the vast majority of our corporate targets while undertaking these extra duties is a cause for celebration.

One of our most important long-term objectives is to assist the Government in achieving its PSA target for SSSIs. In meeting the overall target of having 95% of SSSI area in favourable or recovering condition by 2010, we set ourselves a year-end target of 72%. The fact that we have exceeded this figure is a testament to the hard work of our staff and that of many landowners and managers. We offer them our profuse thanks.

As well as SSSIs, the work to improve our National Nature Reserves also continues to deliver results, with 86.4% of reserve area now in favourable or recovering condition. Our voluntary staff have played a vital part in this achievement and their efforts in this, and in many other areas of English Nature's work, are much appreciated.

Positive results have also been achieved for the BAP priority species and habitats that English Nature leads on. Of these, 8 of the 15 habitats and 43 of the 88 species are now stable or increasing, these numbers representing a very significant improvement on those of the last reporting round in 2002. Species showing an improvement in their population trend include the greater horseshoe bat, Cornish

path moss, the ladybird spider and the pool frog; the latter having been reintroduced to Norfolk this year after its UK extinction in the 1990s. As well as our terrestrial and freshwater habitats, our knowledge of our maritime BAP habitats continues to grow, with trends now known for 5 out of 6 of the maritime habitats we lead on, a reverse of the situation last year.

Our work to promote conservation in the wider countryside has also seen significant developments. One of these was the start of the Countdown 2010 Biodiversity Action Fund, a grant-scheme that I had the honour of launching at the World Conservation Union's UK committee meeting in December. The Defra-funded scheme is being administered by English Nature and it will help support many voluntary conservation organisations in their efforts to conserve species and habitats around the country.

This year also saw the publication of *Geological conservation: a guide to good practice.* Illustrated with numerous case-studies, this publication shares good practice developed by English Nature and its partners over the last 15 years. The guide is certain to become required reading for those with an interest in geological conservation and it has already attracted fulsome praise from many quarters.

We have had a busy year providing advice to help align policies so they contribute to achieving sustainability. We responded to well over 100 national and regional consultations and provided evidence to many Parliamentary Committees. Of particular note during the year was the announcement of the Catchment Sensitive Farming programme, to be delivered jointly with the Environment Agency.

As this is my last year as Chief Executive of English Nature I would like to record my thanks to all those volunteers and partners who have contributed so much to nature conservation over many years. Without their support and efforts, England's natural heritage would be much the poorer. My job as Chief Executive has been enormously stimulating and enjoyable because of the friendships and partnerships with so many people and organisations, and the expertise and dedication of Council Members and staff. It has been a privilege to have served as Chief Executive of such a wonderful organisation.

Dr Andy Brown Chief Executive

Protecting the very best

One of English Nature's objectives is to conserve a network of special sites that is well-managed and in a favourable condition. These sites – including Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) – should safeguard the diversity and geographic range of England's habitats, species, and geological and physiographic features for future generations. Around three-quarters of SSSI land is also designated under the EU Habitats and Birds Directives, or as Ramsar sites under the Convention on Wetlands of International Importance.

This year we continued to work hard to improve the quality of our SSSIs and NNRs. We have also sought to increase our knowledge of why some sites are in unfavourable condition, so that we can make further improvements to their management.

Left:
Lundy Marine Nature Reserve, Devon.
Paul Glendell/English Nature 24,267

Right:
River Coquet & Coquet Valley Woodlands SSSI, Northumberland.
Peter Wakely/English Nature 15,234

Sites of Special Scientific Interest

England's Sites of Special Scientific Interest (SSSIs) are the country's finest sites for wildlife and geology. The overall area of SSSI land in England on 31 March 2006 was 1,074,215 ha, a figure that represents about 7.5 per cent of the area of England. Some SSSIs are very small – about 235 are less than half a hectare. Others cover thousands of hectares. The largest is The Wash, an area of intertidal mudflats of great importance for its waterfowl populations, covering 62,054 ha. During 2005/2006, five new SSSIs were designated, bringing the total number of SSSIs in England to 4,120.

Timeline

The timeline running through this report records events and milestones in the history of the conservation movement, environmentalism and the natural sciences, with particular reference to the UK and the origins of English Nature. It takes us from the 19th century up to the creation of Natural England, highlighting and expanding upon some of the more significant milestones along the way.

1807 Foundation of the Geological Society

1836 Foundation of the Botanical Society of the British Isles

1865 Foundation of the Commons, Open Spaces & Footpaths Preservation Society

1869

Sea Birds Preservation Act

In the mid-19th century, the shooting of sea birds for sport became a popular pastime. One area particularly notorious for this activity was a 30 km stretch of coast between Bridlington and Scarborough. In the 1860s it was estimated that around 120,000 birds were taken each year, the vast majority being shot by day-trippers from the Sheffield region.

To try and prevent this slaughter, a local vicar, the Revered Henry Barnes called a meeting of clergy and naturalists at his vicarage in October 1868. A result of this meeting was the formation of the Association for the Protection of Sea-Birds (APSB). The APSB attracted a number of supporters, including local landowners, the Archbishop of York, and several Members of Parliament, including Christopher Sykes, MP for Brantingham Thorpe. In 1869, Sykes introduced a Bill that reached the Statute Book as the Sea Birds Preservation Act, the first law devoted to wildlife conservation. The Act provided protection for 35 species by introducing a closed season from 1 April to 1 August.

The first successful prosecution under the Act took place in Bridlington on 10 July 1869 after a Sheffield tourist shot 28 birds. He was fined £3 19s.

The condition of SSSIs

English Nature continues to work closely with Defra to achieve the Government's Public Service Agreement (PSA) target for SSSIs; that is, that 95 per cent of SSSI land, by area, should be in favourable or recovering condition by 2010. This is a challenging target, but given the necessary resources and action, it is achievable.

English Nature assesses the condition of SSSIs using standards agreed between the UK conservation bodies. SSSI land is recorded as favourable when the wildlife and/or geological features it holds meet set criteria. SSSI land is recorded as 'recovering' only when all the necessary measures and programmes are in place to allow the site's special conservation interest to fully recover.

Detailed information on the site condition of every piece of SSSI land (already published by English Nature on our 'Nature on the map' website) together with the standard used to assess it, are open to full public scrutiny.

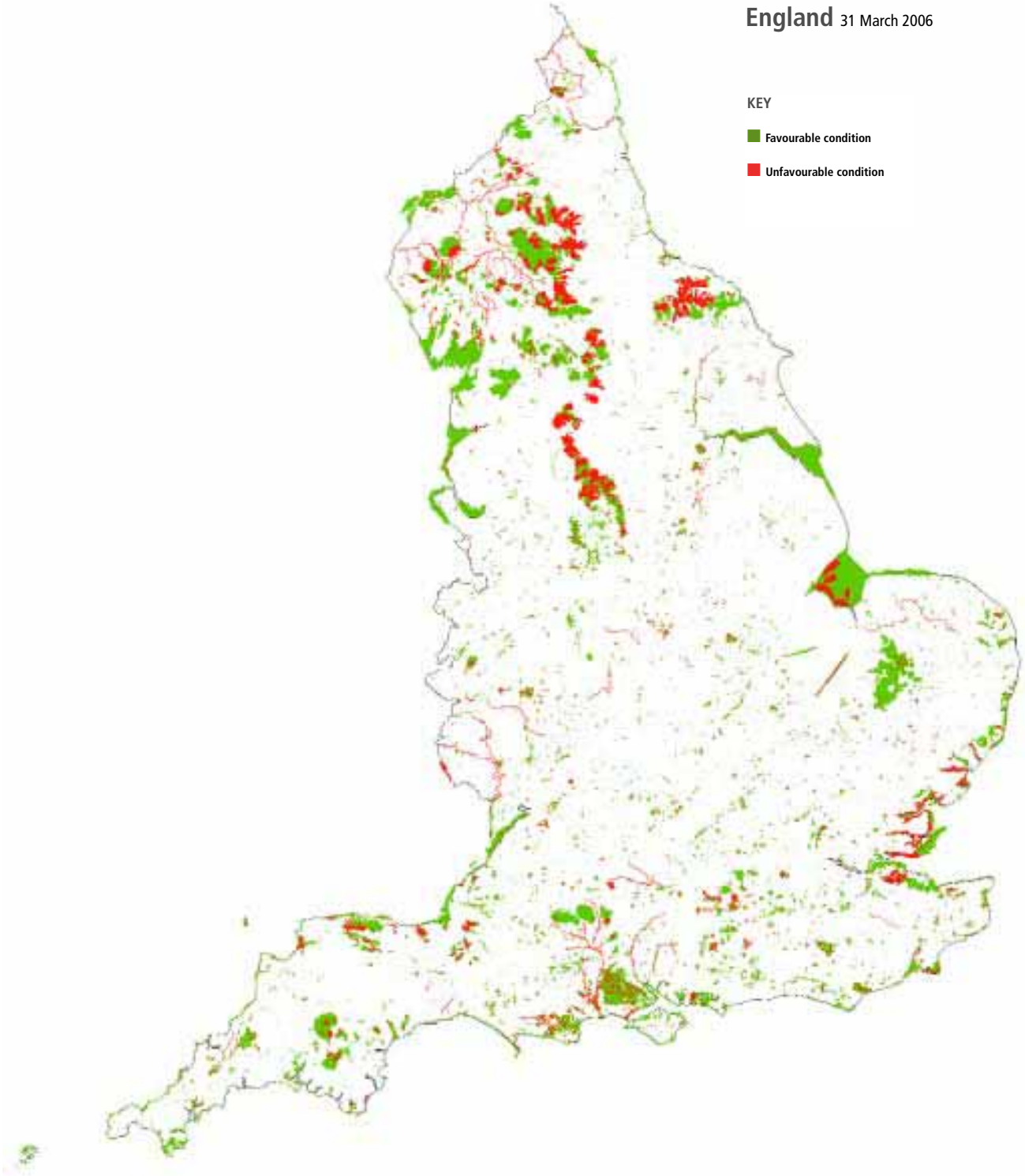
The map opposite shows the condition of every SSSI in England. Fuller information at all levels – from individual SSSIs, through regional to national statistics – is available on the English Nature website.

Remedying problems on sites

To help co-ordinate the delivery of the PSA target, English Nature launched a project to identify 'remedies' for unfavourable condition on SSSIs. This work has now been completed.

Herdwick sheep grazing at Ainsdale Sand Dunes SSSI, Merseyside.
Paul Glendell/English Nature

Condition of SSSIs in England 31 March 2006



1895 Foundation of the National Trust (the National Trust for Places of Historic Interest or Natural Beauty)

1907 Foundation of the Country Landowners Association (now the Country Land and Business Association)

1910

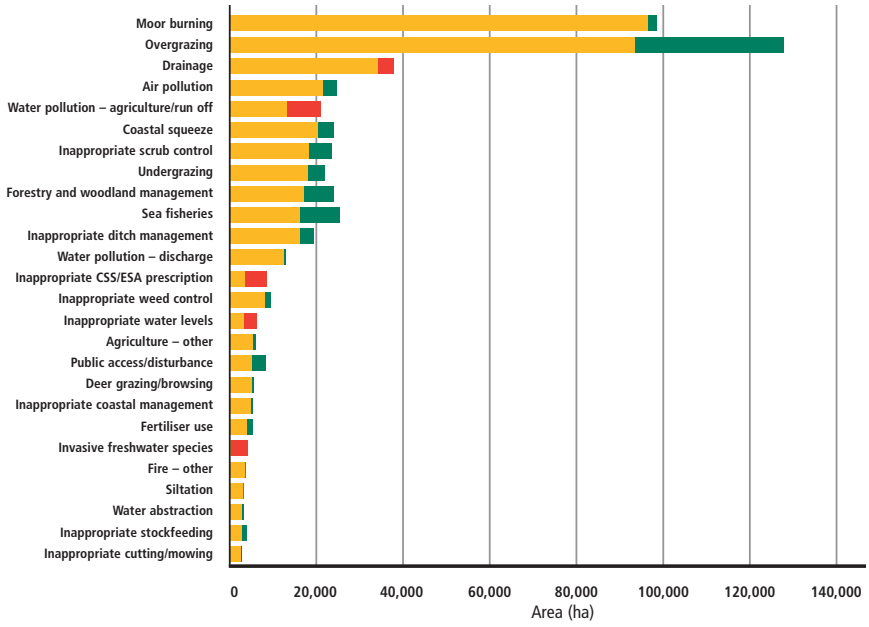
Woodwalton Fen – the first nature reserve

Charles Rothschild (1877–1923), an heir to the Rothschild banking fortune, had been a keen entomologist since his schooldays, and as an adult spent much of his free time on field trips in the UK and abroad.

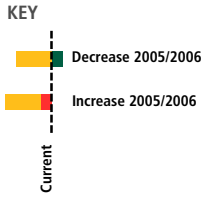
One of Charles' favourite collecting spots was Woodwalton Fen, a relic area of wild fen 15 km east of his Northamptonshire country estate at Ashton Wold. Local drainage schemes meant that Woodwalton was in danger of drying out, and to try and preserve the fen Charles purchased it as a private nature reserve in 1910.

Charles' intention was to buy land that had a special wildlife interest and donate these tracts to the National Trust on condition they preserve the local flora and fauna. Unfortunately, the brief of the National Trust was to preserve places of historic interest and natural beauty, and areas rich in wildlife were not necessarily very attractive. The Trust decided that Woodwalton lacked sufficient charm and Charles' offer to donate it was rejected.

Ownership of the reserve was eventually given to the Society for the Promotion of Nature Reserves in 1919 (see 1915) together with a substantial donation to help cover its high running costs.
Woodwalton Fen was declared a National Nature Reserve in 1954 and it is now part of the Great Fen Project which aims to restore over 3,000 ha of fenland.



Work done to improve SSSI condition in 2005/2006



A remedy defines the actions needed to address the causes of unfavourable condition, details the mechanism that will enable the action to be carried out, identifies who is best placed to implement the mechanism, and enables and secures the agreement of land managers to ensure that actions are carried out. For example, a remedy for overgrazing will not simply be 'reduce grazing', but rather the mechanism by which this can best be achieved – perhaps through an agri-environment agreement.

Many of our partner organisations have been involved in this project and, working with Conservation Officers, all the remedies have now been identified. Currently, our partners have agreed to take on the responsibility for 87% of them. Most of this work was undertaken during 2005/2006. Due to the complexities of agreeing over 15,000 remedy mechanisms with 253 partner organisations, a secure website was created to allow partners to provide direct feedback via our English Nature Site Information System (ENSIS) database. Using the site, our partners can tell us if they agree mechanisms can be delivered by them and, if so, when. If partners have queries, the system also enables them to contact Conservation Officers by email.

In completing this project, English Nature now has an extremely powerful dataset which can be used to monitor progress towards the PSA target, and calculate the associated costs both internally and externally.

Improving the condition of SSSIs

During 2005/2006, more than 50,000 ha of SSSI land that was previously in poor condition was improved into favourable or recovering condition. This great achievement is due to the work carried out by the owners and managers of that SSSI land, English Nature and Defra. The target in our Business Plan was to achieve a five per cent increase during 2005/2006 in partnership with Defra, and to achieve a cumulative figure of 72 per cent by March 2006. English Nature and Defra exceeded this target, reaching 72.3 per cent, and we remain on course to meet the Public Service Agreement target of 95 per cent by 2010.

English Nature and Defra RDS have made excellent progress in reducing overgrazing. Over the year it has fallen by 34,000 ha (27 per cent), a substantial achievement that is the result of a sustained, combined effort. As a consequence of the progress that has been made with overgrazing, it has now been replaced by inappropriate moor burning as the largest single cause of poor condition within SSSIs; English Nature is working with Defra, the Moorland Association and a number of moor owners to tackle this issue.

Denotifying SSSIs

The Countryside and Rights of Way Act 2000 (CRoW) made a number of changes to the Wildlife and Countryside Act 1981. One of these changes gave English Nature the power to remove an SSSI notification (section 28D of the 1981 Act, as amended) – a process called denotification.

A Code of Guidance published by Defra in 2003 entitled *Sites of Special Scientific Interest: encouraging positive partnerships* recommended that English Nature, "produces guidelines that it will use to determine whether to remove a notification." Between March and June 2005, we issued a public consultation document entitled *Procedural guidelines for the removal of an SSSI notification* and asked for comments on the principles and procedures outlined in the document.

The responses to this public consultation were summarised in a report which also made recommendations on amending the guidelines and these were subsequently approved by English Nature's Council in December 2005. In addition to approving the guidance on SSSI denotification for operational use, Council also asked that a concise version be made available and this document is now being prepared.

This policy statement will set out the principles and procedures which English Nature will follow in determining whether any site, or part of a site, should be denotified.

How we work with the Defra Rural Development Service (RDS) to deliver the PSA target

By working closely with Defra RDS we have developed a plan for the delivery of management agreements on SSSIs and supported the launch of the new Higher Level of the Environmental Stewardship agri-environment scheme.

Higher Level Stewardship (HLS) will become the primary means of supporting land management on SSSIs and will be of real benefit to the environment and land managers.

Moccas Park SSSI, Hereford and Worcester.
Peter Wakely/English Nature 17,108

Over 27,500 ha of SSSI land were brought into target condition this year through the combined impact of HLS, the Wildlife Enhancement Scheme, the Countryside Stewardship Scheme and Environmentally Sensitive Area agreements. This figure represents over 50 per cent of the total area of SSSI land brought into target condition this year. This area of work will be critical to the long-term delivery of the PSA target.

The chart on page 10 shows the work done in 2005/2006 to reduce the causes of poor condition on SSSIs.

1915

The SPNR's schedule of nature reserves

The Society for the Promotion of Nature Reserves (SPNR) was founded by Charles Rothschild in 1912. Its primary objective was to "collect and collate information as to the areas of land in the United Kingdom which retain primitive conditions and contain rare and local species liable to extinction owing to building, drainage, disafforestation, or in consequence of the cupidity of collectors". This information was then to be used to determine which areas should be secured as nature reserves.

Thanks to Charles' energy and financial resources a detailed survey of the Britsh Isles had been carried out by 1915, with 273 sites identified as being "worthy of permanent preservation". These sites were either "typical primeval country", the breeding places for "scarce creatures", the localities of rare plants, or contained features of geological interest.

Sadly, the war blunted interest in the fledgling conservation movement and the SPNR's list was largely ignored at the time. Despite this, many of these worthy sites survived (in whole or in part) and most are now SSSIs, NNRs, SACs or SPAs. The SPNR also survived, it evolved into today's Royal Society of Wildlife Trusts, the umbrella organisation of The Wildlife Trusts partnership.

SSSI awards

For the last nine years English Nature has been honouring those who are dedicated to preserving some of England's Sites of Special Scientific Interest (SSSIs).

The SSSI awards – our 'green Oscars' – are presented to those who go the extra mile to protect some of the country's most special wildlife sites.

In 2005, we presented awards to 19 owners and occupiers of SSSIs. The award winners range from a Kent couple who remortgaged their house to buy species-rich chalk grassland and save it from agricultural development, to a Worcestershire husband and wife team, Harry and Kate King, who hand-cut hay on their two acre plot to protect the thousands of orchids growing there.

For the first time we produced a full colour booklet featuring all the winners photographed on their SSSIs. This booklet was then distributed with *English Nature Magazine* and *Sitelines* to illustrate just how important individuals are in helping care for our wildlife. We also used the booklet to promote our work with key stakeholders.

SSSI award winners, Harry and Kate King, Hillend Meadow and Orchard SSSI.
Paul Glendell/English Nature

Common land

Concerted action on common land is fundamental to achieving the PSA target. Some 55 per cent of all common land is SSSI, and 19 per cent of SSSI land includes common land. Nearly 43 per cent (around 84,000 ha) of common land is failing to meet the PSA target for SSSIs, with overgrazing remaining the single largest factor. The reason that common land is in disproportionately unfavourable condition is because of the difficulty in negotiating agreements (for example, Higher Level Stewardship) with large numbers of commoners, any of whom can effectively veto an agreement proposal.

It should be noted that the reasons for unfavourable condition differ markedly between lowland England (where commons are often neglected and under-managed) and upland England (where commons are generally overstocked). English Nature is working closely with Defra and other stakeholders in contributing to the Commons Bill currently making its way through Parliament. As well as other helpful clauses within the Bill, we support the proposal for a facility that will enable the formation of statutory commons associations. These associations will be capable of negotiating on behalf of their members, hence easing the complex negotiations necessary to conclude management agreements with large numbers (sometimes hundreds) of right-holders.

North York Moors SSSI.
Peter Wakely/English Nature 12,801

Legal casework

There have been two successful prosecutions this year under the Wildlife and Countryside Act 1981 (as amended and substituted by the Countryside and Rights of Way Act). Both prosecutions were in relation to unauthorised works to construct and upgrade tracks in the uplands. The first case involved damage to dry heath habitat on North York Moors SSSI. The occupier pleaded guilty at Northallerton Magistrates' Court resulting in a fine of £7,500, with £6,787 costs awarded to English Nature. The court also ordered that restoration works be carried out at the occupier's expense. The second prosecution case also resulted in a guilty plea by the landowner in relation to three offences, including dumping material and track building on South Pennine Moors SSSI. The works resulted in damage to blanket bog and wet and dry heath habitat. Keighley Magistrates'

1924 Formation of the International Tree Foundation

1926 Formation of the first Wildlife Trust: The Norfolk Naturalists' Trust

1929 Foundation of the Freshwater Biological Association

1947

Report of the Huxley Committee

After the Second World War, the Government appointed a National Parks Committee to look into the possibility of creating a series of National Parks in the UK; areas that would be protected from unsympathetic development and where the public would be allowed greater access for recreation. A sub-committee was also formed to explore related issues surrounding wildlife conservation. This body, the Wild Life Conservation Special Committee, was sometimes known as the 'Huxley Committee' after its chairman, the distinguished biologist Julian Huxley.

At the time, it was believed by many that the conservation of wildlife and geological features should be the responsibility of the Ministry of Town and Country Planning. However, when the Huxley Committee delivered its report in 1947 it recommended the public purchase of 73 sites as nature reserves and the setting up of a national Biological Service to manage them. This service was to be a scientific body separate from the planning system that, as well as managing reserves, would also carry out research to support government decisions. As a result of these recommendations, plans were drawn up for the creation of a new organisation, the Nature Conservancy Board.

Court fined the landowner £17,500 and awarded English Nature £17,026 costs. The court also ordered that restoration works be carried out at the landowner's expense. A third case resulted in a formal caution being administered after a brick track was created, damaging lowland neutral grassland. Work to restore the area has now been completed.

In July 2003, English Nature acted to prevent disturbance to waterfowl on Upper Solway Flats and Marshes SSSI by refusing consent for a trial shellfishery. English Nature did, however, seek to work with the applicants to design a modified application that could be consented to, but with conditions attached. Appeals against our decisions were made to the Secretary of State. Following a hearing on 21 December 2005, the Secretary upheld English Nature's decision to refuse consent for the initial trial. English Nature was also directed to grant consent for a smaller second trial that will allow birds to continue to feed, roost and breed without being disturbed.

Another appeal was heard on 13 September 2005. In this case, English Nature had acted to prevent further overgrazing of Ickornshaw Moor, part of South Pennine Moors SSSI, by refusing consent for additional grazing. The Secretary of State again upheld English Nature's decision. This will allow work towards the recovery of the site's special features to continue without the burden of added grazing pressures.

In January 2001, English Nature was given a duty to notify our views about managing each existing SSSI to all (32,081) SSSI owners and occupiers. This is to ensure they have a basic knowledge of the management required to conserve and enhance their SSSI.

Upper Solway Flats and Marshes SSSI, Cumbria. Derek Ratcliffe/English Nature 7,467

Ebernoe Common SAC, West Sussex.
Paul Glendell/English Nature 24,432

These same owners and occupiers were invited to make comments or objections to these 'views about management' (less than 0.5 per cent did so). January 2006 saw the completion of this exercise.

International sites

During the past year, Holnest (Dorset) was submitted as an additional candidate Special Area of Conservation (cSAC) to the European Commission as part of the requirements of the Habitats Directive. In addition, extensions were made to two existing SACs: Ebernoe Common (West Sussex) and Orton Pit (Peterborough).

English Nature continues to direct its resources to the management and monitoring of international sites. We will carry this work forward as part of our ongoing effort to secure their favourable condition.

Marine and Coastal Protected Areas

In July 2005, English Nature and the Marine Biological Association held a highly successful week-long workshop on The Principles of Highly Protected Marine Reserves (HPMRs). Experts from New Zealand and the UK led the course, which focused on the science and design of HPMRs and evidence of their positive benefits to the marine environment.

Several European marine sites, including North East Kent, The Wash and North Norfolk Coast, Plymouth Sound and Estuaries,

Designation	Number of sites	Total area (ha)
Special Areas of Conservation	237	927,229
Special Protection Areas	80	689,262
Ramsar sites	70	375,776

Lundy lobsters bounce back

The UK's first statutory No-Take Zone (NTZ) near Lundy has been a resounding success with the number and size of crabs and lobsters inside the area having shown significant growth compared to outside.

The No-Take Zone covers an area of 3.3 km^2 within the Lundy Marine Nature Reserve, and within the zone the removal of any creature is forbidden by a bylaw.

Set up in 2003, it was hoped that the NTZ would help the recovery of the local marine environment including sea-bed species such as the pink sea fan and the rare sunset cup coral. To date, the results have exceeded expectations with clear evidence that the zone is also helping commercial species such as lobster and scallops to recover from the effects of over-fishing.

Lundy lobsters. Chris Davis/English Nature

The Lundy project is adding to our knowledge of what No-Take Zones can achieve in UK waters and is an important case study that supports the argument for a network of Marine Protected Areas around the UK. These areas will help the recovery of marine species and habitats in our seas and improve the health of the wider marine environment.

1945 The Royal Society recommends the formation of a 'Biological Service'

1946 Foundation of the Severn Wildfowl Trust, later the Wildfowl & Wetlands Trust

1947 Report of the Huxley Committee

1949

The National Parks and Access to the Countryside Act

Following the recommendations of the Huxley Committee (see 1947) it was decided to form a new organisation, the Nature Conservancy. Earlier suggestions to call it a 'board' or 'council' were dropped on the grounds that it would sound too officious. In 1949, the Nature Conservancy was established as a separate body by Royal Charter, deriving its powers from the National Parks and Access to the Countryside Act.

According to the Charter, the Nature Conservancy's purpose was "to provide scientific advice on the conservation and control of the natural flora and fauna of Great Britain; to establish, maintain and manage nature reserves in Great Britain, including the maintenance of physical features of scientific interest; and to organise and develop the research and scientific service therein."

The powers granted to the Nature Conservancy by the Act included the ability to acquire land (including its compulsory purchase), the ability to schedule Sites of Special Scientific Interest (SSSIs), to declare National Nature Reserves (NNRs) and consent the establishment of Local Nature Reserves (LNRs) by local authorities. Although these powers were potentially very contentious, there was little opposition in Parliament as it was expected that the proposed series of National Nature Reserves would be relatively small, only covering around 28,000 ha.

Flamborough Head SAC, East Riding of Yorkshire.
Peter Wakely/English Nature 13,756

and Flamborough Head have started reviewing their management schemes five years on from publication. Following work with the North Eastern Sea Fisheries Committee, a ban on trawling came into effect around Flamborough Head which will help protect marine life on its chalk reefs.

Survey work started in the summer of 2005 to identify new Special Areas of Conservation in inshore waters (the 0–12 nautical mile zone). Pilot surveys have provided physical and biological information on the reefs at Eddystone in Devon, and sandbanks in the Outer Thames Estuary. Additional sites will be surveyed in the coming year.

1947 Publication of *Conservation of Nature in England and Wales*. Command 7122

1948 Foundation of the International Union for the Conservation of Nature and Natural Resources (IUCN), better known as the World Conservation Union

The Lundy No-Take Zone continues to demonstrate positive benefits to the marine life within it. In the second year of monitoring, increased numbers of lobsters were recorded inside the zone compared to outside. These results were presented at the International Marine Protected Areas Congress in Australia in October 2005.

English Nature has been working with Defra and other Government departments on developing the Marine Bill. One of the objectives English Nature is calling for is an ecologically coherent and representative network of marine protected areas – with varying levels of protection – and areas for the recovery of marine life and ecosystems. The policy proposals for the Marine Bill are currently out for consultation.

Supporting the RIGS movement

The concept of Regionally Important Geological and geomorphological Sites (RIGS) was introduced in 1990 to provide a more structured approach to the conservation of local geological sites. Since then, English Nature has supported the establishment and growth of the RIGS movement through a mix of funded project officers, grants and direct promotion. Other major sources of funding have included the landfill tax, Heritage Lottery Funding and the Aggregates Levy Sustainability Fund (ALSF).

The annual UK RIGS conference has been held since 1998, and in 1999 the Association of UK RIGS Groups (UKRIGS) was established to act as an independent umbrella body for RIGS groups throughout the UK.

There is now near total coverage of RIGS groups in England. Each group covers a county or unitary authority area and is responsible for the identification of RIGS, their management (directly, or in an advisory role) and the delivery of a range of educational initiatives aimed at raising the understanding of local geology and encouraging its wider appreciation. Among the strongest groups are The Geology Trusts (established in 2003) which have benefited from a partnership approach that o-ordinates their work.

The UKRIGS strategy and associated Memorandum of Understanding with English Nature have now run their course and, coinciding with the initiation of Natural England, we are now looking at the future direction and growth of the RIGS movement. PPS 9 and the recent Defra guidance on local sites are both timely and, together with the recently agreed joint statement between UKRIGS and The Geology Trusts and the growing profile and development of Local Geodiversity Action Plans (LGAPs), will provide clear momentum, support and direction for the continued strengthening of local geological conservation.

Supporting local geological conservation

This year, English Nature has continued to provide strong support for the delivery of local geological conservation. This has included financial support to help local groups deliver a range of small projects ranging from site interpretation, site management and recording, to local promotion and events. Our support for UK Regionally Important Geological and geomorphological Sites (RIGS) has helped the continued provision of a national RIGS newsletter, website and conference, and the employment of a project officer to explore funding opportunities for RIGS groups and the challenges facing their continued development.

English Nature has also facilitated the agreement of a joint statement between UKRIGS and The Geology Trusts. The agreement sets out common goals for local geological conservation and identifies key areas for co-operation between UKRIGS and the Trusts which will provide an important steer for future work.

Local Geodiversity Action Plans (LGAPs) have continued to grow in number and prominence. In 2005/2006, six new plans were initiated, bringing the total to 25. Guidance for company GAPs has also been developed (by Capita Symonds) and a company GAPs seminar was held this year to explore LGAP progress and share good practice.

Importantly, the publication of PPS 9 has provided additional strong and clear support for local geological conservation, and for LGAPs as a framework for its delivery.

Clearance work before (right), and after (below), at Southerham Grey Pit SSSI, East Sussex.

Mick Murphy/English Nature

Face Lift

English Nature's Face Lift programme supports the management of geological SSSIs by providing funding for enhancement works such as scrub and tree clearance, trenching and the production of interpretation panels. The programme has a number of aims, including improved access and safety at sites and the conservation of important outcrops as scientific and educational resources.

The programme is now in its eighth year. Since the inception of Face Lift, English Nature has spent more than £590,000 on the enhancement of geological SSSIs. Last year, English Nature spent over £97,000 on 31 enhancement projects on geological SSSIs around the country. A recent example of this work was clearance carried out at Southerham Grey Pit SSSI, East Sussex. Here, a large section of face was cleared to expose parts of the Cretaceous Chalk that are not present elsewhere in the UK.

Land purchase grants

Five grants were awarded during the year with a total expenditure of £82,961 (in 2004/2005, ten grants were awarded with a total value of £266,367). This money enabled the applicants to purchase over 180 ha valued at £815,071 (a multiplier of 9.8). As in previous years, a key factor in awarding grants has been the ability of the applicant to deliver favourable condition on all or part of the SSSI land to be purchased. Unfortunately, three grants on which offers had been made could not be taken up by the applicants. In these cases there were difficulties in concluding the negotiations on acceptable terms within the year.

Land Purchase Grants 2005/2006

SSSI	Location	Grant recipient	Habitat	Area (ha)	Total purchase price £	Grant £
Humber Estuary	North Lincolnshire	Lincolnshire Wildlife Trust	Standing open water and canals	3.3	70,000	13,000
Brading Marshes to St Helen's Ledges	Isle of Wight	RSPB	Neutral grassland	146.6	647,000	40,000
The New Forest	Hampshire	National Trust	Dwarf shrub heath	16.4	52,500	15,000
The Wye Valley	Derbyshire	Derbyshire Wildlife Trust	Broadleaved, mixed and yew woodland	10.9	29,000	6,750
The Swale	Kent	Canterbury City Council	Neutral grassland	4.3	16,571	8,211
			Total	181.5	815,071	82,961

The Swale SSSI, Kent.
Paul Glendell/English Nature 24,420

National Nature Reserves

National Nature Reserves (NNRs) are the jewels of England's wildlife and geological treasures, and offer excellent opportunities for people to access the countryside. We look after these nature reserves to make sure that their special features are secured for future generations and to allow people from all parts of society to learn about, appreciate and enjoy nature.

At 31 March 2006 there were 218 NNRs in England covering 89,809 ha – an increase of 2,175 ha from March 2005. During the year one new NNR was declared, with extensions made to ten others.

The new reserve is Far Ings, on the south bank of the Humber, managed by the Lincolnshire Wildlife Trust. It consists of a series of former clay pits that have flooded, creating reed beds, though the site also includes a mosaic of rough grassland, scrub and open water. Marsh harrier, bearded tit, bittern and grey partridge breed at the site. The reserve has been managed by the Trust for over 20 years and welcomes over 50,000 visitors each year, including many college, school and university students.

The largest reserve extension was of 1,500 ha, made to the Humberhead Peatlands NNR. Most of this area is land whose management came to English Nature as a result of an agreement with the Scotts Company in 2002. Major restoration work has been carried out on the peatlands since Scotts started to vacate the land, enabling the new area's declaration in October. A small part of the extension is sand and gravel pits which were gifted to us by Tarmac. Several other extensions were declared to sites in Cumbria, including over 400 ha on the South Solway Mosses, as well as land at North Walney, Drumburgh Moss, Duddon Mosses and Hutton Roof.

Far Ings NNR, Lincolnshire.
Robin Chittenden/English Nature

1950

The first SSSIs

The main task of the Nature Conservancy was to identify and secure land for the creation of National Nature Reserves (NNR), however, alongside this work, the Conservancy also undertook the duty of informing local authorities of land that was of special interest by reason of its flora, fauna, geology or physiographical features. These areas became known as Sites of Special Scientific Interest (SSSIs).

SSSIs started to be scheduled on a county basis in 1950, one of the first being Oxfordshire. Sites scheduled here in 1950 include Wicklesham & Coxwell Pits and Hurst Hill. The Pits have a special geological interest, the Lower Cretaceous gravels they expose having a very rich and unusual fossil assemblage; while Hurst Hill is of interest for its mosses and liverworts and the fossils of marine reptiles found in nearby brick pits.

These sites still exist, but many early SSSIs were, in whole or in part, later lost to forestry or agriculture. It had been thought that farming was compatible with nature conservation and this was often the case where traditional farming practices were carried out. However, as agriculture modernised and became more intensive, the special interest of many sites was destroyed. Since it was not yet the practice to inform SSSI owners that their land was of special interest, some of these sites were lost through ignorance.

Environment Minister Elliot Morley with voluntary wardens at the opening of the extended Humberhead Peatlands NNR.
Paul Glendell/English Nature

1952

The first English NNRs and LNR

The first National Nature Reserves (NNRs) in England were Holme Fen, Yarner Wood, the Piltdown Skull Site, Moor House, Cavenham Heath, Kingley Vale and Ham Street Woods.

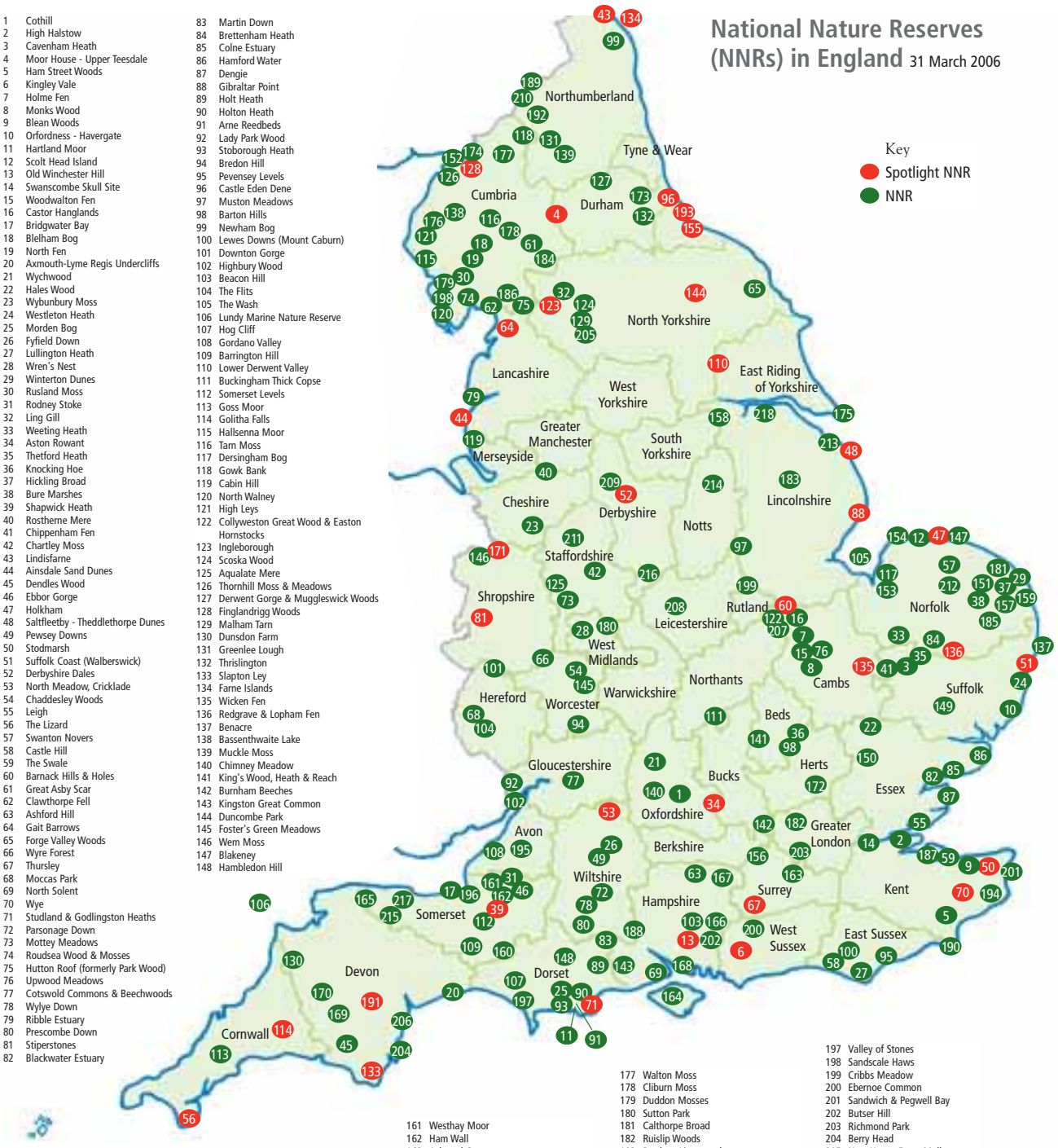
Holme Fen was acquired for its birch woodland, raised mire and heathland habitats; Yarner Wood (now part of East Dartmoor Woods & Heaths NNR) for its oak woodland and heath; Kingley Vale for its yew forest and species-rich downland grassland; Ham Street Woods for its oak woodlands; Moor House (now Moor House–Upper Teesdale NNR) for its diverse Pennine habitats; Cavenham Heath for its heathland; and the Piltdown Skull Site for its anthropological remains. Unfortunately, the remains found at Piltdown were proved to be faked in 1953 and the site's NNR status was removed as a consequence. The remainder of these reserves continue to be managed by English Nature.

The first Local Nature Reserve, Gibraltar Point, was also designated this year, by Lindsey District Council. The site is an area of intertidal flats and saltmarsh, important for its large numbers of overwintering and migrant birds. It was declared an NNR in 1984 and is now managed by the Lincolnshire Wildlife Trust under powers for 'Approved Bodies' to hold NNRs introduced in 1981.

This last site was previously known as Park Wood, but the name was changed to better reflect the extent of the total holding. Land was also added to reserves in Oxfordshire (Aston Rowant), Devon (East Dartmoor Woods & Heaths), Shropshire (Fenn's Whixall and Bettisfield Mosses) and Lancashire (Gait Barrows).

We continue to place a high priority on the improvement and maintenance of the important features on all NNRs in line with the Government's Public Service Agreement (PSA) target for SSSIs. During the year, the area of England's NNRs in favourable or recovering condition rose from 84% to 86.4%. Long-term solutions are still required for some issues, such as coastal management, if we are to achieve the PSA target, but it is also vital that our work sustains those areas already meeting the target.

We have also continued with work to make the reserves we manage more open and welcoming to visitors. Some of this work has reflected the new access arrangements to open country and registered common required by the Countryside and Rights of Way Act (CRoW) 2000. These access arrangements were introduced on a rolling programme across the regions of England, and this programme was completed in the year. Much of the work has consisted of relatively small-scale improvements, for example installing easy-access gates, improving paths and revising signs and leaflets. We have also upgraded or replaced some facilities such as bird-hides and small car parks, so as to avoid damage to fragile areas. As reported last year, we are reviewing our NNRs to see what land may be suitable for dedication for access as provided for under CRoW, and expect the first of these sites to be dedicated in 2006/2007. However, much of our NNR land is not eligible, being held under agreement or on a shorter lease than the legislation requires. Only land that is owned or held by lease with more than 90 years remaining is eligible for dedication.



1 Cothill
2 High Halstow
3 Cavenham Heath
4 Moor House - Upper Teesdale
5 Ham Street Woods
6 Kingley Vale
7 Holme Fen
8 Monks Wood
9 Blean Woods
10 Orfordness - Havergate
11 Hartland Moor
12 Scolt Head Island
13 Old Winchester Hill
14 Swanscombe Skull Site
15 Woodwalton Fen
16 Castor Hanglands
17 Bridgwater Bay
18 Blelham Bog
19 North Fen
20 Axmouth-Lyme Regis Undercliffs
21 Wychwood
22 Hales Wood
23 Wybunbury Moss
24 Westleton Heath
25 Morden Bog
26 Fyfield Down
27 Lullington Heath
28 Wren's Nest
29 Winterton Dunes
30 Rusland Moss
31 Rodney Stoke
32 Ling Gill
33 Weeting Heath
34 Aston Rowant
35 Thetford Heath
36 Knocking Hoe
37 Hickling Broad
38 Bure Marshes
39 Shapwick Heath
40 Rostherne Mere
41 Chippenham Fen
42 Chartley Moss
43 Lindisfarne
44 Ainsdale Sand Dunes
45 Dendles Wood
46 Ebbor Gorge
47 Holkham
48 Saltfleetby - Theddlethorpe Dunes
49 Pewsey Downs
50 Stodmarsh
51 Suffolk Coast (Walberswick)
52 Derbyshire Dales
53 North Meadow, Cricklade
54 Chaddesley Woods
55 Leigh
56 The Lizard
57 Swanton Novers
58 Castle Hill
59 The Swale
60 Barnack Hills & Holes
61 Great Asby Scar
62 Clawthorpe Fell
63 Ashford Hill
64 Gait Barrows
65 Forge Valley Woods
66 Wyre Forest
67 Thursley
68 Moccas Park
69 North Solent
70 Wye
71 Studland & Godlingston Heaths
72 Parsonage Down
73 Mottey Meadows
74 Roudsea Wood & Mosses
75 Hutton Roof (formerly Park Wood)
76 Upwood Meadows
77 Cotswold Commons & Beechwoods
78 Wylye Down
79 Ribble Estuary
80 Prescombe Down
81 Stiperstones
82 Blackwater Estuary
83 Martin Down
84 Brettenham Heath
85 Colne Estuary
86 Hamford Water
87 Dengie
88 Gibraltar Point
89 Holt Heath
90 Holton Heath
91 Arne Reedbeds
92 Lady Park Wood
93 Stoborough Heath
94 Bredon Hill
95 Pevensey Levels
96 Castle Eden Dene
97 Muston Meadows
98 Barton Hills
99 Newham Bog
100 Lewes Downs (Mount Caburn)
101 Downton Gorge
102 Highbury Wood
103 Beacon Hill
104 The Flits
105 The Wash
106 Lundy Marine Nature Reserve
107 Hog Cliff
108 Gordano Valley
109 Barrington Hill
110 Lower Derwent Valley
111 Buckingham Thick Copse
112 Somerset Levels
113 Goss Moor
114 Golitha Falls
115 Hallsenna Moor
116 Tarn Moss
117 Dersingham Bog
118 Gowk Bank
119 Cabin Hill
120 North Walney
121 High Leys
122 Collyweston Great Wood & Easton Hornstocks
123 Ingleborough
124 Scoska Wood
125 Aqualate Mere
126 Thornhill Moss & Meadows
127 Derwent Gorge & Muggleswick Woods
128 Finglandrigg Woods
129 Malham Tarn
130 Dunsdon Farm
131 Greenlee Lough
132 Thrislington
133 Slapton Ley
134 Farne Islands
135 Wicken Fen
136 Redgrave & Lopham Fen
137 Benacre
138 Bassenthwaite Lake
139 Muckle Moss
140 Chimney Meadow
141 King's Wood, Heath & Reach
142 Burnham Beeches
143 Kingston Great Common
144 Duncombe Park
145 Foster's Green Meadows
146 Wem Moss
147 Blakeney
148 Hambledon Hill
149 Bradfield Woods
150 Hatfield Forest
151 Ant Broads & Marshes
152 South Solway Mosses
153 Roydon Common
154 Holme Dunes
155 Teesmouth
156 Chobham Common
157 Ludham - Potter Heigham
158 Humberhead Peatlands
159 Martham Broad
160 Hardington Moor
161 Westhay Moor
162 Ham Wall
163 Ashtead Common
164 Newtown Harbour - Isle of Wight
165 Dunkery & Horner Wood
166 Ashford Hangers
167 Castle Bottom
168 Titchfield Haven
169 Wistman's Wood
170 Black-a-Tor Copse
171 Fenn's, Whixall & Bettisfield Mosses
172 Broxbourne Woods
173 Cassop Vale
174 Drumburgh Moss
175 Spurn
176 Sandybeck Meadow
177 Walton Moss
178 Cliburn Moss
179 Duddon Mosses
180 Sutton Park
181 Calthorpe Broad
182 Ruislip Woods
183 Bardney Limewoods
184 Smardale Gill
185 Mid-Yare
186 Whitbarrow
187 Elmley
188 Langley Wood
189 Kielderhead
190 Dungeness
191 East Dartmoor Woods & Heaths
192 Kielder Mires
193 Durham Coast
194 Lydden Temple Ewell
195 Leigh Woods
196 Huntspill River
197 Valley of Stones
198 Sandscale Haws
199 Cribbs Meadow
200 Ebernoe Common
201 Sandwich & Pegwell Bay
202 Butser Hill
203 Richmond Park
204 Berry Head
205 New House Farm, Malham
206 Dawlish Warren
207 Bedford Purlieus
208 Charnwood Lodge
209 Biggin Dale
210 Whitelee Moor
211 Hulme Quarry
212 Foxley Wood
213 Donna Nook
214 Sherwood Forest
215 Tarr Steps Woodland
216 Calke Park
217 Hawkcombe Woods
218 Far Ings

1955 The horned dung beetle is declared extinct in the UK

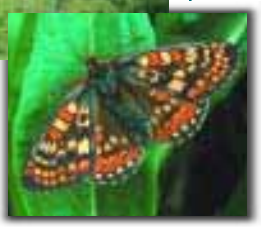
1956 Designation of the Quantock Hills as the first Area of Outstanding Natural Beauty (AONB) in England

1957 The Norfolk damselfly and orange-spotted emerald dragonfly declared extinct in the UK

'Heart' bypass for Cornwall

When the Transport Minister David Jamieson announced the realignment of the A30 across Goss Moor in November 2005, he did more than just solve a road transport bottleneck.

Goss Moor NNR, Cornwall.
Paul Glendell/English Nature 25,769



Marsh fritillary.
Mike Hammett/English Nature

Managed as a National Nature Reserve by English Nature, the moor is the largest part of an extensive landscape of wet, diverse moor and heath sites – an area known as the Mid Cornwall Moors. Currently the A30 is a single carriageway where it crosses Goss Moor, but the road is now to be moved north of the reserve and widened to a dual carriageway. As well as relieving traffic congestion, important species such as the marsh fritillary butterfly will also benefit. The current route cuts the butterfly's habitat in two and it's hoped its numbers will increase once the moorland is reconnected.

The marsh fritillary is at the heart of the Mid Cornwall Moors Project, a partnership between English Nature, the Environment Agency, Butterfly Conservation, the Highways Agency and Cornwall Wildlife Trust, and is part of the European Commission's LIFE Nature programme.

Last year, we reported on the establishment of standards for all our nature reserves so that our visitors can expect good service at these sites. We completed on schedule our programme of implementation for our 'Spotlight' reserves, and are making good progress in delivering standards across all the remaining reserves.

There have been over 25 exciting community events on NNRs this year, ranging from the practical construction of a boardwalk 'Discovery Trail' on Shapwick Heath NNR (Somerset) to the inspirational 'Wildlife of the Dales captured in Clay' on the Lathkill section of the Derbyshire Dales NNR. It has been a year of diversity, not only in the people who have taken part but in the different types of events on offer. There have been anniversaries galore: Ainsdale Sand Dunes (40 years) and Roudsea Wood & Mosses (50 years) to name but two. Each time an NNR celebrates a special anniversary, the local community can be guaranteed a special day often followed by a selection of opportunities to get more involved.

Bird watchers at Thursley NNR, Surrey.
Paul Keene/English Nature

NNRs and visitor satisfaction

Last year we asked visitors to our NNRs how satisfied they were with their experience. Generally we are performing well in the areas that visitors feel are most important, such as well marked and easy to

Wildlife display – part of the 40th anniversary celebrations at Ainsdale Sand Dunes NNR. Paul Glendell/English Nature

1958 Designation of the Northumberland Coast AONB

1959 Formation of the Conservation Corps of the Council of Nature

1961 Formation of the World Wildlife Fund

Visitors to Bardney Limewoods NNR, Lincolnshire.

Robin Chittenden/English Nature 26,963

walk paths, good interpretation and car parks. However there is evidence that our visitors are becoming more demanding, requiring increased levels of comfort and guidance in access and leisure facilities. There is a marked seasonal difference in visits: winter visitors are more local, travel less far, are more likely to be walking the dog and come more often. Summer visitors are less familiar with the site, and are more likely to have been guided to it by family and friends, rather than by our off-site promotion and advertising. More people come by car than in previous research, and practically all our visitors are white.

Positive awareness of English Nature as managers of NNRs is at its highest ever, and visitors also appear fairly well informed as to whether or not a reserve is also a National Park or open access land. However, this could be a reflection of the fact that over a third of visitors have been visiting 'their' NNR for over 20 years.

The next stage is to ensure that the results of this research are taken into account in moving to Natural England, and measures are put in place to address the various issues raised.

Avian influenza and NNRs

English Nature has developed a detailed contingency plan for dealing with an outbreak of the H5N1 virus in England based on the latest advice from Defra and the Health Protection Agency. The plan considers actions that would be necessary to reduce the risk of the further spread of the virus in the event of an outbreak on, or close to, one of our National Nature Reserves.

The plan also considers precautionary measures that would be implemented in order to minimise any risks to human health from coming into contact with infected birds. This risk is considered to be extremely low as, to date, all human cases worldwide have resulted from direct contact with infected poultry rather than wild birds.

NNRs and the Natural Environment and Rural Communities Act

A significant development for NNRs in the year has been a revision to the definition of the term 'nature reserve'.

Under Schedule 11 of the Natural Environment and Rural Communities Act 2006, the definition has been widened so that a nature reserve may also be managed for a recreational purpose, provided this does not compromise its management for the conservation purpose (which remains unaltered from the 1949 Act).

Under the Act, land is managed for a recreational purpose if it is managed for the purpose of providing opportunities for the enjoyment of nature or for open-air recreation. This change formalises the principles that English Nature has developed in recent years in the management of NNRs.

Paul Glendell/English Nature 24,962

This change also applies to the definition of 'nature reserve' used for establishing Local Nature Reserves in England. Other sections of the Act may also affect how NNRs are viewed, notably Section 7 which changes the legal basis for Management Agreements, and Section 8 which provides powers for experimental schemes.

1962 The 100th NNR is designated in the UK

1963 Creation of the IUCN Red List System

1964 Launch of the International Biological Programme

From species to landscapes

Protected sites are some of our best places for wildlife. However, where these sites are small and isolated they cannot sustain their biodiversity indefinitely. To survive, these sites need to be protected within wildlife-friendly landscapes that help buffer them from change and provide ecological networks that allow species to move between areas. Wildlife-friendly landscapes are particularly important in the light of climate change; species will only be able to adapt to its impacts if they can move freely through a robust network of healthy habitats.

Traditionally, wildlife conservation has focused on the needs of individual habitats and species in isolation, an approach that has not always taken account of how habitats 'fit together' in the landscape. This way of working also risks missing opportunities to work with others in a given area. By working to conserve and restore wildlife and habitats on a landscape-scale we can combine our efforts with those of other conservation bodies, industry, local government, planners and the like and multiply the benefits of our effort.

The use of the landscape-scale approach is promoted by many international Conventions and Directives (including the Water Framework Directive and the European Landscape Convention) and, increasingly, we are working on projects that cover large areas and encompass a broad range of habitats, species and land uses. By working through these landscape-scale schemes we can better combine conservation goals with

Left:
De Lank River, Camel River SSSI, Cornwall.
Paul Glendell/English Nature

Right:
Typical Cotswolds landscape.
Paul Glendell/English Nature 22,946

1965 Opening of the first National Trail: the Pennine Way

1967 The UK becomes a member of the IUCN – Protection of Birds Act

1968

Management Agreements with SSSI owners

Before 1968, the Nature Conservancy was largely dependent on the goodwill of owners and occupiers for the conservation of SSSIs, many of which were areas of downland, heath and marsh; semi-natural countryside that had remained relatively undisturbed for hundreds of years. However, new farming techniques meant this land could now be farmed productively and, since the maximisation of food production was still a priority, the Ministry of Agriculture was making money available for agricultural development in the form of grants.

One site to suffer from this development was Waddingham Common, an area containing a unique assemblage of plants in a peat bog overlying limestone. Despite protests from the Nature Conservancy the entire common was ploughed up in 1963.

To try and prevent similar destruction, the Conservancy sought to offer financial incentives to farmers to ensure their co-operation in the conservation of SSSI land. In return for payment, owners and occupiers would agree to manage SSSI land according to the advice of the Nature Conservancy.

The provision for these Management Agreements was included in the Countryside Act of 1968. However, the rates of payment were low in most cases, and few could compete with agricultural improvement grants.

the needs and aspirations of local communities and economies, and achieve them while retaining the character of the local landscape.

A landscape-scale approach also brings us closer to organisations concerned with the preservation of our built environment, such as English Heritage and the National Trust. The character of many of our protected sites is defined as much by their archaeological and historical interest as by the species that live there. In the same way, many old buildings are as important for the wildlife refuges they represent as for their 'human' interest. In the past year, English Nature has participated in a number of projects with conservator bodies, local government and heritage groups to protect habitats that are as rich in human history as they are in wildlife.

BAP habitats and species

Every three years, the Lead Partners for the 45 UK Habitat Action Plans and 391 Species Action Plans report on progress. The third such reporting round was in 2005 and it has revealed a number of successes for the 15 habitats and 88 species for which English Nature is Lead Partner. Eight (53%) of our Lead Partner habitats are now stable or increasing, compared to five in the last reporting round in 2002, while 43 species (49%) are stable or increasing compared to 32 in 2002.

This year's successes include:

- The re-introduction of the pool frog which became extinct in the UK in the 1990s.
- The discovery of record numbers of ladybird spiders (over 1,000) at the original colony. Also, a newly established colony has bred for the first time.

Cornish path moss.
Pat Sargeant

The Great Fen Project is helping to secure the future of Woodwalton Fen NNR.
Peter Wakely/English Nature 21,157

- The continuing recovery of the Cornish path moss with the population at its highest levels since monitoring began.
- A very successful public awareness project for the scarlet malachite beetle which involved local communities and schools. One result has been the private purchase of some of the beetle's habitat in Hertfordshire and the setting up of a local study group.
- Significant progress in the increase of information available for maritime BAP habitats as a result of several survey initiatives: a year ago the trend was unknown for five out of six of English Nature lead maritime habitats, now this is down to just one.
- The launch of a programme to develop a 50 year vision for wetlands, together with the Environment Agency and the RSPB.
- The incorporation of a new biodiversity duty in the Natural Environment and Rural Communities Act. This requires all public bodies (including local authorities) to have regard to the purpose of conserving biodiversity. Potentially, this will ensure that biodiversity considerations are better integrated into the decisions of public bodies.

English Nature has also worked closely with its partners across the conservation community on a wide-reaching review of our targets for priority species and habitats, and of the priority lists themselves. Due to be completed late in 2006, these reviews will help invigorate the BAP process by ensuring it remains focused on the most important species and habitats.

Geological conservation: a guide to good practice

Land's End granite and sea arches.
Mick Murphy/English Nature

In February 2006, English Nature published new guidance on geological conservation – *Geological conservation: a guide to good practice*. This illustrated guide provides practical advice on geological conservation and shares good practice developed by English Nature and its partners over the last 15 years. The guide is based on a revised site-type classification scheme and provides management solutions to address a wide range of threats and opportunities. The publication illustrates good practice through 35 case studies, and also provides advice on methodologies for undertaking conservation activities such as site condition monitoring, the production of site management plans and the preparation of Local Geodiversity Action Plans.

Geological conservation: a guide to good practice reflects the many political, policy and legislative changes that have affected geological conservation over the last 15 years and will be a valuable tool for practitioners, local planning authorities and developers seeking to implement the policies described in the Government's recently published Planning Policy Statement 9: biological and geological conservation.

– A new virulent strain of Dutch Elm Disease reaches Britain – Foundation of the Countryside Commission – Countryside Act

English Nature Lead BAP Habitat Overview

Habitat name	England trend (2005 reporting round estimate)	Comments
Coastal and floodplain grazing marsh	Increasing	English Nature is involved with a number of projects including a managed coastal realignment project at Alkborough that will lead to the restoration of 440 ha. The Great Ouse project and the Great Fen project will also result in the creation/restoration of significant areas of coastal and floodplain grazing marsh.
Lowland heathland	Increasing	English Nature has co-ordinated the Tomorrow's Heathland Heritage programme funded by the Heritage Lottery Fund. This programme is now coming to an end, but since the late 1990s it has led to the creation of over 2,300 ha of heathland and the restoration of a further 42,000 ha.
Lowland raised bog	Increasing	Good progress has been made in England protecting this resource, including curtailing damage to bogs from peat extraction, and the establishment of remedial management on surviving remnants.
Reedbeds	Increasing	English Nature is involved with the EU LIFE Project 'Reedbeds for Bitterns' with work underway at 20 sites around England to restore and create wet reedbed. Over 300 ha of new reedbed have so far been created and over 50 ha of reedbed have been restored.
Sabellaria alveolata reefs	Increasing	The range of honeycomb worm *Sabellaria alveolata* habitat fluctuates naturally and currently it appears to be increasing.
Saline lagoons	Stable	87.9% of saline lagoons in SSSIs are now in favourable or unfavourable recovering condition. Surveys of this habitat are progressing on schedule.
Upland heathland	Stable	The extent of the habitat appears to have stabilised, although insufficient data on the extent and condition of this resource outside of SSSI/ASSIs* remains a significant issue.
Sublittoral sands and gravels	Stable	Large areas of seafloor are covered by this habitat. English Nature is involved in the multi-partner 'UKSeaMap' project which will deliver a simple, interpreted 'landscape' map of the seabed and water column features for the sea area around the UK in the next two years. Natura 2000 sites and possible additional designations arising from the Marine Bill may also help to protect this habitat.
Lowland calcareous grassland	Declining (slowing)	English Nature is contributing to a number of projects for the benefit of lowland calcareous grassland including a 25 ha restoration project in Hampshire.
Lowland dry acid grassland	Declining (slowing)	Projects underway include a 100 ha restoration scheme in Shropshire and the Herefordshire Commons project, whose management plans are nearing completion.
Lowland wood-pasture and parkland	Declining (slowing)	A major policy success was achieved this year with the recognition of the importance of veteran trees in Planning Policy Statement 9. This will require local authorities to take account of them in their planning decisions.
Fens	Declining (slowing)	English Nature is contributing to the restoration of 100 ha of fen in the Broads and we are a major partner in the Great Fen Project in Cambridgeshire. This project is a flagship for landscape-scale wetland restoration and expansion in terms of spatial vision, safeguarding existing wetlands and engaging stakeholders.
Coastal vegetated shingle	Declining (slowing)	English Nature has provided funding for the Nature Coast project – a survey of the whole of West and East Sussex coast that will establish a baseline map of vegetated shingle habitats and identify restoration opportunities.
Littoral and sublittoral chalk	Fluctuating – probably declining	We continue to work to improve the status of this habitat through our management of European Marine Sites. Common Standards condition monitoring is providing further information on its status.
Sabellaria spinulosa reefs	Unknown	English Nature is funding a PhD which has improved our understanding of the life history and dynamics of the ross worm *Sabellaria spinulosa* and refined our survey methods. As a result, the locations of some new reefs have now been found. Significant data are also being obtained from offshore wind farms surveys.

* ASSI. 'Area of Special Scientific Interest' in Northern Ireland

Trends in the populations of BAP species that English Nature leads on

Mammals	
Increasing	Greater horseshoe bat.
Declining	Dormouse; decline slowing. A new edition of the *Dormouse conservation handbook* was published this year and a further re-introduction was carried out in the Peak District.
Lost	Greater mouse-eared bat; considered extinct since 1990.
Birds	
Increasing	Cirl bunting.
Declining	Corn bunting, turtle dove.
Amphibians and reptiles	
Increasing	Pool frog; re-introduced to England this year. Sand lizard; four introductions have occurred since 2003 and these appear successful. Population is fluctuating but probably increasing.
Higher plants	
Increasing	Creeping marshwort, Killarney fern.
Stable	Alchemilla, broad-leaved cudweed, fen orchid, prickly sedge, red-tipped cudweed, true fox-sedge, western ramping-fumitory, yellow marsh saxifrage.
Declining	Pennyroyal, pigmy rush.
No clear trend	Ribbon-leaved water-plantain.
Not known	Purple ramping-fumitory.
Lower plants and fungi	
Increasing	Cornish path-moss.
Stable	Derbyshire feather-moss, glaucous beardmoss, knothole moss, the lichens *Enterographa sorediata* and *Graphina pauciloculata* , roundleaved feather-moss, slender thread-moss, triangular pygmy-moss, western rustwort, Yorkshire feather-moss.
Declining	Greater copperwort, lead moss, the lichen *Bryoria smithii*, New Forest beech-lichen, Nowell's limestone moss, the moss *Weissia multicapsularis*, scaly Breck-lichen, thatch moss.
Not known	Hedgehog fungus, marsh honey fungus, oak polypore.
Lost	Starry Breck-lichen.
Invertebrates	
Increasing	Dotted bee-fly, field cricket, ladybird spider, the solitary wasp *Cerceris quinquefasciata*.
Stable	Beaulieu dung beetle, blue ground beetle, carder bumblebee, cliff tiger beetle, the cranefly *Lipsothrix nigristigma*, the cuckoo bee *Nomada armata*, Desmoulin's whorl snail, fiery clearwing, the hoverfly *Callicera spinolae*, the mining bee *Andrena ferox*, ruby-tailed wasp, the spider-hunting wasp *Homonotus sanguinolentus*, the mason bee *Osmia parietina*, northern dune tiger beetle, Purbeck mason wasp, sandbowl snail, violet click beetle.
Declining	Bog hoverfly, fen raft spider, heath tiger beetle, red barbed ant, picture winged fly.
No clear trend	Banded mining bee, the mining bee *Andrena lathyri*, mole cricket, the solitary wasp *Cerceris quadricincta*, Rosser's sac-spider.
Not known	Crucifix ground beetle, dark guest ant, the hoverfly *Doros profuges*, large garden bumblebee, scarlet malachite beetle.
Lost (pre-BAP publication)	Black-backed meadow ant, the cuckoo bee *Nomada errans*, large copper butterfly, short-haired bumblebee.

1973

The NC is replaced by the Nature Conservancy Council

The Science and Technology Act of 1965 had transferred the powers of the Nature Conservancy to the Natural Environmental Research Council (NERC), a new body with a brief to deliver research on a range of subjects including geology, meteorology, nature conservation and fisheries. Within NERC, the Conservancy was to exist as a 'Charter Committee' with the responsibility for the management of nature reserves and the "dissemination of knowledge concerning nature conservation".

The merger was unpopular in some quarters and the Conservancy found it a struggle to retain a separate identity. It also faced problems in gaining funding for conservation activities in competition with research projects.

In 1971, the Rothschild Report recommended that government research and development should be undertaken on a customer/contractor principle. NERC functioned as both, but was primarily a contractor, and it was decided to remove its 'customer' functions. The Nature Conservancy Committee saw this as an opportunity to leave NERC and operate independently. As a result, the Government established the Nature Conservancy Council (NCC) as an independent statutory body in 1973. The NCC retained the reserves and advisory functions of the Nature Conservancy, but its laboratories and research staff were left behind in NERC.

Pool frog

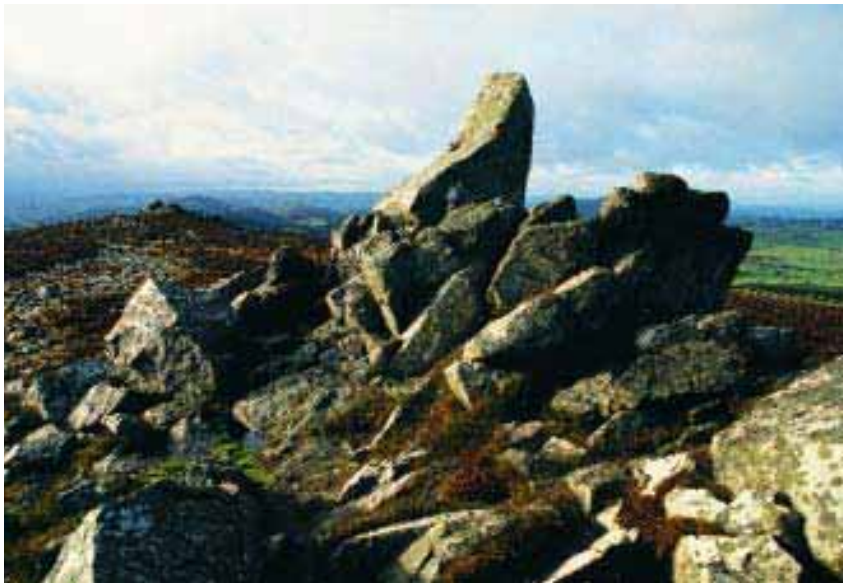
In August 2005, 167 Swedish northern pool frogs were released on a site near Thetford, Norfolk. The northern pool frog disappeared from England in the mid-1990s, a victim of fenland drainage, but it is hoped that the release will re-establish a thriving population.

The English northern pool frog was originally thought to be an alien species introduced from mainland Europe, but researchers listening to archive sound recordings discovered that the pool frogs of East Anglia had uttered their own distinctive croak. The frogs' call suggested it differed from its Continental cousins (which would not have been the case if it had been a recent introduction) and genetic studies confirmed the native status of the species.

Adult male pool frog. Jim Foster/English Nature

The same studies also revealed that the extinct English northern pool frog was closely related to pool frogs from Scandinavia. This led to the decision to re-stock a Norfolk site with frogs taken from Uppsala in south-central Sweden, under special permission from the Swedish Government.

English Nature jointly led on the project, and part-funded much of the research, working with, amongst others, the Forestry Commission and the Herpetological Conservation Trust. Anglian Water acted as the pool frog's Biodiversity Champion generously providing most of the funds for the project.



The Stiperstones NNR, Shropshire.
Peter Wakely/English Nature 15,458

Our archaeological and built heritage

The interests of nature conservation and our built heritage frequently overlap and the work of English Nature is becoming increasingly entwined with that of organisations such as English Heritage. An example is The Stiperstones National Nature Reserve, where we are entering into a joint project with English Heritage to preserve the remains of human habitation and industry on the reserve. Apart from remains, such as the ruins of miners' cottages, that testify to the recent history of the reserve, the area is also important for its archaeological interest, and the reserve has more scheduled monuments than any other outside of Wessex; these include an Iron Age hill fort and five Bronze Age monuments.

Another example of this co-operation is a 'bats in buildings' handbook being produced in conjunction with the National Trust and English Heritage. The handbook (due to be published later this year) is designed to improve the awareness of building conservators to bat issues, and also improve the awareness of bat workers to the issues surrounding the care of historic buildings. The publication uses case histories to demonstrate how bat/building issues can be solved in ways that meet the aspirations of conservationists and conservators alike.

Brown long-eared bat.
Mike Hammett/English Nature

1973 Badgers Act. The first UK legislation to offer protection to badgers – Britain joins the EEC and adopts the CAP – The UK signs the Ramsar Convention on Wetlands of International Importance

The Aggregates Levy Sustainability Fund (ALSF)

English Nature and the Countryside Agency have formed the ALSF Partnership Grants Scheme. This scheme is designed to support local communities and the aggregates industry in working together to tackle the impacts of past and present aggregate extraction. The scheme also supports projects to encourage environmentally-friendly aggregate extraction at sea.

Community open space provided by the Holme Park Quarry Liaison Group through an ALSF Grant.
Holme Park Quarry Liaison Committee

By enabling communities to identify and act on the opportunities offered by aggregate extraction sites, the scheme provides benefits to nature conservation and local communities.

In the past year the ALSF Partnership has awarded £5.5m to over 70 projects. These have ranged from access and habitat improvement work carried out by the Holme Park Quarry Liaison Group near Kendal, Cumbria, to the scientific investigation of the marine life found on various types of sand and gravel deposits in the English Channel.

At Holme Park Quarry, work has included the creation of dry-stone walls that will allow stock to graze the site. This, in turn, will increase the diversity of local plant life. Improved access to the quarry and the creation of interpretation panels are also helping locals discover more about their wildlife and geology.

The ALSF-funded research in the English Channel aims to provide information about the ability of benthic organisms (those living on the sea-floor) and ecosystems to recover after the cessation of dredging for sand and gravels.

Hen Harrier Recovery Project

During 2005, hen harriers attempted to breed at five different sites in the English uplands, compared to just a single site the previous year. In total, 19 breeding attempts resulted in 15 successful

Hen harrier.
Richard Saunders/English Nature

Countdown 2010 Biodiversity Action Fund

In December 2005, our Chief Executive, Andy Brown launched the new Countdown 2010 Biodiversity Action Fund during the meeting of the World Conservation Union's UK committee in York.

Natterjack toad. Mike Hammett/English Nature

The scheme, funded by Defra, will provide £3.8 million to voluntary conservation organisations over two years. The aim is to support projects that will help achieve the Government's commitment to halt decreases in biodiversity by 2010, a commitment that will be fulfilled by delivering the objectives of the England Biodiversity Strategy and meeting targets from Biodiversity Action Plans.

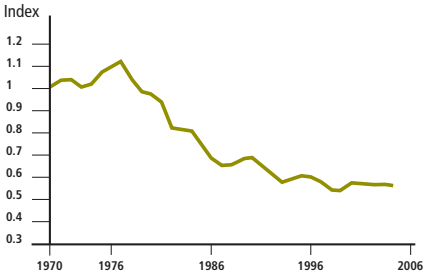
In March 2006, 33 Countdown 2010 awards were made to support diverse and exciting projects across all nine English regions. Species benefiting from the awards include natterjack toads, black grouse, cirl bunting and threatened moths, butterflies and beetles. In addition, grants have been given to restore important habitats such as heathland, grazing meadows and native woodlands. Local communities and volunteers will be at the heart of many of the Countdown 2010 fund projects to ensure that their benefits are sustainable and will be enjoyed by as many as possible.

1974 Publication of the Sandford Committee report on National Parks. This established the 'Sandford Principle' that conservation should have priority over other land uses

1975 Conservation of Wild Creatures and Wild Plants Act

Bowland Fells SSSI, Lancashire.
Peter Wakely/English Nature 7,366

Grey partridge.
Nick Watts/English Nature 25,245



Farmland bird index for England

hen harrier nests producing a total of 36 young birds – the highest number in any year since the start of the project. However, the English population remains very low, with regular breeding now confined to the Bowland Fells in Lancashire, which, in 2005, had 80 per cent of the successful nests in England.

The hen harrier is a generalist predator and eats whatever is available. Inevitably this brings these rare birds into conflict with gamekeepers when they nest on grouse moors. Only one incident of suspected hen harrier persecution was recorded during the 2005 breeding season, but this occurred at one of only two grouse moors where breeding was attempted away from the hen harriers' Bowland Fells stronghold.

In 2005, English Nature continued to work closely with the RSPB, grouse moor owners and gamekeepers throughout Bowland to conserve the whole range of moorland wildlife. It is universally recognised that without this type of involvement from nature conservation practitioners, land managers, and shooting and countryside groups, the number of breeding hen harriers will not increase. To this end, the Hen Harrier Recovery Project has developed plans that will place an even greater emphasis on the joint-working that will help bring this beautiful bird back to more of our countryside.

Farmland bird index stabilises

The farmland bird index is used by Defra to measure progress against the Government's PSA target to reverse the long-term decline in farmland birds by 2020. The index incorporates trends in the populations of 19 farmland bird species, and in recent years it has shown very encouraging signs of stabilisation (see graph below left). However, several farmland specialists, including the grey partridge and corn bunting, continue to decline. The next challenge is to effect a significant upturn in the index and the populations of individual species by encouraging wildlife-friendly management across England's farmland.

Yellowhammer. Mike Hammett/English Nature

1975 The Tree Council's first National Tree Week – CITES (the Convention on the International Trade in Endangered Species of Flora and Fauna) comes into force

Transporting aggregate through the Attenborough Gravel Pits SSSI, Nottinghamshire.
Natalie Bennett/English Nature

Exciting in this respect was the launch, in March 2005, of Defra's new Environmental Stewardship agri-environment scheme. English Nature was closely involved in the development of the scheme which consists of two complementary elements, Entry Level (including Organic Entry Level) and Higher Level, both benefiting farmland birds. Entry Level will involve simple, low cost options to maintain existing features such as hedgerows, ditches and in-field trees. It will also encourage the creation of new features that will benefit birds, such as buffer strips and skylark plots. Entry Level will be most beneficial to birds that are still widespread such as skylarks, yellowhammers, linnets and reed buntings.

Higher Level is designed to provide benefits for specific bird species in defined areas. It will include more costly options such as the planting of low-input spring crops (with lower levels of fertilisers and pesticides) after weedy over-wintered stubbles. Stubbles are an important food source for many seed-eating species, and spring crops provide nesting sites and insect food. Higher Level will benefit scarcer and less widespread species such as corn buntings and tree sparrows, and breeding waders like lapwing. The initial uptake of Entry Level in particular has been very encouraging. In the scheme's first year, over 16,000 agreements were made covering over two million ha of England's farmland.

Working with the minerals industry

Our work with the minerals industry stepped up a gear in the last year, following the signing of a series of updated Memorandum of Understanding with the Quarry Products Association, the Silica and Moulding Sands Association and the British Marine Aggregates Producers.

Working with minerals companies, we have identified key work areas where English Nature is ideally placed to assist them in improving delivery and reporting for biodiversity and geodiversity on land under their control. This will be achieved by supporting companies in producing corporate Biodiversity and Geodiversity Action Plans, an initiative which we began with a series of training events in late 2005.

These training events, organised jointly with the industry, provide company geologists and ecologists with the tools they need to develop, monitor and evaluate the success of plans. Training is supported by a number of projects that have received Aggregates Levy Sustainability Fund grants to develop local and site-based Biodiversity and Geodiversity Action Plans.

1977

Publication of *The Nature Conservation Review*

The Nature Conservation Review (launched in 1967) was envisaged as a natural inventory of the entire wildlife and habitat resource of Britain, taking into account every site of conservation value.

To ensure a standardised approach, the Review required a classification system on which to base site appraisals. Since no such system existed, one was created by Derek Ratcliffe, then the Deputy Science Director of the Nature Conservancy.

Apart from using traditional divisions between woodlands, coastlands, wetland etc, Ratcliffe also developed ten criteria to help assess the value of a site. These included size, fragility, irreplacability, rarity, naturalness, geological/geomorphological importance and historical continuity; criteria that are now used in many conservation evaluation systems worldwide.

Covering 735 sites, the Review represented the most comprehensive evaluation of scientific sites ever attempted, its scope leading it to be described as a Domesday Book for nature (though it took eight times longer to complete than the 1086 original).

People and nature

Modern life is increasingly demanding. Being able to take time out to experience wildlife and enjoy our natural surroundings can reduce stress and contribute to an overall sense of calm and wellbeing, as well as increasing productivity at work.

At English Nature, we understand how important it is for people to have contact with the natural environment, so we have been helping create more opportunities for people to access and enjoy wildlife-rich green spaces in the places they live, work and relax.

This year we have supported hundreds of projects and events that have enabled more people from all walks of life to experience wildlife.

Volunteers

English Nature currently has 1,865 volunteer workers and they contribute a huge amount of their time to our projects. This year our volunteers gave us around 7,500

days of support (equivalent to over 20 years) making a tremendous difference to the level of service we have been able to provide to both people and wildlife. As well as helping English Nature, our volunteer programme has enabled these people to take action for nature where they live, work and play. It has also helped them learn new skills and make new friends.

In 2005, we welcomed 98 new bat workers and 221 other volunteers who took on a variety of roles, including NNR habitat management, administrative assistance, bird ringing, butterfly,

Left:
Children enjoying an amphibian day at Far Ings NNR, Lincolnshire.
Paul Glendell/English Nature

Right:
Relaxing in St James's Park, London.
Judith Hannah/English Nature

1977 Start of the Geological Conservation Review to identify key geological sites in Britain – Publication of the Red Data Book for British Vascular Plants

The executive shepherd

Hebridean sheep on Strensall Common SSSI.
Julian Small/English Nature

Malcolm Johnston, a senior pharmaceutical executive from Essex, spent his summer holiday volunteering as a shepherd! English Nature arranged for Malcolm to spend a week with tenant sheep farmer Chris Dunn on Strensall Common SSSI, in the Vale of York. The sheep are being used to restore the common's heathland, their grazing preventing the encroachment of scrub and encouraging native plants such as heather and marsh gentian, and birds like woodlark and nightjar.

Malcolm was thrilled to be working on such a worthwhile project whilst learning about sheep husbandry and how it can contribute to nature conservation. He was able to get involved in a variety of tasks including gathering the sheep from the common after lambing, weaning the wethers (young males) from their mothers, and vaccinating and worming the new lambs.

Malcolm is keen to take up sheep farming on retirement. By volunteering on the SSSI he got some useful hands-on experience and made a valuable contribution to nature conservation.

dragonfly and botanical surveying, and livestock monitoring and management. Other volunteers took on roles as educational visit leaders, events organisers, guided walk leaders, and seal and little tern wardens, amongst others.

This year we worked in partnership with the BTCV to support the Year of the Volunteer, and during Environment Month in May hundreds of visitors came to Aston Rowant and Humberhead Peatlands National Nature Reserves to participate in Green Gym sessions. As part of the Year of the Volunteer, a celebratory event was held at Kew Gardens to acknowledge the commitment of environmental volunteers in the UK. A number of our volunteers, nominated by English Nature Area Teams, were personally invited to attend this prestigious event.

Local Nature Reserves

Local Nature Reserves (LNRs) are havens for both people and nature. They offer people pleasant places, close to home, to relax and unwind in, as well as providing habitats where wildlife can thrive. This year, 80 new LNRs were declared in England, giving us a total of 1,287.

The Wildspace! LNR grant scheme, run by English Nature in partnership with the Big Lottery Fund, has been a huge success. Over the last three years this scheme has helped hundreds of people – in particular disadvantaged groups and communities – to improve, care for and enjoy their local environment. Around 70% of the overall Wildspace! grant distribution was spent in areas with high levels of urban and rural deprivation.

Volunteers lighting a traditional charcoal mound, East Dartmoor Woods & Heaths NNR, Devon.
Paul Glendell/English Nature 26,584

Mr Motivator (above) and Nick Baker (below) at the Shire Brook LNR celebrations. Chris Gomersall/English Nature

To celebrate Local Nature Reserves and their value for people and nature, celebrations were held on more than 300 LNRs across England. The celebrations, called Waking up to Wildlife, aimed to show how being active at LNRs and getting close to nature can be good for your health and wellbeing. This 'fortnight of festivities' took place in July 2005 with an estimated 40,000 people taking part.

To launch the two-week LNR celebrations, we held a star-studded event at Shire Brook LNR in Sheffield. Fitness guru Mr Motivator encouraged people to take part in a 'wild workout', whilst BBC presenter Nick Baker helped people explore the huge variety of wildlife that can be found on the reserve.

Community projects on NNRs

Reconnecting people with their natural environment is a major focus for our work and our National Nature Reserves (NNRs) have provided the perfect setting to do this. By working with community artists and others this year, we have helped create some truly inspirational projects. Two examples are the Learning in Limestone project in Ingleborough and the Shapwick Heath Story Seat.

Part of Learning in Limestone is the organisation of school visits to nature reserves and historic sites in the Yorkshire Dales. On these visits, pupils can take part in activities organised by experienced staff and local experts and find out more about the wildlife, geology and human history of the limestone landscapes of the Dales. A range of activities is also being offered to local and community groups from West Yorkshire and North

1979

The EEC Birds Directive

The Birds Directive was the first piece of environmental legislation to be passed by the European Union (then the EEC). Today it applies to all 25 EU members.

The Directive addresses the conservation of all wild birds throughout the European Union and covers their protection, management, control and exploitation. It requires member states to take necessary measures to maintain the populations of all wild birds at levels determined by ecological, scientific and cultural needs.

Knot. Mike Hammett/English Nature

Under Article 4 of the Directive, habitats important to birds can be declared as Special Protection Areas (SPAs). The first SPA in England was The Swale, declared in 1982. This is an estuarine area supporting internationally important populations of avocet, plovers, godwits, knot, redshank and hen harriers.

Currently, there are 77 SPAs in England covering 609,249 ha. Three further sites are proposed SPAs: Breckland, Mersey Narrows & North Wirral Foreshore and the Upper Nene Valley Gravel Pits.

1980

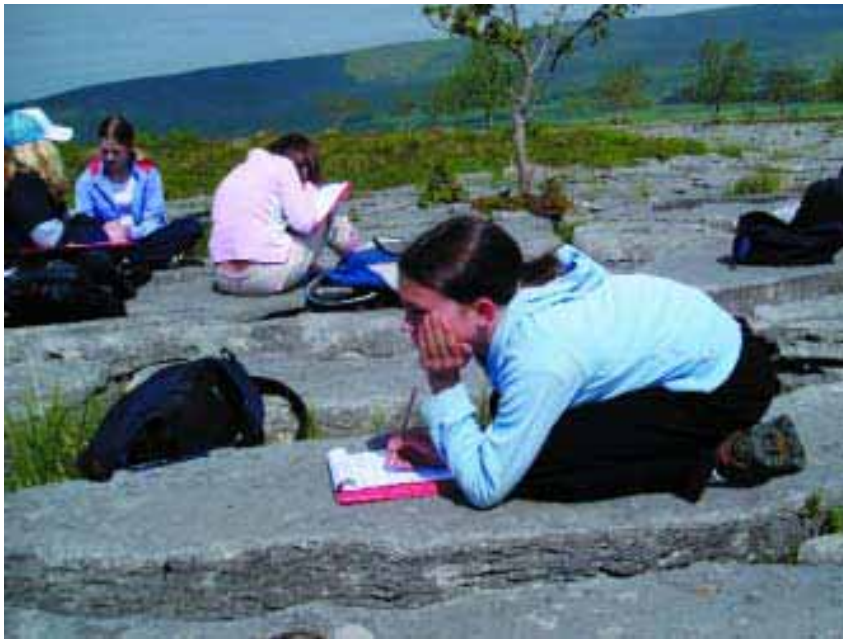
The World Conservation Strategy

Published by the IUCN, the World Wildlife Fund and UNEP (the United Nations Environment Programme), the World Conservation Strategy focused on the concept of sustainable development and the infusion of ecological principles into economic development.

The Strategy emphasised three objectives: the maintenance of essential ecological processes and life-support systems; the preservation of genetic diversity; and the sustainable use of species and ecosystems. In meeting these objectives, the Strategy stressed, amongst other things, the need for increased environmental education and the participation of the public.

Developed with the help of more than 450 government agencies, international bodies, and non-governmental organisations from over 100 countries, the World Conservation Strategy highlighted the fact that humanity has no future unless nature and natural resources are conserved. It also identified the main agents of habitat destruction as poverty, population pressure, social inequity and the terms of trade.

The Strategy argued that economic development and growth can be used to enhance the ability of societies to conserve nature and stressed the importance of accelerating the growth of poor countries.



Children from Ingleton Middle School at Ingleborough NNR – part of the Learning in Limestone project. Yorkshire Dales Millennium Trust

Lancashire; the aim being to encourage the participation of people who would not normally visit the area. Learning in Limestone is also offering a programme of accredited courses in heritage and conservation skills including dry-stone walling, hedge laying, charcoal making, lambing and art-based activities.

In Shapwick Heath NNR, the Story Seat project (organised in conjunction with the Landscape & Arts Network) is one of a series of community art projects that have taken place in and around the reserve in recent years. The horseshoe-shaped Story Seat – made from eight interlocking slabs of sweet chestnut – has been a

The Shapwick Heath Story Seat. Phil Holms/English Nature

A member of the High Wycombe English for Speakers of Other Languages group visiting Aston Rowant NNR.
Paul Keene & Jill Pakenham/English Nature

focal point for local children coming to the reserve to learn about local history and wildlife. School groups have used the seat as a theatre area to act out stories based on local history. These stories have then been used as the basis for art projects and recorded in hand-crafted books to be read by other children. Other groups have based their artwork on the results of wildlife forays round the reserve, manufacturing natural pigments from material such as earth and ground-up berries.

Diversity

Through our diversity programme we have supported a range of projects and events designed to create more opportunities for people from all walks of life to access our nature reserves and have positive wildlife experiences.

We have been working with a primary care trust in the North West to provide opportunities for people with mental health difficulties to get out, experience wildlife and help with practical conservation tasks at the Ribble NNR. So far the group has helped to rebuild a bird hide, reinstate a viewing platform and improve access to many of the entrances on the site. This initiative provides valuable continuity of care for clients and gives them opportunities to undertake practical jobs, together, in a supportive environment.

In May 2005, women from High Wycombe's English for Speakers of Other Languages group visited Aston Rowant NNR. The group members explored the reserve, stopping at various points to draw and paint the stunning natural features around them. The group members, from different ethnic backgrounds, such as Asian, Chinese, Cuban and Polish, get together to improve their language skills as well as making new friends. The relaxing and informal atmosphere at Aston Rowant provided a perfect setting for this.

Sydenham Garden

We supported this community project where people coping with mental or physical illness can come to relax, work, train and socialise. Sydenham Garden is testament to the growing evidence that outdoor work has therapeutic benefits and can be used to complement or even replace medication in the treatment of certain conditions.

Making a difference – outdoor work at Sydenham Garden. Yvonne Getgood

The first patients – known on the project as co-workers – were referred by GPs and care co-ordinators in April 2004 and are now helping volunteers with the clearance, construction and planting of the garden site. They also help in raising plants and in creating craftworks for sale to the public.

Three-quarters of the site is managed as a nature reserve, whilst the remainder is being developed as a community garden and resource centre. An eco-friendly building will house the charity's offices, as well as a conference room. This room will be available to schools and community groups, and for training courses in horticulture, conservation and arts and crafts.

– Signing of the Convention on the Conservation of Migratory Species of Wild Animals (also known as the Bonn Convention)

1980 Publication of the World Conservation Strategy

Health and the EU

Within the European Union, the rising cost of healthcare and ill health is of concern. Internationally, there is a recognition of the need for sustainable public health strategies, and that these must be linked to sustainable environmental outcomes.

The European Union has a remit that covers both public health and the environment. We are working closely with officials to ensure that the benefits of quality, nature-rich environments for people's health – children in particular – are recognised across the policy spectrum, for example, in urban transport, sustainable farming, biodiversity, rare diseases and water policy.

Children from Bank Leaze Primary School visiting Lawrence Weston Moor LNR. Sally Oldfield

Early in the year we chaired the Ministerial Round Table discussions that contributed to the EU Environment and Health Action Plan. This put the positive role of the quality environment in determining people's health clearly on the agenda. Further advocacy work has resulted in European Commission Green Papers on physical activity and mental health which make that same link, as have a number of reports by European Agencies and the World Health Organisation.

Joggers on Sandscale Haws NNR, Cumbria.
Paul Glendell/English Nature 24,526

Health and nature

Access to sustainable natural environments and their role in the determination of people's health – and their importance in providing sustainable health benefits – achieved mainstream status during the year.

We continued to develop our on-the-ground programme, a series of projects that is making a real difference to people's lives. For example, our partnership with Phoenix House in its drug rehabilitation work now covers two centres. Clients can take part in a Conservation Therapy Programme on NNRs, and they are being offered the chance to train for accredited conservation qualifications. Clients visit NNRs each week to carry out practical conservation tasks such as dry-stone walling to control livestock, and improving footpaths for visitors. This pioneering partnership has proved that conservation therapy can improve the mental and physical wellbeing of people going through rehabilitation, and it makes a positive contribution towards the management of NNRs.

As well as Phoenix House, our partnership with the BTCV also continues and we are working together to further develop Green Gyms on NNRs. We have also supported other local and regional partnerships that are taking forward natural environment and health principles, for example, greenspace access in Liverpool, and the pioneering LNR programme of the Sydenham Green Health Care Centre.

In October 2005, we spearheaded the formation of the Outdoor Health Forum, launched by Jim Knight MP, to bring together over 40 environmental and outdoor sector organisations with interests in health. The aim of the forum is to improve our collective delivery, research and evaluations, and to provide a clear point of contact for health professionals. We have also been heavily involved in the strategic policy group on the natural and built environment being led by the UK Public Health Association (UKPHA). In March 2006, we attended the 14th UKPHA conference where we

shared the platform with the Deputy Chief Medical Officer on the topic of sustainable health. In Europe, our advocacy of the environment and health agenda, with the JNCC, has resulted in the European Commission Green Papers on mental health and physical activity making the link to the natural environment.

Wildlife gardening

Gardens are important places for people and wildlife. They are the places where many of us have our first close-encounter with wildlife and they are becoming an increasingly important habitat for common species. Through our wildlife gardening programme this year we have continued to encourage more people to 'make space for nature'.

For the fifth year running we attended BBC Gardeners' World Live. Our feature stand, with an urban garden theme, attracted tens of thousands of visitors and once again won the top prize in the category 'Best Contribution to Environmental and Conservation Issues'. As part of their Breathing Places campaign, the BBC sent out 270,000 copies of our CD, *Gardening with wildlife in mind*, to SpringWatch viewers who'd asked for a free information pack.

During the summer, Notcutts garden centres featured a wildlife garden designed by us and also distributed our 'wildlife-friendly gardening' leaflets. We have expanded our range of titles dealing with wildlife and wildlife-friendly gardening, producing new leaflets on ponds, moths and butterflies, dragonflies and damselflies, and mammals. This year we also established a Wildlife Gardening Forum for any organisation with an interest in the subject. The forum's purpose is to inspire people to manage gardens for their own enjoyment in ways which will also benefit wildlife. Its membership now stands at 55 organisations, including bodies from the worlds of the media, commerce, nature conservation, academia and, of course, gardening.

Paul Glendell/
English Nature 25,292

Visitors to our stand at this year's BBC Gardeners' World Live event. Paul Keene/English Nature

– Limestone pavements recieve statutory protection

– Foundation of the first Groundwork Trust, in Merseyside

Policy advice for sustainability

Influencing policy

Many policies can affect our efforts to conserve wildlife and geology, ranging from the EU Common Agricultural Policy, through Government policies, to Regional Strategies and local development plans. We promote an approach where the environment and nature are integrated into policies. This is at the heart of the England Biodiversity Strategy.

Last year we responded to 96 national consultations, including 12 to Parliamentary Select Committee inquiries. Towards the end of the reporting year, many of these responses became joint ones issued by the founding partners of Natural England. The issues covered ranged widely, but were heavily dominated by pollution, modernising government, agriculture, planning policy, nature conservation issues and freshwater.

Left:
Wind farm in Cumbria.
Wayne Hutchinson/FLPA

Above right:
Controlled grazing on Chippenham Fen and Snailwell Poor's Fen SSSI using Asian water buffalo.
Paul Glendell/English Nature 25,578

CAP and the Single Payment Scheme

English Nature has been monitoring the environmental impact of the introduction of the new Single Payment Scheme for farmers, who now have the so-called 'freedom to farm' – subject to maintaining minimum environmental standards. We have continued to advise Defra on these standards, and participated in the establishment of the new Agricultural Change and Environment Observatory which will provide information on changes in farming patterns. Work commissioned by English Nature this year suggests there might be significant changes in livestock farming in the future with possible impacts on the grazing of SSSIs.

1981

Wildlife and Countryside Act

The Act was originally drafted to allow Britain to fulfil its obligations under the EEC Birds Directive and the Council of Europe's Convention on the Conservation of Wildlife and Natural Habitats (the Bern Convention). However, it was decided that the 1981 Act should also include the provisions of previous Acts with conservation interests.

To protect species, it was recognised there was a need to better protect their habitats. At the time, around 4% of SSSIs were damaged or destroyed every year, primarily by agricultural and forestry practices. The NCC could intervene where it thought that an SSSI would be damaged but there was nothing to stop an unsympathetic manager destroying the conservation interest of a site before action could be taken.

The Act made it a requirement that owners and occupiers wanting to carry out potentially damaging operations on SSSI land must first notify the NCC. In return, the NCC was required to contact owners and occupiers and inform them of the nature conservation interest of their site and the types of activity that might damage them.

1984

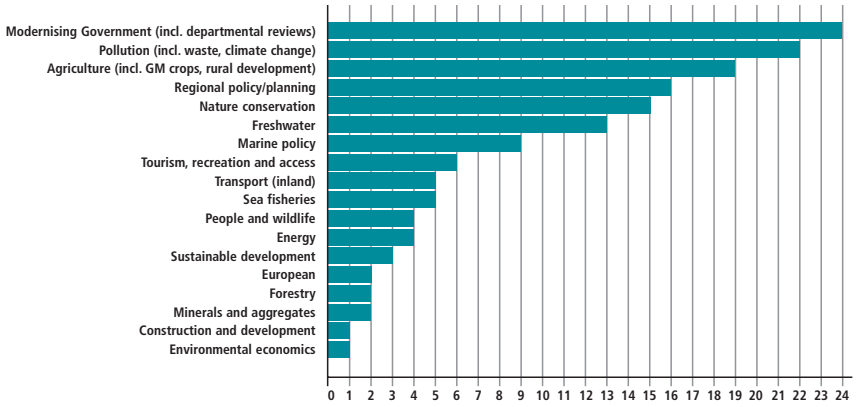
Nature conservation in Great Britain

Published as a response to the World Conservation Strategy (see 1980) *Nature conservation in Great Britain* outlined the way in which organisations and individuals concerned with conservation could contribute to the management of natural resources.

The publication recognised there was a wide and growing appreciation of conservation amongst the public, but warned that economic pressures were pressing land managers into practises at odds with nature conservation interests.

Nature conservation highlighted two main causes of concern: firstly, that there had been a lack of cohesion between nature conservation bodies and that conservationists had not been energetic enough in 'selling their product'; secondly, that although there were successful methods for safeguarding sites, the overall programme for their application had been 'hopelessly inadequate'.

To solve these problems, *Nature conservation* proposed a strategy based on ten themes. Apart from addressing traditional topics such as the protection of sites and the need for research, these themes also included the conservation of nature in the wider environment, marine nature reserves and 'creative conservation' – the re-creation of destroyed habitats and the reintroduction of lost species.



Number of English Nature responses to national consultations in 2005/2006 by sector

Ahead of the EU budget deal, the Government set out its 'Vision for the CAP' which made a strong case for shifting farm subsidies towards environmental payments. We urged the Government to make sure the deal secured more EU resources to fund rural development schemes such as the new Environmental Stewardship agri-environment scheme which will be a flagship project for Natural England. Unfortunately there was very limited progress on CAP reform, though there was an agreement to look at the issues again in 2008/2009. However, the Government successfully negotiated the ability to shift UK CAP resources, which should enable Environmental Stewardship to be funded. To get a better picture of those EU environmental needs that should be funded through a reformed CAP, English Nature took part in a major project, Europe's Living Countryside (ELCo) which began in 2004 and is due to end in 2006. ELCo is being carried out in collaboration with WWF Europe, Stichting Natuur en Milieu and the Land Use Policy Group (www.lupg.org.uk).

Rural Development Programme

A new seven-year Rural Development Programme for England will begin in 2007, and English Nature, together with its Natural England partners, has been working to ensure that the new programme is well-funded and focused on meeting the needs of the natural environment. We are advocating a programme that ensures a healthy environment lies at the heart of sustainable rural regeneration and development.

The seven-year programme will be worth approximately £3.5 billion, with the majority of funds being used to support the Government's Environmental Stewardship agri-environment scheme; a scheme that will be delivered by Natural England. The new programme is expected to improve on elements of the existing £1.6 billion England Rural Development

Programme which ends in 2006. For example, funds will be more proactively targeted towards areas of greatest priority (such as SSSIs and Biodiversity Action Plan habitats) and there will be new objectives such as combating water pollution from agriculture and measures to address climate change. There will also be better integration between the programme's environmental, social and economic elements, so maximising their synergies and helping us reach the goal of sustainable development.

Catchment Sensitive Farming

Controlling water pollution from agricultural land is a critical step in restoring England's river, lakes, wetlands and coastal waters; including those specially designated for wildlife. English Nature has identified around 170 SSSIs which require high priority strategic action to address agricultural pollution, and over 200 other sites that are of additional concern.

Over recent years we have assisted Defra in the development of its Catchment Sensitive Farming

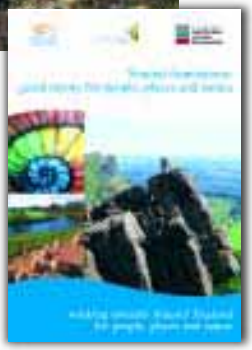
River Teme SSSI, Herefordshire.
Peter Wakely/English Nature 22,321

1983 Foundation of the World Commission on Environment and Development – Creation of the Wildlife and Farming Advisory Group

1984 The publication of *Nature conservation in Great Britain*

Natural Foundations: geodiversity for people, places and nature

Natural Foundations: geodiversity for people, places and nature, the fourth of English Nature's *State of Nature* reports, examines geodiversity, its environmental importance and its influence on the way we live. Importantly, *Natural Foundations* is a joint report, reflecting the shared views of English Nature, the Countryside Agency and the Rural Development Service as part of the integration towards Natural England.



Geodiversity is an essential element of our stunning scenery on the coast and inland. Gritstone tor, Dark Peak, Derbyshire.
Paul Glendell/English Nature

Natural Foundations demonstrates how geodiversity influences the changing character of our surrounding environment and landscapes – the link between geology, process, landscape, wildlife and people. It also shows the vital role that geodiversity plays in achieving sustainable development: it provides many of the raw resources for economic development, contributes to a better understanding of the mechanisms and effects of global climate change, and has a number of environmental benefits such as pollution absorption and the control of water flow.

Soil erosion through field gate, near the Ross-on-Wye CSF area. Paul Glendell/English Nature

(CSF) programme, a programme aimed at establishing farm management operations that are consistent with the water quality needs of wildlife and water users. Part of this work has included the setting up of a multi-organisation pilot project, covering four priority catchments: the Hampshire Avon, Bassenthwaite Lake, River Teme and River Wensum. Each area has catchment officers co-sponsored by English Nature, the Rural Development Service and the Environment Agency.

These catchment officers have successfully demonstrated joint working between the Natural England partners and the Environment Agency. Their experiences have also helped inform the new CSF initiative, an exciting £25 million programme focused on 40 priority catchments around the country. Within each area, a dedicated officer will liaise with the farming community, develop and communicate a clear understanding of the local issues, target advisory visits and help bring about beneficial changes in farm management.

Delivery of this initiative is being led by the Natural England partnership and the Environment Agency. English Nature has been heavily involved in the operational design of the programme, including the selection of priority areas, and will play a key role in steering the local initiatives. Around 125 of the SSSIs at greatest threat from agricultural water pollution – many of them SACs – lie within the priority areas. The initiative will therefore help the Government meet its PSA target on SSSIs and fulfil its obligations to Europe under the Habitats Directive.

Pesticides and toxic substances

English Nature has a lead role to provide advice to government on the impacts of pesticides, veterinary medicines, biocides, other toxic substances and radioactivity on wildlife in the UK.

In 2005/2006 English Nature, on behalf of the JNCC and the other country bodies, responded to national consultations on the Draft National Strategy on the Sustainable Use of Plant Protection Products, to the Draft Sheep Dip Pollution Reduction Programme and to a European consultation on the Thematic Strategy on Pesticides.

In its lead role, English Nature manages the long-running Wildlife and Pollution contract. This contract funds the Predatory Birds Monitoring Scheme together with the Environment Agency and the Centre for Ecology and Hydrology (Monks Wood). The scheme monitors rodenticide residues in the tissues and eggs of a range of predatory birds, allowing us to advise on the effectiveness of measures designed to restrict the use of these compounds and control their entry into the environment.

This monitoring work was instrumental in the 2005 launch of the Campaign for Responsible Rodenticide Use (CRRU), an industry-led initiative that was prompted by research on second-generation anticoagulant rodenticide residues in barn owls (with additional information on red kites and kestrels). The CRRU aims to protect wildlife while promoting and providing effective rodent control through the responsible use of rodenticides in rural areas. English Nature is an invited expert member of the CRRU's steering group.

Peter Wakely/English Nature 18,982

As well as the CRRU, English Nature is an active member of the steering group for the Voluntary Initiative on Pesticides, an industry-led initiative to minimise the environmental impacts of pesticides. English Nature is also a member of the UK Chemical Stakeholder Forum, a body set up to advise government on how industry should reduce the risks from hazardous chemicals to the environment and to human health through the environment.

1985 Discovery of the Antarctic ozone hole

– Amendments to close loopholes in the Wildlife and Countryside Act

1986 The Agriculture Act introduces the Environmentally Sensitive Areas scheme

Hamford Water NNR, Essex. Peter Wakely/English Nature 13,142

1986

The 100th NNR and the 1st MNR

This year saw the designation of The Flits, England's 100th NNR, and Lundy, its first Marine Nature Reserve (MNR).

The idea of a marine reserve at Lundy was first discussed in 1969 when the diversity of the island's marine life started to be recognised. However, it was not until 1981 when the Wildlife and Countryside Act made provision for marine reserves that the idea could be considered seriously.

Lundy's importance lies in the variety of habitats found in its waters, from the storm-battered boulder screes of its exposed western coast, to the sand, mud and gravel plains off its sheltered eastern side. Strong currents round the island contribute to this diversity by carving out deep gulleys. The reserve is also affected by variations in the water: nutrient-rich estuarine water from the Bristol channel flowing with warm water heated by the gulf stream and cooler waters from the Atlantic.

Managed realignment on the English coast

Managed realignment occurs on sections of the coast where maintenance of sea walls is not cost-effective and where there is a need to accommodate rising sea levels and resulting coastal squeeze.

Defra's Coastal Squeeze Policy Statement places a high priority on funding for realignment schemes as they have a number of benefits, in particular improved wildlife potential and better flood risk management. The importance of these schemes is also reinforced by the need to deliver the BAP target for saltmarsh. To meet this target, 100 ha of saltmarsh a year have to be created to offset ongoing losses, and 40 ha a year have to be created to offset historic losses. Managed realignment is also essential if the Government's PSA target for SSSIs is to be achieved. At the time of writing the impact of coastal squeeze – and the lack of appropriate measures to make good the losses – has contributed to the fact that 27.7% of SSSI land is still in unfavourable condition.

English Nature is currently a partner in the largest realignment project in the UK. At Alkborough Flats, on the Humber Estuary, 400 ha will be returned to tidal inundation in 2006, making a significant contribution to the PSA target of the Humber Estuary SSSI. This realignment will also provide space for water from storm surges and can be expected to reduce high waters by up to 10 cm, representing a major flood risk management saving elsewhere on the estuary.

Managed realignment is also supporting the delivery of sustainable port development, with a number of new port projects being accompanied by proposed realignment schemes. Examples are Associated British Port's Immingham Outer Harbour project (including 60 ha of realignment on the Humber) and the port development at Bathside Bay (with 130 ha of realignment on Hamford Water). In addition, 115 ha of inter-tidal habitat will be delivered at Wallasea Island this year as compensation for the loss of Fagbury Flats and Lappel Bank in the 1990s.

However, despite many successes, the pace of managed realignment is slow, and the process of securing land and the necessary consents is problematic. Although various large projects are close to completion, there are very few in the next phase. The pace of realignment must increase if the PSA target is to be achieved and its benefits for flood risk management realised.

The area to be flooded at Alkborough Flats.
Environment Agency

Water Level Management Plans

Significant progress has been made in reviewing Water Level Management Plans (WLMPs) with our main partners – the Environment Agency and Internal Drainage Boards. Our aim is to meet Defra's target and complete these reviews by December 2006. The programme seeks to deliver appropriate water levels for SSSIs in unfavourable condition, and the Environment Agency has set up a fully funded national programme for implementing plans for those SSSIs where it has responsibility for water level management. This sum is additional to the funding agreed by Defra for Internal Drainage Board schemes in 2005.

Together with the review and implementation of those schemes under the control of local authorities, the Water Level Management Plan programme will make a significant contribution towards meeting the Government's PSA target on 104 SSSIs, these sites representing a wide range of wetland and open freshwater habitats.

Climate adaptation policy

Due to greenhouse gas pollution, the world will be subject to at least 50 years of climate change which cannot be prevented. Adaptation to the impacts of this change is essential to reduce their effect on human and natural systems.

Biodiversity conservation strategies have to be adapted in the face of climate change, and English Nature has been at the forefront of this process. English Nature has worked closely with colleagues in

A 50-year vision for water and wetlands

English Nature, in partnership with the RSPB, The Wildlife Trusts and the Environment Agency, is developing a 50-year vision for water and wetland biodiversity in England. Many of our wetlands have been damaged or destroyed by pollution and activities such as drainage and peat extraction. Climate change will increase pressures on freshwater habitats, for example through sea level rise and increasing the effects of drought, particularly in the south east of England, where water tables are currently at a record low.

English Nature is working with its partners to produce maps that indicate their joint aspirations for wetland habitat creation over the next 50 years. The partnership will also create tools to help planners and others in targeting wetland creation at a local level. However, we recognise that, if it is to succeed, the

Wildfowl roosting on reservoir in Tring, Hertfordshire.
Ernie Janes/NHPA

process must involve a wide range of stakeholders, from conservationists to major land owners. This process of engagement was launched at the Chartered Institute of Water and Environmental Management World Wetlands Day conference in February 2006 and will be continued though a series of workshops in 2006/2007.

– Publication of the Red Data Book for British Insects

1988 Pine martens and wild cats receive statutory protection

– Formation of the Women's Environmental Network

the RSPB and Woodland Trust on the issue and, with others, has been instrumental in the establishment of the IUCN's Adaptation Working Group. Through the IUCN, a report, *Climate change and nature: adapting for the future* was drafted for the World Parks Congress in Durban in 2003 and a resolution, *Adapting to climate change: a framework for conservation action* submitted to (and adopted by) the World Conservation Congress in Bangkok, 2004. We have also worked with Defra to constitute the Climate Change Workstream of the England Biodiversity Strategy, of which adaptation is a key activity, and in 2006 published guidance, *Climate change – space for nature?* for the English regions.

Of particular note has been English Nature's 'climate adaptation' influence on EC biodiversity policy, chiefly through our involvement with the European Environment and Sustainable Development Advisory Councils (EEACs). In September 2005, we co-hosted the 13th annual EEAC Conference, the theme of which was, Climate change and biodiversity – meeting the challenge. At the conference, we launched an EEAC Statement, *Biodiversity conservation and adaptation to the impacts of climate change* and have subsequently published the conference proceedings. Building on this, we are now seeking to influence the adaptation component of the European Climate Change Programme.

A strategic approach to housing development

The Government plans to increase the housing supply to 200,000 homes a year (from a 2004 level of 150,000). This increase is a response to population growth and a rise in the number of households; the new developments also addressing housing affordability and supporting economic growth. English Nature acknowledges the need for more housing, but has concerns about the sustainability and environmental impact of such a large programme of house building and its associated infrastructure. Our concern is heightened by the fact that the main 'growth' areas are concentrated in the South East and South of England where development pressures are already high.

Whilst direct construction impacts on designated sites are unlikely to be high, indirect impacts on water resources, water quality, and climate change – via increased carbon dioxide emissions – and other cumulative impacts on the wider countryside are a major concern. Even development targeted at brownfield sites can have a direct environmental cost. Many of these sites have been colonised by wildlife, and can be of considerable importance for local biodiversity.

Despite these concerns, English Nature believes the building programme represents a one-off opportunity to demonstrate best

1988 Formation of the Inter-governmental Panel on Climate Change (IPCC)

1989 Start of the red kite reintroduction programme

– Foundation of Plantlife and the Herpetological Conservation Trust

Harton Down Hill SSSI, Tyne and Wear.
Peter Wakely/English Nature 7,378

practice in sustainable construction and design. Well-designed sustainable communities have a 'green infrastructure' that contributes to quality of life through multiple functions. They have enough greenspace to support local biodiversity, provide for access and recreation and contact with nature, support flood management and drainage, and help to ameliorate temperatures – a function that will be increasingly important in adapting to climate change.

English Nature has worked with the Government on many aspects of the complex housing agenda: advising on the strategic planning of green infrastructure (eg through contributions to Regional Spatial Strategies), greenspace management, using the proposed 'planning gain supplement' for nature conservation purposes, revising Planning Policy Statements on housing, flood defence and sustainable construction and assessing the sustainability of 'growth points'. In the Thames Basin Heaths, we have proposed innovative mitigation to address the predicted impacts of housing growth.

Planning Policy Statement (PPS) 9 – planning for biodiversity and geological conservation

In August 2005, English Nature's advocacy and support work over the years came to fruition with the publication of the Government's revised policy for nature conservation – PPS 9. The statement, published by the ODPM, packs a strong punch and contains significant policy advances advocated by English Nature. We also helped draft the accompanying Government Circular which interprets the complex legal protection applied to biodiversity via the planning process. In March 2006, the PPS 9 *Guide to Good Practice*, which English Nature also had a lead role in drafting, was published to complement PPS 9 and the Circular. The *Guide to Good Practice* offers vital advice to local authorities on how to embrace biodiversity and geological conservation within planning decisions and development. It offers a variety of information and examples of best practice, including the use of web-based technology and advice on the integration of conservation into the planning of new developments.

1991

English Nature starts operations

Plans to restructure the Nature Conservancy Council were first announced in 1989. According to the Government, the organisation of the NCC had been "inefficient and insensitive" with regards to the needs of the different parts of the UK, and the proposed solution was to split the NCC into separate bodies for England, Scotland and Wales.

Although this proposal met with resistance in some quarters, the idea to merge the Scottish and Welsh parts of the NCC with their respective parts of the Countryside Commission was more popular, many believing that a closer integration of countryside and nature conservation would be a positive step. A similar merger in England was vetoed on the grounds of cost.

The three new bodies, English Nature, the Countryside Council for Wales and Scottish Natural Heritage came into being with the Environmental Protection Act 1991 and Natural Heritage (Scotland) Act 1991. As well as the new country organisations, the Joint Nature Conservation Committee was formed to establish common standards between them and to provide advice to the Government on conservation issues with a UK or international dimension.

A guided walk around Hatfield Moor.
Paul Glendell/English Nature

Collectively, these publications represent a very positive statement about the role of planning in both conserving and enhancing biodiversity and geological interests. They also reinforce the need to integrate biodiversity in all planning considerations. The priority the ODPM has given to the review of planning policy for biodiversity illustrates the importance that the Government attaches to nature conservation within its broader agenda and helps cement the commitments made in Defra's 2002 England Biodiversity Strategy.

A reduction in peat extraction

Peat is extracted commercially for use by the horticultural industry and amateur gardeners. Although the majority of the peat used in the UK comes from abroad, a significant proportion is still mined in England. English Nature has acknowledged the damage caused to many of our peatlands by this extraction. It is committed to preventing this damage and to supporting the development of alternative materials.

To this end, we are glad to report that peat extraction has now virtually ceased on the three largest lowland bog sites in England: Thorne, Crowle & Goole Moors, Hatfield Moor, and Wedholme Flow. The end of commercial-scale extraction was celebrated in October 2005 with the formal inclusion of the Thorne, Crowle, Goole and Hatfield moorland into the Humberhead Peatlands National Nature Reserve. Remedial work has been carried out on these sites for several years and a consultant's report completed this year shows that bog vegetation is spreading quickly over the damaged surface.

Peat extraction continues on two other large lowland bogs in Cumbria that have been proposed,

though not yet confirmed, as Special Areas of Conservation. It also continues on a number of other undesignated sites, particularly in the Greater Manchester and Merseyside areas. The future management and restoration of these sites is considered under the review of targets for the Habitat Action Plan for Lowland Raised Bog, which is led by English Nature.

Bovine TB and badgers

During the year, English Nature was deeply involved in considering the scientific issues relating to bovine TB (bTB) and badgers, and has provided comprehensive advice to Defra and Ministers. We have also submitted evidence to the House of Commons Environment Committee hearing on the subject.

Our advice was that we would not support a badger culling policy unless there was good scientific evidence that it would help deliver a sustained reduction in the incidence of cattle herd breakdowns; there would also have to be good evidence that a culling strategy could be developed to achieve this objective. It is also essential that there is no adverse effect on the, currently healthy, conservation status of the badger, regionally or nationally, nor on the conservation status of any other priority species. We expressed serious doubts that a badger culling strategy is likely to be beneficial and cost effective, however it is implemented. The results from the Randomised Badger Culling Trial illustrate the complexities of the problem, and the dangers of making the situation worse rather than better.

English Nature also considers that, if culling were to be introduced simultaneously with the new requirements for the pre-movement testing of cattle it would be extremely difficult to determine the relative effects of these two different initiatives. We expressed the view that pre-movement testing and other new measures (such as the use of the gamma-interferon test) to reduce the cattle-to-cattle transmission of bTB – which the Defra Science Advisory Council considers is probably the dominant infection route at present – should be implemented immediately, and independently of any badger cull. We are pleased to note that pre-movement testing has now been introduced.

Mike Hammett/English Nature

– The Badgers Act prevents interference with setts – Deer Act – Start of the Wildlife Enhancement Scheme

Avian flu

The highly pathogenic H5N1 strain of the avian flu virus has spread west from Asia into Europe in recent months, causing concern in the poultry industry and prompting fears that wild birds might be affected by the virus. The first case in a wild bird in Britain involved a whooper swan found dead on a beach in Fife, Scotland, in April 2006.

Nigel Cattlin/FLPA

English Nature and the other country bodies have, through the JNCC, played an important role in providing the Government with detailed information on the concentrations and movement patterns of waterbirds that visit Britain. This information has been used to help assess the risk of the spread of H5N1 by wild birds and to put this in context with the risk from other routes, such as the movement of poultry. Advice has also been provided to help establish a surveillance programme involving the sampling of both live and dead waterbirds. This is part of an EU-wide surveillance programme that will provide invaluable information on the incidence of avian flu – including the highly pathogenic H5N1 strain – in wild bird populations.

Wind energy

English Nature supports renewable energy as part of a strategic approach to emissions reduction. We are working with all concerned to ensure that windfarms are designed and built in the right location and in the right way to avoid significant impacts on wildlife and natural features.

Where potentially damaging impacts are identified we will work with developers to identify solutions which avoid, reduce or compensate for these impacts. Our aim is to secure sustainable development alongside the appropriate conservation of features of interest.

Wind energy is still a new industry surrounded by uncertainty. English Nature advocates the need for all concerned to manage the associated risks in a reasonable and proportionate way. There are a range of measures to do this both at a strategic level – through strategic environmental assessment to avoid sensitive or important nature conservation locations, and at an individual development level – through environmental impact assessment and the application of mitigation measures and monitoring conditions.

With such a new and rapidly developing sector it is critical that its implementation is undertaken strategically, with the Government taking a lead. This should include making the best use of existing information and making a priority of the collection of new information and research. We welcome recent progress in this, in particular the DTI's co-ordination of aerial bird surveys for all Strategic Areas. However, there is more to be done, especially in the collation and application of learning from earlier developments to inform new projects.

Keepers of time

Over the last 20 years the importance of ancient woodland (land wooded continuously since at least AD 1600) has been increasingly recognised in Forestry Commission policy and practice. In 2005, collaboration between English Nature and the Forestry Commission culminated in the publication of *Keepers of time* – a new Government policy on ancient woodland.

Keepers of time represents a significant change in emphasis by placing native and ancient woodland at the heart of forestry policy. The policy sets out a vision where ancient woodland, veteran trees and other native woodland are adequately protected, sustainably managed in a wider landscape context, and provide a wide range of social, environmental and economic benefits. There will also be a new emphasis on restoring those ancient woods that were planted with conifers prior to 1985.

We are pleased to have been able to work with the Forestry Commission and others in

Grimeshaw Community Wood, Peterborough. Peter Wakely/English Nature 12,013

developing this policy and will play our part in addressing the challenges that lie ahead. This will mean making more people aware of their local ancient woods by improving ancient woodland inventory maps, and encouraging their sympathetic management – particularly on ancient woods that lie within SSSIs. We must also tackle the threats to wildlife within ancient woods, such as over-grazing by deer and the shading of glades leading to loss of butterflies.

The environment around our ancient woods has also changed and too often the edges of woodland adjacent to farmland are affected by fertilizers. To help prevent this, we will be working with our colleagues in the Rural Development Service to encourage the development of buffer strips next to ancient woods and veteran trees. In addition, further research will be needed to assess the likely impacts of climate change on ancient woodland communities.

1992

European Habitats Directive

The Directive is the means by which EC members meet their obligations under the Convention on the Conservation of European Wildlife and Natural Habitats, also known as the Bern Convention.

The Directive lists 788 endangered species and 189 threatened habitats, and member states are required to monitor and report on them every six years. The Directive also requires members to designate Special Areas of Conservation (SACs). Alongside Special Protection Areas (see 1979) these sites now form a Europe-wide network of protected areas known as Natura 2000.

The Habitats Directive represents an important milestone as it, for the first time, introduced the precautionary principle for protected sites, this means that development can be allowed on an SAC only when it has been ascertained that it will have no adverse affects on the site's integrity.

There are currently 228 SACs in England, covering an area of 808,976 ha. SACs range greatly in size and character. One of the smallest, Paston Great Barn covers 0.95 ha and comprises a 16th century thatched barn and various outbuildings. A maternity colony of barbastelle bats represents the sole conservation interest of the site. At the other end of the scale, the North Pennine Moors SAC covers 103,109 ha and includes 13 protected habitat types.

Science, information and knowledge

Today we have unrivalled information about the wildlife and geology of England. In the past most of this knowledge was gathered piecemeal, but since the 1950s much has been learned from more systematic, scientifically rigorous surveys.

This work, together with the work of many naturalists, meant that when English Nature was established in 1991 we had a clear understanding of the national distribution of flowering plants, mammals, birds and butterflies; as well as that of groups such as lichens and bumblebees – which are poorly known in other parts of the world. In the past decade many of these scientific surveys have been repeated, with the result that we are now beginning to understand how the biodiversity of England is changing, and which factors cause change. Within this chapter we report on two such studies, one relating to woodland vegetation, the other to woodland birds.

Left:
The results of a survey into the causes of decline in woodland birds indicated that a number of species, including the blue tit, showed large national increases (see page 60).
Brian Bevan/Ardea London Ltd

We have many partners in this work, including not only statutory bodies but also many non-governmental organisations; and while our main role has been as a co-funder of such studies, our specialist staff have also played an important role in their design and in the interpretation of their results. In large part, the findings of this research can be seen as an achievement of the entire conservation community working together.

A significant partner in this work has been the Natural Environment Research Council (NERC), particularly through research carried out at its Centre for Ecology and Hydrology (CEH). During the year, we were informed of NERC's plans to reduce the staff of the CEH by a third and close four CEH centres. The CEH has a particular expertise in the gathering and interpretation of long-term data and we remain concerned that this area of work should not suffer as a result of these changes.

Long-term evidence, such as that provided by the CEH, now underpins almost all of our decision making. Maintaining the flow of this base-load of information will remain an important challenge for the conservation community.

1992

The Earth Summit

The United Nations Conference on Environment and Development (UNCED) also known as the Earth or Rio Summit, was held in Rio de Janeiro, Brazil, in 1992.

The essential message of the summit was that poverty, as well as excessive consumption by affluent populations, was causing increasing harm to the environment. In light of this, governments had to ensure that all their economic decisions took environmental impacts into account. The subject of global warming was also addressed, as was sustainable development and the need to help poorer countries towards this goal.

A key feature of the summit was the adoption of Agenda 21, a blueprint of action on a global, national and local scale to achieve sustainable development in the 21st century. Agenda 21 is a wide-ranging document. Amongst other things, it includes advice on combating poverty, the integration of the environment into decision-making, atmospheric protection and combating deforestation. It also outlines the means by which change can be implemented, including science, technology transfer, education and financial mechanisms.

Theme	£ Spend	Number of projects
Climate change	72,000	7
Coastal processes	97,275	6
Diffuse pollution	20,000	2
Geological conservation	77,800	7
Habitat and area surveys	318,795	35
Habitat management	194,000	11
Hydrology	83,500	9
Impact studies	216,200	17
Invasive exotic species	19,000	3
Landscape ecology and restoration	242,876	13
Natural heritage information systems	106,700	6
Public access	66,000	5
Remote sensing and telemetry	26,000	1
Risk assessment	57,000	4
Site survey	307,000	10
Socio-economics	85,321	8
Species survey	281,895	40
Strategic science	243,800	4
Total	**2,515,162**	**188**

Spend on science projects 2005/2006

Audit of non-native species

This year we published the *Audit of non-native species in England* (English Nature Research Report 662) the first comprehensive review of this topic in England. The audit identified 2,721 species and hybrids that have been introduced in the wild, the largest number of species being flowering plants (73% of the total). Two routes account for the majority of introductions: escape from captivity or cultivation, and accidental transport. The majority of flowering plants have been introduced as crops or through horticulture, whilst most vertebrate animals are deliberate introductions, and marine species are introduced mainly by accidental transport.

Concern about non-native species arises mainly where they cause ecological damage. The audit identified only 19 species with a strongly negative ecological effect, although a further 103 species were considered to have some negative impact. In addition, the audit found that 326 non-native species are increasing and some of these could, potentially, cause environmental problems in the future. Interestingly, two newly described plant species, common cord grass *Spartina anglica* and York groundsel *Senecio eboracensis* have arisen in England in the 20th century due to the hybridisation of native and introduced species.

Despite the serious environmental and economic problems caused by a small proportion of non-natives, only six species have ever been deliberately eradicated, and it is likely that non-native species will comprise a significant part of England's biodiversity for the foreseeable future.

The non-native butterfly bush *Buddleja davidii.*
Nigel Cattlin/FLPA

Long-term change in woodlands

In 1971, the Nature Conservancy recorded 1,648 vegetation plots covering the range of broadleaved woodland types found in Britain. The plots were re-surveyed in 2001 and a comparison of the two surveys published in English Nature Research Report 653, *Long-term change in woodland vegetation 1971–2001*. The report was published this year and represents the most comprehensive study of woodland change carried out to date. The work, organised by the Centre for Ecology and Hydrology, was funded by a consortium of conservation bodies together with the Forestry Commission, Defra and the Woodland Trust.

Holly. Mike J Thomas/FLPA

Over 30 years, our woods have become more shady – probably in part due to a reduction of management. This has resulted in a loss of seedlings and saplings for most tree and shrub species, as well as a general increase in the size of trees and shrubs as the woodland canopy closes. Holly

Woodland survey.
Rebecca Isted/English Nature

Ilex aquifolium, a shade tolerant shrub, has, however, shown a marked increase in abundance.

Evidence of a climate change effect was detected in the ground flora; 51 species showed changes in abundance linked to spring temperature changes, all but four of them increases. Signs of change due to nutrient enrichment were also detected. Evidence of a recent, dramatic increase in deer in the lowlands was found. Other studies have shown that this increase is damaging many woods.

One striking result of the work is evidence of the effects of storms. Nationally there has been a decrease in the number of plant species in woodlands, but those plots recorded in parts of South East England that were hit by the severe storm of October 1987 show an upward trend in the number of species. This is probably due to the opening up of the woodland canopy as trees were blown down.

1994

The UK Biodiversity Action Plan

The UK Biodiversity Action Plan (BAP) is a response to Article 6 of the Convention on Biological Diversity adopted at the Earth Summit (see 1992), the first international treaty designed to provide a legal framework for biodiversity conservation.

Overall, the Convention has three main goals: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of the benefits arising from the use of genetic resources. However, Article 6 of the Convention is concerned specifically with the conservation of biological diversity and the sustainable use of biological resources.

In 1993, the Government consulted over three hundred organisations throughout the UK regarding key issues raised by the Convention. The result was the launch of Biodiversity: the UK Action Plan and the creation of the UK Biodiversity Steering Group to establish a framework for identifying species and habitat types of conservation concern.

An important part of BAP was the production of Action Plans for threatened species and habitats, and the monitoring of other species to provide a biodiversity 'health check'. The UK BAP now has 45 Habitat Action Plans and 391 Species Action Plans targeted at priority habitats and species. In addition, there are now 162 Local Biodiversity Action Plans around the country.

– Formation of The Wildlife Trusts partnership

– The Convention on Biological Diversity adopts the Jakarta Mandate on Marine and Coastal Biodiversity

1996 Creation of the Environment Agency

Woodland bird species trends

Declining species*
Garden warbler
Hawfinch**
Lesser redpoll
Lesser spotted woodpecker
Redstart**
Spotted flycatcher
Tree pipit
Willow tit
Willow warbler
Wood warbler

Increasing*
Blackcap
Blue tit
Chiffchaff
Coal tit
Goldcrest
Great spotted woodpecker
Great tit
Green woodpecker
Robin
Treecreeper
Wren

* Species whose breeding populations have declined or increased by more than 25% between the mid-1980s and 2003/2004.

**Species which showed substantial declines at the RSPB sites only.

Male lesser spotted woodpecker.
Roger Wilmshurst/FLPA

Garden warbler.
Maurice Walker/FLPA

Causes of the declines in woodland birds

In recent years, there has been increasing concern over the apparent declines in woodland breeding birds, as shown by a 20% decline in the Woodland Bird Index. The index is made up from the trends of 33 birds species associated with woodland in the UK and is used by the Government as one of its 20 framework indicators of the sustainability of lifestyles in the UK. English Nature was part of a consortium (including the Forestry Commission, Defra, the Woodland Trust, RSPB and BTO) that funded the Repeat Woodland Bird Survey (RWBS), a project designed to explore these declines. In 2003 and 2004, over 400 broadleaved and mixed woodland sites in Britain were surveyed by the RSPB and BTO, repeating bird surveys carried out in the 1980s. The results were launched in March 2006 by the then Biodiversity Minister, Jim Knight.

Of the 34 species recorded in sufficient numbers by the survey, 8 had declined significantly (by >25%) at a national level and 11 species had increased significantly (>25%) – see table. The study confirmed that long-distance migrants are under particular pressure, possibly due to deteriorating conditions in their African wintering areas. However, habitat change in Britain or competition from resident species might also be responsible for their decline. There were also clear links between the decline in some species and changes in habitat structure in British woodlands. The most likely drivers of this change are increases in woodland age, a reduction in the active management of woodland and an increase in browsing pressure from deer. The full report can be found at www.forestry.gov.uk/woodlandbirdsurvey.

1996 Wild Mammals (Protection) Act

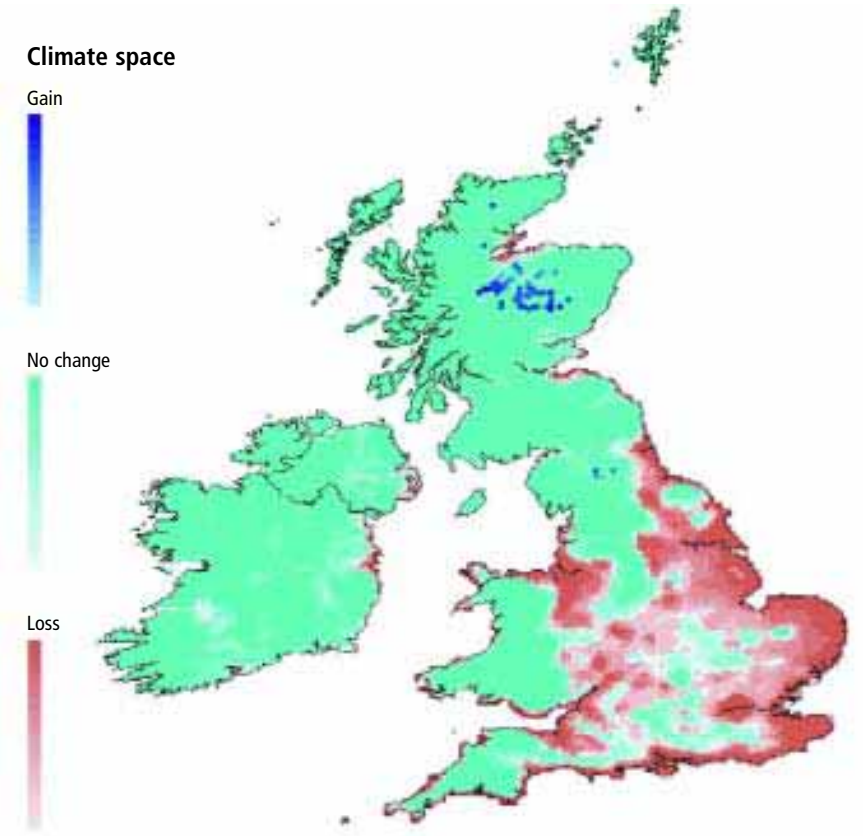
1997 Start of UK Climate Change Impact Programme

1998 Creation of MarLIN (the Marine Life Information Network)

Climate impacts

Climate change is the most significant environmental threat to face the modern world. It is already affecting species and ecosystems and its impacts will become increasingly severe in decades to come. English Nature has been involved in a range of research initiatives – both in the UK and Europe – to help policy-makers and conservationists understand the likely effects of climate change on biodiversity and formulate measures to adapt to it.

English Nature has led the multi-partner MONARCH project (Modelling Natural Resource Responses to Climate Change) which has built computer models to show how wildlife might respond to climate change in Britain and Ireland over the next 50 years. We have engaged in collaborative work with the Tyndall Centre for Climate Change Research on both terrestrial and coastal ecosystems. We have also successfully bid for EC funding for, and now lead, the BRANCH project (Biodiversity Requires Adaptation in Northwest Europe under a Changing Climate) supported by European Regional Funding through the INTERREG III B Community Initiative.



A 2080s climate change scenerio showing potential changes in otter habitat

2000

The Countryside and Rights of Way Act

The Act provided a new statutory basis for many aspects of conservation. It placed a duty on government departments to include biodiversity conservation in their planning, gave the police and wildlife inspectors greater powers with regards to wildlife offences, and allowed the courts to impose heavier fines and prison sentences for these offences.

The Act also improved the procedures associated with the notification, protection and management of SSSIs, giving English Nature the power to refuse consent for damaging activities and to encourage the positive management of the land. It also allowed for increased penalties for damage to SSSIs by owners and occupiers and other parties.

As well as introducing these conservation measures, the Act provided a new right of public access on foot to areas of open land comprising mountain, moor, heath, down, and registered common land, with provisions for extending the right of access to coastal land. Rights of way legislation was also improved by the Act, with a provision that allowed the diversion of rights of way if they were a danger to SSSIs.

2002

The Biodiversity Strategy for England

The Government's Biodiversity Strategy for England, *Working with the grain of nature* sought to ensure that biodiversity considerations became embedded in all main sectors of public policy. It also set out a five-year programme to make the changes necessary to conserve and enhance nature and ecosystems; working with them, not against.

Prepared with the help of a broad range of stakeholders in the public, voluntary and private sectors, the Strategy's aim is to make biodiversity a fundamental consideration in five areas: agriculture – encouraging farmland management that conserves and enhances biodiversity; water – aiming for a 'whole catchment' approach to the sustainable use of water and wetlands; woodland – managing it to promote biodiversity and quality of life; marine and coastal management – to achieve their sustainable use; and urban areas – to ensure biodiversity becomes a part of urban planning.

The Strategy also looks at the ways in which society as a whole can be engaged in understanding the needs of biodiversity, and what can be done to help conserve and enhance it, for example, by encouraging business to act for biodiversity and making biodiversity part of peoples' everyday lives through information, communication and education.

BRANCH is an important trans-national project involving research and policy partners from England, France and The Netherlands. It is developing innovative tools to help spatial planners across Northwest Europe take account of the impacts of climate change on biodiversity and build adaptation measures into their policies and plans, for example the creation and maintenance of ecological networks to help species move as climate changes.

MarClim

This year saw the end of MarClim, a four-year (2001–2005) multi-partner project created to investigate the effects of climatic warming on marine biodiversity. MarClim was a consortium led by the Marine Biological Association, and funded by a wider group of organisations, including English Nature, under the UK Climate Impacts Programme (UKCIP). UKCIP is part of a wider programme of research into climate change being undertaken by Defra.

Rapid changes in climatic conditions can have profound effects on marine life and ecosystems, and how these will affect the marine environment is of major importance to a wide range of stakeholders. However, until recently, little attention has been paid to the possible effects of climate change on marine biodiversity. By exploring the subject, MarClim has done much to generate awareness of marine climate change issues.

The project used intertidal species living on rocky shores (whose abundances has been shown to fluctuate with climatic change) as indicators of the likely response of both shore-dwelling and offshore species to climate warming. MarClim used both historical and contemporary data – the latter collected as part of the project – to provide evidence of changes in the abundance, range and population structure of intertidal species and relate these changes to recent climatic warming.

As a result of MarClim there is now strong evidence that recent rapid climatic change has resulted in changes in the abundance, population structure and biogeographic ranges of a number of intertidal indicator species, mirroring changes offshore.

MarClim has exceeded its original objectives and continues to play a pivotal role in stimulating the development of new approaches to

The barnacle *Chthamalus montagui* – a species used as an indicator of climate warming.

MarClim Project

2000 Formation of the Sustainable Development Commission

– Creation of the National Biodiversity Network Trust

– Foundation of Buglife, the Invertebrate Conservation Trust

Weir Wood reservoir, East Sussex. Water at 30% of usual levels, showing exposed freshwater mussels.
Paul Glendell/English Nature

the study of the impacts of climate change in the marine environment. Examples include, the production of climate change scenarios for the marine environment, the Marine Climate Change Impacts Partnership (officially launched by Elliot Morley in 2005) and the development of the Annual Report card approach for thematic reporting through to Government.

Climate change and freshwater habitats

Predicting the impact of climate change on freshwater and wetland ecosystems, and how they will adapt to this change, is difficult due to the way in which human activity interacts with the water cycle. In simple terms, future climate predictions indicate there will be less summer precipitation and higher temperatures, the result being less water available through rainfall and more of it being lost by evaporation. An increasing demand for water for domestic and agricultural uses will place further stress on rivers, lakes and groundwater-fed fens and bogs.

To explore this subject, English Nature has participated in an Environment Agency-led consortium project called Preparing for Climate Change Impacts on Freshwater Ecosystems (PRINCE). The project has evaluated the current level of scientific understanding of climate change impacts on a range of freshwater ecosystems, and has also undertaken some preliminary modelling work to look at specific risks facing some example ecosystems. Preliminary results (to be published later this year) suggest that headwater streams will see significant changes as a result of climate change, with the possibility of major consequences for freshwater biodiversity.

Future research to investigate the potential impacts on other freshwater systems is planned. Developing an adaptation strategy to manage these impacts will require an understanding of how other factors – such as land use change, flood defence work and water use – are likely to interact with a changing climate.

Managing English Nature

Staff at every level have been actively involved in the preparation for Natural England. For many, this has meant an increased workload. However, despite the extra effort that has been required, and in the face of many uncertainties, the day-to-day functions of English Nature have been maintained to their usual high standard. Thanks to this continuing hard work the transition to Natural England will be as smooth as possible.

Excellent public service

English Nature continues to demonstrate its commitment to excellence in delivering public services. We have achieved Charter Mark accreditation again this year, for the fourth time. This is the national standard of customer service excellence and it is available to all public sector organisations, including those who provide internal services. To be accredited with this award we have to show our commitment to six criteria: set standards and perform well; actively engage with customers, partners and staff; be fair and accessible to everyone and promote choice; continuously develop and improve; use resources effectively and imaginatively; and contribute to improving opportunities and quality of life in the communities we serve.

Information on English Nature's service standards and complaints procedure is available from our Enquiry Service and from our website. A summary of the organisation's performance against our service standards, and information about complaints received during the year can also be found on our website: www.english-nature.org.uk.

Left:
Reserve Officer and visitor at Clara Vale LNR, Tyne and Wear.
Paul Glendell/English Nature

Right:
Tree planting to commemorate English Nature's fourth successive Charter Mark.
Haydn Pearson/English Nature

Environmental management

English Nature is committed to good environmental management in its business operations and has delivered ongoing improvements in environmental performance over the last year. In particular we have recognised the need to continually reduce our environmental footprint and have successfully implemented a number of environmental initiatives throughout the organisation.

David Williams/English Nature

Saville Audio-Visual/English Nature

In 2005/2006 we:

- Continued our commitment to use alternatively fuelled vehicles; currently 46% of the pool car fleet are LPG dual fuel.
- Made a considerable investment in video conferencing facilities which have now been installed in our Peterborough headquarters and Area Team offices – these facilities provide environmental benefits through a reduction in business travel with its associated pollution impacts.
- Renegotiated a green electricity contract for English Nature offices to continue our commitment to renewable energy sourcing.
- Extended recycling initiatives at our headquarters to include the re-use or recycling of furniture and IT equipment. In addition, used toner cartridges, spent batteries and fluorescent tubes are now all sent to recycling facilities.
- Reduced water consumption for all metered offices to below the best practice figure of 6.4m^3 per person per year.
- Progressed ISO14001 implementation to a state of readiness for roll-out in Natural England.

Paul Lacey/English Nature

e-Government

English Nature embraces the Government's strategy of using technology to enable the transformation of Government. There has been a significant increase in the number of people using English Nature's electronic services, 100% in the case of the electronic Species Licensing service. Our on-line mapping service, Nature on the Map continues to receive widespread praise and has been further enhanced to better meet the needs of its customers. Nature on the Map has been widely used by land managers when applying for agri-environment schemes.

We have continued to work with our partners on sharing and joining-up our information resources. In particular, English Nature has made a substantial contribution to Defra's Spatial Information Repository (SPIRE) programme. More generally, English Nature continues to improve organisational efficiency and effectiveness through the innovative use of technology.

2006

The Natural Environment and Rural Communities Act

The Act was passed to provide a statutory basis for the institutional changes described in the Government's Rural Strategy of 2004. The Strategy set out three areas of focus for rural policy: economic and social integration; social justice for all; and enhancing the value of our countryside.

To help address these issues, the Act bought two new organisations into being: Natural England and the Commission for Rural Communities. Natural England has responsibilities for the natural environment, while the Commission is designed to act as an advisor, a watchdog and an advocate for rural people and communities.

Natural England combines functions from English Nature, the Rural Development Service and the Countryside Agency and is responsible for enhancing biodiversity and landscape in rural, urban and coastal areas, while also promoting access and recreation. Natural England's environmental management will not only encompass access and recreation, it will also aim, where possible, to deliver positive economic and social outcomes alongside its conservation goals.

This is the first time a UK organisation has had a role of this kind and it's hoped that people throughout the country will benefit from the integration of Natural England's responsibilities.

Summary of achievement

Protected Areas

Targets	Progress	Commentary
Achieve improvements in the condition of SSSIs. Work with partners and owner/occupiers to achieve a national target of 71% in favourable or recovering condition.	Exceeded	The 2005/2006 milestone has been exceeded. SSSI condition reached 72.3%, by area, at 31/3/06. To maintain sites in favourable condition and to increase the area is a substantial organisational achievement.
Agree the status of approximately 14,000 remedies with external partners to ensure that the future management of SSSIs will deliver favourable condition.	Achieved	Extensive liaison with landowners and managers has resulted in agreement over the majority of remedies. Further work with local authorities and water companies is ongoing.
Ensure improvements in the condition of the NNR estate to achieve the target of 85% in favourable or recovering condition.	Exceeded	The overall figure for NNR estate in favourable/recovering condition has reached 86.4%. The main contribution to this achievement was a new agreement with the Strathmore Estate on Upper Teesdale which ensured appropriate management on almost 2,000 ha of the Moor House-Upper Teesdale NNR.
Views About Management (VAMs) notified to all SSSI owners and occupiers by January 2006 (to notify approximately 1,200 in the final tranche).	Achieved	All Views About Management were completed and sent to owners and occupiers. A few outstanding queries and objections are to be resolved in the first part of 2006/2007.
To complete conservation objectives and condition assessments for SSSI units in accordance with the programme developed in 2004/2005.	Not achieved	The progress of the conservation objective target improved dramatically in the last few months of the year, but only 41.9% of the condition assessments planned for 2005/2006 were carried out. The main reasons for the lack of re-assessments are the delays in conservation objectives production (tied to the lack of Common Standards Monitoring guidance for invertebrates) and a focus of staff resources into the delivery of the SSSI condition target. The lack of invertebrate guidance is currently being addressed by the JNCC.
Implement English Nature's Maritime Strategy proposal for Marine Protected Areas, specifically: • Refine the draft scoping list of offshore SACs (0–12 nautical miles) through a stakeholder consultation event. • Undertake surveys, where required, to confirm areas meeting selection criteria (two sites surveyed by March 2006).	Achieved	Seven areas of interest have been identified for the next tranche of SACs within the 0–12 nautical mile zone. The 2005/2006 survey work and SAC structure and function project will continue in 2006/2007.

Targets	Progress	Commentary
Establish whether a further two areas qualify for selection as marine Special Protection Areas (SPAs) between 0–12 nautical miles offshore ie The Thames Estuary and The Wash & North Norfolk Coast.	Not achieved	The informal consultation phase for the Liverpool Bay marine SPA has begun and we are awaiting reports regarding The Thames Estuary and The Wash & North Norfolk Coast.
Achieve access and interpretation standards on 95% of spotlight NNRs.	Not achieved	The target was missed by only a couple of percentage points. A spotlight review is underway in light of future Natural England aspirations.
Achieve access and interpretation standards on 80% of non-spotlight NNRs.	Not achieved	75% achieved, rather than the 80% originally forecast. This is an 8% improvement on the position in March 2005.

Wider Environment

Targets	Progress	Commentary
For the nine terrestrial Biodiversity Action Plan (BAP) habitats for which English Nature is Lead Partner: • Continue the recovery of the four habitats whose declines are slowing (fens, lowland dry acid grassland, lowland wood pasture and parkland, and upland heathland). • Continue the recovery of the five habitats that are already stable/increasing.	Achieved	Overall, of the nine habitats that English Nature leads on, one habitat is stable and four habitats are increasing. The decline in the remaining four habitats continues to slow. Two improvements in status have occurred: upland heathland is now considered to be stable; and coastal and grazing marsh floodplain is now considered to be increasing. Although the trend for lowland calcareous grassland has changed from 'stable' to 'declining (slowing)' this difference reflects a change in information rather than a real downturn.
For the six maritime English Nature led Habitat Action Plans (HAPs): • Increase the proportion of saline lagoons in SSSIs that are in favourable/recovering condition from 80% to 85%. • Support survey programmes to complete the baselines for two of the five remaining habitats whose status is currently unknown (saline lagoons and coastal vegetated shingle).	Exceeded	Considerable progress has been made this year with 87.9% of saline lagoons now in favourable or unfavourable/recovering condition. Surveys on vegetated shingle and saline lagoons are progressing to schedule. A byelaw to protect *Sabellaria spinulosa* biogenic reef in The Wash is now being implemented. Trend estimates are now available for five out of six of our maritime HAPs (compared to only one in the last BAP reporting round). *Sabellaria alveolata* reef habitat is considered to be increasing; sublittoral sands and gravels, and saline lagoons are considered stable; littoral and sub-littoral chalk is fluctuating – probably declining; for coastal vegetated shingle the decline is considered to be slowing. The trend is still unknown for *Sabellaria spinulosa* reefs.
Restore or recreate an additional: • 142 ha of chalk grassland. • 235 ha of freshwater habitats. • 440 ha of coastal habitats. Achieve a three year total to March 2006 of 4,000 ha of chalk grassland, 2,000 ha of freshwater and 500 ha of coastal habitats restored or created outside SSSIs.	Achieved	New projects are underway that will deliver an additional 162.6 ha of chalk grassland, 261.3 ha of freshwater habitats and 444.8 ha of coastal habitats.
Halt or reverse decline on a further 3% of the priority species for which English Nature is the lead partner. (The planned cumulative three year increase to March 2006 is 54%.)	Not achieved	Of the 88 species for which English Nature is lead partner, 43 are stable or increasing (49%). Six new species had their decline halted during the year, partially offset by four previously stable species whose fortunes declined. The target has been narrowly missed because two species could not be surveyed due to withdrawal of funds, and a third is no longer considered reliably stable following the application of new survey techniques.

Targets	Progress	Commentary
Prescriptions for farmland bird recovery to be set in 158 Joint Character Area agri-environment scheme targeting statements by December 2005.	Achieved	152 Joint Character Area targeting statements have now been prepared that include a specific target for farmland birds. The remaining six statements include reference to UK BAP priority species in general, including 12 farmland bird species. Updated targeting maps for 16 range-restricted and declining farmland birds have been provided to government and non-government partners. There has also been good progress with a number of locally-run, dedicated farmland biodiversity initiatives, including the Cam Valley, Lincolnshire Wolds, Peak District, North West Norfolk and Wiltshire – all directly benefiting farmland birds.
Restore 15,400 ha of heathland, re-create 1,140 ha of heathland and contribute to reconnecting people and heathland (through Tomorrow's Heathland Heritage programme and other English Nature projects).	Achieved	The overall target was achieved. The programme has returned to the Heritage Lottery Fund. The only future role for English Nature is to maintain records for potential monitoring purposes until the programme ends in 2023.
Ensure that the Aggregates Levy Sustainability Fund (ALSF) grant scheme budget has been spent to target and in accordance with scheme guidance. Ensure the impact of ALSF in 2005/2006 has been quantified and evaluated.	Achieved	Working in partnership with the Countryside Agency almost all available funds for 2005/2006 were fully allocated to projects in the form of grant-aid. 79 projects were funded by English Nature. Project deliverables have been evaluated for 2005/2006 in conjunction with the Countryside Agency and have been recorded in the annual report.
Ensure aspirational biodiversity targets are set for all ten landscape-scale Area-Based Delivery (ABD) projects by May 2005. Ensure that three ABDs meet defined biodiversity targets by April 2006, and a further four ABDs commence delivery of practical work towards targets by December 2005.	Achieved	Practical work has commenced in seven ABDs: Great Fen, Mineral Valleys, Northern Kites, Thames Basin Heaths, North West Wetlands South Lakes and Wigan, Yorkshire Floodplains and the Inner Thames. Targets have been set for the other three ABDs.
Update four habitat inventories by March 2007: lowland grassland, upland heath, blanket bog and upland calcareous grassland. (Ancient woodland habitat inventory work has been postponed.)	Achieved	Habitat inventories have either been delivered (uplands), are on target for the two year plan (grasslands), or have been subject to target revision earlier this year (woodlands). Additional work has been started on lowland heathlands and this is on target to deliver sample survey information in 2006/2007.
Ensure that 73% of counties are capable of storing, accessing and supplying regional and local biodiversity information.	Achieved	There is an increasing recognition of the need for Local Record Centres (LRCs), particularly in relation to the new planning policy statements from the Office of the Deputy Prime Minster. Some encouraging progress is being made towards the development of new LRCs in counties such as Lincolnshire and Merseyside. However, funding remains a fundamental obstacle to the delivery of comprehensive biodiversity information across the English regions.

People and Policies

Targets	Progress	Commentary
Greenspaces: build commitment and facilitate action to increase the quality, quantity, connectivity and accessibility of natural greenspace in towns and cities, or wherever it is needed, to contribute to achieving biodiversity gain and sustainable communities.	Achieved	English Nature has been working with the Peterborough Environment City Trust on a £25 million bid to the Living Landmarks Lottery Fund. We held a successful stakeholder workshop in March and the ecological information for the area of South Peterborough Green Parks has been collated. We initiated the environmental forum on 'Better engagement' to develop good practice and join-up stakeholder participation. The Natural England confederation project Wild Adventure Space has been contracted to OpenSpace and they are organising focus group discussions with young people.
Improving policies: provide evidence and examples that demonstrate the social benefits of wildlife-rich natural greenspace for health, social inclusion, community cohesion and lifelong learning, and use this evidence to promote policies that support actions for nature and community participation.	Exceeded	Our health and wellbeing policy advocacy work is beginning to produce positive results. The UK Public Health Association has established an advisory group on nature, health and sustainable development and we are an invited member. The National Institute for Health and Clinical Excellence invited us to participate in its consultation on evaluation frameworks for its public health programme guidance on Physical Activity and the Environment. English Nature has also been 'health working' with other UK bodies, including the Forestry Commission and the Environment Agency, to establish a sector-wide approach to green health research.
People taking part: extend the range of opportunities and facilities for people and communities to access, enjoy and participate (particularly on NNRs and LNRs) through initiatives for health, recreation and tourism, outdoor learning, volunteering, arts and culture.	Achieved	Our work on Local Nature Reserves (LNRs) has expanded considerably through the interest and involvement of the BBC. The BBC recently agreed to feature LNRs in its SpringWatch campaign and the corporation has secured Lottery funding to support new designations. English Nature is currently adding comprehensive new site information to the Nature on the Map website and has expanded the LNR network.
Provide timely and well evidenced advice for the UK negotiation of a new European Agricultural Fund for Rural Development (EAFRD) that increases budget share and enables an environmentally focused, locally responsive and fully integrated England Rural Development Plan (ERDP).	Achieved	There has been close engagement with Defra and the Rural Development Service over the European Rural Development Policy 2007-2013 (ERDP07), how it will be delivered, and the resource requirements for the environment. Information is being cascaded to the regions to enable them to develop appropriate regional ERDP07 chapters. The Rural Development Service is leading over the Implementing Regulations.
Influence Defra guidance on River Basin Management Plans (RBMPs) to secure an integrated approach to the delivery of water-related biodiversity targets.	Achieved	There is ongoing work with the Environment Agency on monitoring requirements for protected areas under the Water Framework Directive. Agreement has been reached with Defra and the Environment Agency on the criteria for adding water bodies in phase 2. We are currently in the process of agreeing lists of additional water bodies. We advised on the shape and content of Environment Agency consultation on good status standards. A list of groundwater dependent wetlands has been supplied.

Targets	Progress	Commentary
As part of the wider management measures required under a Marine Spatial Plan, we will identify the role of an ecologically coherent and representative network of Marine and Coastal Protected Areas that are afforded varying levels of protection. This will make a significant contribution to the recovery and protection of marine ecosystems, including the restoration of fish stocks and wider marine biodiversity.	Achieved	A report on the effects of Marine Protected Areas (MPAs) is now complete and the text for a summary leaflet has been drafted. We examined the evidence for benefits from MPAs set up for the conservation of marine biodiversity and across the full spectrum of management regimes, from Highly Protected Marine Reserves (where all extraction is prohibited) to multiple-use management areas. From the evidence, our conclusion is that there is overwhelming evidence of the benefits of MPAs for marine biodiversity, and that these benefits are clearest and most significant in the case of Highly Protected Marine Reserves. Alongside this report, we continue to work at a regional level on MPAs. In the south west in particular, we are working with stakeholders to develop a community-based view of what a network of MPAs would look like under the Finding Sanctuary project. More generally, on a day-to-day basis we explore the challenges and opportunities that MPAs provide to protect biodiversity and support sustainable fisheries management.
We will influence the environmental content of Regional Spatial Strategies and Regional Economic Strategies in each region where there are active review processes underway, and through effective advocacy and service delivery in each region.	Achieved	Throughout the year we have influenced thinking on Regional Spatial Strategy and Regional Economic Strategy reviews in most regions. This has involved considerable activity and engagement with both Regional Assemblies and Regional Development Agencies. Most regions have been involved in work to promote Green Infrastructure through Regional Spatial Strategies, sub-regional plans and the Olympics Master Plan. A number of successes have been achieved in securing Green Infrastructure policies within these plans, and a number of sub-regional Green Infrastructure delivery projects are underway.

Managing the Organisation

Targets	Progress	Commentary
To use the confederation period to ensure that English Nature offices are ready to implement ISO14001 in Natural England. This will be achieved through: • Close liaison working with partners in the RDS/CA. • Ensuring policy and practices are agreed and phased implementation is underway. • Ensuring 75% of English Nature offices have trained environmental accredited auditors.	Achieved	Currently we are still on target to achieve ISO14001 for our headquarters in Peterborough by October 2006. The external accreditation auditor has reviewed the systems in place and – subject to some minor changes – is content that this target is achievable in the coming year. In addition, the sustainable development report was signed off by an external verification officer.
Ensure the available staff resource is deployed to work on priority areas, and their understanding of what is required of them is demonstrated through team and individual performance plans.	Achieved	The development of Natural England has been an important context for all this work in terms of managing our staff resource and securing an effective change programme, as well as delivering ongoing business.
Achieve Charter Mark re-accreditation in July 2005.	Exceeded	We achieved Charter Mark accreditation in quarter one, two months earlier than planned.
Ensuring the appropriate integration of English Nature's Information Systems with the Information Systems of the wider Defra family, including Genesis, e-enabling and Geospatial IS.	Achieved	Business integration is continuing. Information System Strategy development is also continuing alongside business change. Spatial Information Repository (SPIRE) and customer (stakeholder) relations with Defra are ongoing. Genesis is outside the scope of this target (now 2006/2007).
Increase the contribution of external funding to the delivery of the Programme Board's priority outcomes and targets by £1.1million.	Not achieved	£7m was received this year for projects that were led by English Nature and projects where we are partners. This misses our target by c£1.4m. However, considering the reductions in staff levels in the External Funding Unit and the diversion of staff effort to the Big Lottery Fund applications, this in nonetheless a significant achievement.
Ensure the grants delivered by English Nature meet corporate and Charter Mark standards at point of issue.	Achieved	Grants have been delivered according to service standards. The External Funding Unit has provided support to establish the new Countdown 2010 grant scheme. The unit is also involved in influencing the design of the Environment Land Management Fund (ELMF) with regards to external funding.

Targets	Progress	Commentary
Ensure all external communications products adhere to our corporate identity standards and will indicate our status as part of the Natural England confederation. This will include the identification of key messages, audiences and reflect our corporate and confederated communication priorities.	Achieved	All teams but one have reported that they achieved the target, and one exceeded it. Most Area Teams are producing their annual target of two newsletters, though some teams report slippage into the next financial year.
To have successfully implemented the outcome of the e-enabling business review.	Achieved	English Nature's Council decided that e-enabling would not be taken forward for the remaining life of English Nature.
Contribute to the creation of the Natural England Information Services Strategy (target date, end June 2005) ensuring it meets Natural England's business needs.	Achieved	A framework strategy has been produced for Natural England. We are now awaiting business needs in order to finalise the document.
To identify options, agree an implementation strategy and have begun some actions for an estate strategy for Natural England. To develop this in harmony with the Rural Development Service, Countryside Agency and Defra. Property and Facilities Management business areas to seek opportunities for co-location for early lease breaks in the year.	Achieved	The options appraisal proposal for a Head Quarters office in Sheffield was approved by the Natural England programme board on 5 October 2005. Lease negotiations have been instructed and a detailed list of terms agreed with landlord's agents.
The Natural England sub-projects which English Nature leads on are implemented to plan.	Achieved	A large number of staff continue to input to Natural England projects in line with the Programme Plan and are feeding into its reporting systems.
For the Natural England sub-projects which English Nature does not lead on, our contribution is delivered on time and to standard.	Achieved	A large number of English Nature staff continue to input to the Natural England Programme in line with its planning and reporting process.
Agree proposals in conjunction with our colleagues in the Countryside Agency and the Rural Development Service about the way forward for Natural England on Investors in People (IiP).	Achieved	A draft business case for IiP has been prepared, but held pending the appointment of senior management for Natural England. They will make decisions about approach and timing in due course. Planning has been completed as far as we can at this stage. The English Nature target of retaining English Nature's IiP accreditation up to the end of September 2006 has been achieved.

Science

Targets	Progress	Commentary
Ensure that 90% of projects in the tactical science programme are delivered in time and within budget. Seven projects have been cut from the programme (ie about 10%). The target for the remaining projects remains the same, that is, to deliver 90% of them in time and within budget.	Achieved	The revised tactical science programme delivered 25 of 27 (92.6%) science projects in time and within budget. Two projects which should have been completed are running slightly behind schedule. A total of 11 projects were completed within the year with final reports produced for six. The results of the audit of non-native species project were expressed as English Nature Research Report No 662 within the year.
Ensure that 80% of elements in the strategic science programme are delivered in time and within budget. This programme comprises 16 elements within three strategic projects: • Ecosystem processes at the landscape scale. • Marine ecosystems and an integrated ecosystem approach. • The use of an evidence-based approach.	Achieved	All 16 elements of the strategic programme are on track. Annual meetings of Knowledge Transfer and UKPopNet have reported progress to stakeholders.
Achieve greater awareness of English Nature's contribution to conservation science through a demonstrated improvement in the dissemination of English Nature science.	Achieved	Staff from all three of Natural England's founding bodies gave very positive feedback on the English Nature Science Conference held in December 2005. Eight English Nature Research Reports were produced this quarter together with a wide range of other communications.

Council Members

This is a summary list of Council Members' interests for 2005/2006

Sir Martin Doughty: (Chair)

Date appointed: 8 May 2001

Term ended: 20 November 2005

Tendered resignation due to appointment as Chair Designate to Natural England Board
Board Member of Countryside Agency until March 2005. Elected member of Derbyshire County Council until May 2005. Member of Peak District National Park Authority until May 2005. Member of New Mills Town Council. Chair of Torr Vale Mill Preservation Trust. Chair of Goytside Meadows LNR Advisory Committee. Member of St James the Less Preservation Trust. Vice President of Peak and Northern Footpaths Society. Fellow of Royal Society of Arts. Member of Charter Institute, Water and Environmental Management. Vice President of Arkwright Society. Patron of Institute of Ecology and Environmental Management. Member of Association of Labour Councillors. Patron of Creswell Crags Heritage Trust. Member of Royal Society for Protection of Birds, National Trust and Green Alliance. National Forest Ambassador.

Ms Sarah Burton: *Legal Consultant*

Date appointed: 1 April 2005

Appointed until: 30 September 2006

Tendered resignation 1/5/06 due to appointment to Natural England Board
Strategic legal advisor – self-employed consultant. Born and educated in New York. Lived in England since 1972. Qualified as a Solicitor of the Supreme Court in 1982. Became partner in Seifert Sedley Williams, Solicitors in 1984. In 1990, appointed first in-house lawyer to Greenpeace UK, and later Campaign and Legal Director and acting Executive Director. Member of Green Alliance, Fawcett Society, Haldane Society and Environmental Law Foundation. Co-author of three thrillers published by The Woman's Press under the pseudonym Hannah Wakefield.

Dr Roger Clarke: *Landscape and Rural Business Advisor*

Date appointed: 1 April 2004

Appointed until: 30 September 2006

Tendered resignation 1/5/06 due to appointment to Natural England Board
Chief Executive of Youth Hostels Association. Member of Green Alliance and Association of Chief Executives of Voluntary Organisations.

Ms Lynn Crowe: *Lecturer in countryside management*

Date appointed: 1 April 2005

Appointed until: 30 September 2006

Tendered resignation 1/5/06 due to appointment to Natural England Board
Full time Principal Lecturer at Sheffield Hallam University. Member of Peak District National Park Authority and Chair of relevant committees. Advisory Member of East Midlands Regional Committee of the National Trust. Member of Royal Society for the Protection of Birds, Campaign to Protect Rural England and National Trust.

Ms Sarah Fowler: *Marine Ecologist*

Date appointed: 1 April 2004

Appointed until: 30 September 2006

Director of Naturebureau International (Nature Conservation Bureau Ltd – registered name). Pew Fellow in Marine Conservation 2005–2008 (The Pew Institute for Ocean Science, USA). Trustee of the Shark Trust. Secretary of the European Elasmobranch Association. Co-chair of IUCN/SSC Shark Specialist Group. Member of Marine Stewardship Council's Stakeholder Council.

Professor Ed Gallagher: *Chartered Engineer*

Date appointed: 1 September 2000

Appointed until: 30 September 2006

Chairman of Envirofresh Ltd. Non-Executive Director of ECUS Ltd. Civil Service Commissioner. Chair of Energywatch. Chair of Envision. Chair of Pesticides Forum. Vice President Council for Environmental Education. Chair of CSERGE Advisory Board. Patron of Environmental Industries Commission. Member of Royal Institution, National Trust and English Heritage. Friend of Kew Gardens. Freeman of the City of London – Livery Company of Water Conservators.

Professor Malcolm Hart: *Geologist*

Date appointed: 1 April 2001

Appointed until: 30 September 2006

Professor of Micropalaeontology, University of Plymouth. Fellow of Geological Society (FGS). Member of Palaeontological Association. Member of Micropalaeontological Society. Member of Science and Conservation Advisory Group of Dorset/East Devon World Heritage Site. Member of Ussher Society. Fellow of Society for Sedimentary Geology. Fellow of Cushman Foundation for Foraminiferal Research. Member on Editorial Board of *Palaontologische Zeitschrift.* President of European Palaeontological Association.

Mr Stephen Hockman: *Barrister at Law (Queens Counsel)*

Date appointed: 1 April 2002

Appointed until: 30 September 2006

Self-employed Barrister (QC). Recorder and Deputy High Court Judge. Vice-Chairman of the General Council of the Bar of England & Wales until Oct 2005 – Chairman from Oct 2005. Editor in Chief of Blackstone's *Planning Practice*. Trustee of Environmental Law Foundation.

Mr Doug Hulyer: *Ecotourism*

Date appointed: 1 April 2002

Appointed until: 30 September 2006

Director of Conservation Programmes & Development, Wildfowl and Wetlands Trust (WWT) until December 2005. Managing Director of Wetlands Advisory Service, a subsidiary of WWT, until Dec 2005. Member of Executive and Business Management Committee of the Council for Environmental Education. Chair of Education & Public Understanding SIG – England Biodiversity Strategy (Defra). Vice President Surrey Wildlife Trust. Member of National Trust, Gloucestershire Wildlife Trust, Freshwater Biological Association, Institute of Biology, English Heritage.

Professor David Macdonald: *Mammal Biologist*

Date appointed: 1 April 2003

Appointed until: 30 September 2006

Director of Wildlife Conservation Research Unit. Senior Research Fellow in Wildlife Conservation at Lady Margaret Hall, Oxford. Research Scientist, University of Oxford. Self-employed author, broadcaster and biologist. Member of the Advisory Committee on Pesticides, PSD, Defra. Council Member of Zoological Society of London. Non-Executive Director of Nature Conservation Bureau. Chairman of IUCN/SSC Canid Specialist Group. Advisor to Mammals Trust UK and Esmee Fairbairn Foundation. Chairman of the Darwin Initiative. Trustee of the Wildfowl and Wetlands Trust. Member of BOU, BES, ASAB, Mammal Society.

Dr Mike Moser: *Wetlands specialist*

Date appointed: 1 April 1999

Appointed until: 30 September 2006

Deputy Chair: 28 May 2004 – 20 November 2006

Acting Chair: 1 November 2006 – 30 September 2006

Council member of Royal Society for the Protection of Birds. Board member of Tour Du Valat Foundation (France). Councillor of Honour of Wetlands International. Member of British Trust for Ornithology, Royal Society for Protection of Birds, Devon Wildlife Trust, Wader Study Group.

Mr Christopher Pennell : *Formerly Regional Director, National Trust*

Date appointed: 1 May 2005

Appointed until: 30 September 2006

Educated in Stoke-on-Trent & Worcester College, Oxford – MA in Law. 27 years working in National Coal Board and British Coal – Personal Assistant to Chairman, various procurement roles, then Head of Supply & Contract (£1.3 bn spend) and finally, Head of Privatisation. For 10 years to 2005: East Midlands Regional Director of the National Trust. Trustee of Campaign to Protect Rural England (Peak District & South Yorkshire). Member of parish council for 13 years in South Yorkshire.

Dr Anne Powell: *Freshwater Ecologist*

Date appointed: 1 April 2001

Appointed until: 30 September 2006

Manager of FreshwaterLife Project. Occasional consultant to Government of Isle of Man, Reader's Digest, Environment Agency Rivers Habitat Survey Board. Unpaid Director and Trustee, Ponds Conservation Trust. Trustee of Thames Salmon Trust, Cumbria Wildlife Trust and Berks, Bucks and Oxon Wildlife Trust. Unpaid Director of Ponds Conservation Trust, Policy and Research Ltd. Member of Freshwater Biological Association. Member of Regional Fisheries Ecology Recreation Advisory Committee, Environment Agency (North West). Member of Institute of Biology. Member of Conservation Panel of the National Trust.

Mr Hugh van Cutsem: *Farmer/Business Manager*

Date appointed: 1 April 2002

Appointed until: 30 September 2006

Director of James Purdey & Sons Ltd, Gunmakers. Council Member and Member of the Executive Committee of the National Trust. Chairman of Country Land and Business Association, Norfolk Branch. Chairman of Ecospray. Chairman of Agrifutura. Vice President of Game Conservancy. President South West Norfolk Conservative Association.