

This is one of a range of publications produced by Publicity and Grants Team, English Nature, Northminster House, Peterborough PE1 1UA.

http://www.english-nature.org.uk





\mathbf{C}	\sim	n 1		\mathbf{n}	
			_		

Chairman's overview	7	
Review	16	
Sites of Special Scientific Interest	35	
Management agreements	37	
Joint Statements of Intent	46	
Nature Conservation Orders	47	
Condition of Sites of Special Scientific Interest 1 April 1996 to 31 March 1997	49	
National Nature Reserves	54	
Ramsar sites, SPAs and SACs	64	
Marine Nature Reserves	82	
Environmentally sustainable agriculture	83	
Species Recovery Programme	85	
Licences issued by English Nature's licensing unit in 1996/97	87	
Grants	89	
Local Nature Reserves	93	
English Nature's research	97	
Summary financial statement 1996/97	122	
Register of interests of Council Members	131	
Responsibility of Chairman and Council Members	133	
Audit Committee	133	
Main office addresses	134	
National Office contacts	137	
Refereed publications produced by English Nature staff		
Learning and Development	142	
English Nature publications published during 1996/97	143	



English Nature Northminster House, Peterborough PE1 1UA Telephone (01733) 455000 Fax (01733) 68834

September 1997

The Rt. Hon John Prescott MP
The Deputy Prime Minister and
Secretary of State for the Environment,
Transport and the Regions
6th Floor
Eland House
Bressenden Place
London SW1E 5DU

Sir,

As requested by section 20(1) of Schedule 6 of the Environmental Protection Act 1990, I have the honour to present herewith the sixth report of English Nature (Nature Conservancy Council for England) covering the period 1 April 1996 to 31 March 1997.

I am Sir,

Your obedient servant

The Earl of Cranbrook

Nature Conservancy Council for England



English Nature's Council

Chairman: The Earl of Cranbrook DSc, DL

Professor J M Anderson FRGS

Ms J Barber

Professor D L Hawskworth CBE, DSc, FDhc (appointed 1.9.96)

Professor J Kear OBE

Miss J Kelly

Dr D R Langslow

Professor D Norman (appointed 1.9.96)

Dr D F Shaw MBE

Mr M T Thomasin-Foster CBE, BSc, DL

Mr S R Tromans (appointed 1.9.96)

Professor R C L Wilson BSc, PhD, CGeol

Mr G N Woolley FRICS, FAAV, FRSA

English Nature's Board

Chief Executive: Dr Derek Langslow

Directors: Ms Sue Collins

Dr Keith Duff

Mr Eddie Idle

Ms Caroline Wood



Chairman's overview

This is the sixth Annual Report of English Nature, the statutory nature conservation organisation for England. Once again, it gives an account of continuing progress in the face of a changing world in which the national effort towards sustainable development and the *UK Biodiversity Action Plan* increasingly provide a challenging focus. I am pleased that the Council and staff of English Nature have so many visible achievements to report.

The developments of the last year and the significant progress we have made towards our nature conservation goals serve to confirm my belief in the vital importance of our work in securing a positive future for England's wildlife and natural features.

Biodiversity and sustainability remain the cornerstones of our work. Working with many partners, we have made progress in developing a more focused approach. This is intended to assist us to channel resources to areas where they will have the greatest beneficial effect.

I am particularly pleased with the progress made in developing our work on Natural Areas. This culminated in the publication in December of the Joint Character Map, with the Countryside Commission and with help from English Heritage, displaying both Character Areas and Natural Areas.

Natural Areas provide a powerful means to integrate English Nature's work at a local, national and international level. The action on profiles, objectives and the translation of biodiversity targets to a local level, and their use to help more people become involved in nature conservation, will be vital to our future success.

At English Nature, we continue to encourage an open dialogue with people from a wide variety of organisations including government, industry and commerce, and the voluntary sector. All share a common aim - the effective conservation of the wildlife and natural features which are an integral part of our national character.



Our main priorities

- To implement the Biodiversity Action Plan targets, through our work on SSSIs and by extending the Species Recovery Programme; by starting a new project on habitat restoration and by continuing our projects on lowland heathlands, estuaries, Natural Areas and veteran trees.
- To play a full part in the progressive implementation of the European Union Habitats and Species Directive, consulting with owners and occupiers of proposed Special Areas for Conservation (SACs) and in particular developing conservation objectives for marine SACs.
- To provide high quality advice to Government, especially on statutory consultations, but also focusing on the reform of the Common Agricultural Policy and the Common Fisheries Policy, and the implementation of the strategy on sustainable development.
- To continue to increase the area of Sites of Special Scientific Interest (SSSIs) managed through our Wildlife Enhancement Schemes, our Reserves Enhancement Scheme and other management incentive schemes.
- To complete the Joint Character Map in conjunction with the Countryside Commission and continue work on the Natural Area Profiles and conservation objectives.
- To ensure that our information on the natural environment is made accessible, including reports of the findings of our sample surveys of SSSIs.



- To ensure that all National Nature Reserves are managed effectively and have management plans which will help to attain their objectives.
- To make a contribution to the UK Biodiversity Action Plan by raising public awareness and involvement, through our publications and grant schemes, and through our work on community involvement and access to National Nature Reserves.
- To develop the SSSI Information System (ENSIS), in order to integrate critical conservation data such as Site Objective Statements and Site Management Statements.

Government and agency policies

The way in which other organisations formulate and deliver their policies can have a major influence on nature conservation objectives. Our programme seeks to integrate nature conservation objectives into the policies and practices of national and local government, the European Union and other regulatory agencies.

A range of methods has been used, including seminars, workshops, joint projects and secondments of staff, in order to help integrate nature conservation objectives effectively into policy making. Areas where opportunities have been developed include agriculture, forestry, the water sector, transport, industry and minerals, coastal and marine issues, planning, local government and National Parks.

The new approach at local and national level has received a gratifying response. A shift towards a more strategic approach to overall policy development combined with open debate, based on conservation objectives within the Natural Areas framework has proved powerful and has been welcomed by our partners. This approach has



encouraged joint endeavour in resolving the best ways of achieving biodiversity targets, within the development needs of other sectors.

Partnerships for conservation

In England there are now nearly 4,000 Sites of Special Scientific Interest (SSSIs) covering about 935,000 hectares. These are looked after by 23,000 owners and managers. Many among them are farmers, but others include statutory, voluntary, commercial and institutional bodies. We continue to work with all among this large contingent, to support their stewardship of the country's most precious areas for wildlife.

At the end of 1995, English Nature commissioned a second survey of individual owners and occupiers of SSSIs, to test for change in the relationships between its staff and this key group over the three years since the first survey. Questionnaires were sent to 3,000 owners and occupiers. Of these, 750 replied - a relatively high response rate, reflecting the real interest which exists in SSSIs and our countryside.

Over half of those who responded were proud to have an SSSI on their land, and the majority wanted more information about the nature conservation interest of their SSSI. Most were positive about their relationship with English Nature. New forms of management agreements were considered generally to be effective, helpful and straightforward. Site Management Statements and Wildlife Enhancement Schemes were highly regarded.

SSSIs form an invaluable core, from which English native species and habitats can be sustained and replenished. We will continue to foster partnership with all who influence the way SSSIs are used and managed. We hope to learn from continuing experience, and we shall therefore carry out a further full survey of SSSI owners' and occupiers' views in 1999.



Our growing list of 185 National Nature Reserves now covers more than 70,000 hectares. NNRs include the best of England's natural heritage of species, habitats and landforms. Wherever possible, we welcome visitors to these special places, which make a major contribution to the targets set within the *UK Biodiversity Action Plan*.

'Approved Bodies' under Section 35(1)c of the Wildlife and Countryside Act 1981 now manage 36 National Nature Reserves, either wholly or in part. They include local authorities, industry, wildlife trusts and other conservation organisations. We shall continue to encourage this trend, by which there is a widened sharing in the management of new National Nature Reserves, the variety of which represents the characteristics of each Natural Area within England. We intend to concentrate our resources on the nation's most vulnerable and delicate areas.

We also continue to recommend outstanding wetlands and areas sustaining wild birdlife, respectively, for international designation as Ramsar sites or Special Protection Areas.

UK Biodiversity Action Plan

Since the *UK Biodiversity Action Plan* was published in January 1994, we have made a significant contribution to the development and implementation of the UK Steering Group Report.

The Report sets out a strategy for conserving many of the most important habitats and species in the UK. English Nature is using this strategy to provide further focus to our Corporate Plan and our annual Work Plans.

Central to this work is the link between Natural Areas and biodiversity targets for key habitats and species. Using Natural Areas, we can demonstrate where action may be undertaken to best effect to achieve biodiversity targets. This approach provides the basis for focusing our



own resources, and providing advice to partners on how and where best they may contribute to the overall process.

Derek Langslow chaired the UK Targets Group, which has developed and agreed a process for preparing and refining the second round of species and habitat action plans. Draft plans for 50 key species have so far been prepared and submitted. A marine sub-group to the UK Targets Group has been established to address the specific needs of marine habitats and species.

Guidelines for the implementation of Habitat Action Plans and Species Action Plans have been produced, agreed and issued to English Nature lead groups. The guidelines have also been circulated to our national biodiversity partners as a model for their adoption. These have been accepted by MAFF, the Countryside Commission and the Environment Agency.

We co-ordinated a review of the species on the Middle List to ensure that invertebrates and lower plant species were adequately represented. From this list we identified those most in need of dedicated species action plans.

English Nature has developed a clear strategy for linking local action with national projects, and we have developed the role of Natural Areas as a consistent source of contextual information for local initiatives.

Reporting on England's natural heritage

We are committed to implementing many international and national initiatives, including the Habitats Directive, the UK Biodiversity Action Plan and our own site safeguard programmes. Measuring the effectiveness of our programmes is a vital part of this work.



We have begun the preparation of reports on specific components of England's natural heritage that illustrate the contribution made by English Nature's programmes. Reports on heathland and woodland are at the draft stage, and data are being collected for an uplands report.

The SSSI Information System (ENSIS) has improved the effectiveness of reporting. During the year, ENSIS was further developed to integrate critical conservation data. Site Objective Statements, Site Management Statements and the Ancient Woodland Inventory have been incorporated.

Each SSSI now has a Site Objective Statement, giving a clear indication of the site's wildlife interest and long term nature conservation objectives. In addition, Site Management Statements for each SSSI owner and occupier are being prepared. The completion target for Natura 2000 sites is mid-1997 and for the remaining SSSIs, March 1999. Nearly 3,000 Site Management Statements were drafted or agreed with owners and occupiers in 1996/97 with a further 2,000 in draft.

English Nature worked with Scottish Natural Heritage and the Countryside Council for Wales through the Joint Nature Conservation Committee (JNCC) to establish the Biodiversity Information Service. Through the European Project we have also identified key objectives and partners in Europe to allow us to translate our own approach to monitoring into a wider context.

Ensuring efficiency and quality

We are committed to delivering a high quality service which offers value for money. Operational effectiveness is monitored to ensure the organisation is correctly equipped to fulfil its role.



In the last year, team complements and organisational structures have been streamlined in the light of operational experience. A pay and grading review was completed and delivered a simple pay band structure, enabling the appropriate salary adjustments to be made within the year.

The Financial Management and Policy Review was produced, by Government, at the end of 1996. A joint action plan has been agreed to address its recommendations alongside those of the Fundamental Expenditure Review.

In addition, a Human Resources management approach is to be integrated within English Nature's strategy, following a full review of the organisation of the Personnel Services Team.

Strategy Review

As well as working towards these ambitious goals, we have taken time in the last year to consider the long term future for nature conservation. Our thoughts on our strategy for the future have been widely discussed within English Nature and with our partners in nature conservation at a local, national and international level.

When we decided in the spring of 1996 to undertake our strategy review 'Beyond 2000', we wanted a process which involved everyone within English Nature and provided opportunities for substantive discussions with our key partners.

The London Zoo conference in July 1996 and the Winter Workshop held in January this year brought together people from the wide range of organisations with which we work. The diversity of our partners and their aspirations for nature conservation are both invigorating and challenging.



The two conferences were important in bringing together these diverse interests to exchange ideas and reach a common understanding in pursuit of shared aims. It was refreshing to discover that the many and varied interests represented already had, to a large extent, a shared vision, in spite of the variation in priorities and methods.

Streamlining and simplifying are important strategic goals. We are developing clearer ways to prioritise our work and to make the best of our ability to link national policy with local initiatives and practice.

We plan to publish our new Strategy in October 1997.

Conclusion

English Nature's partnership approach is fundamental to our future success in safeguarding the wildlife and natural features of this country. We embrace support from a wide cross section of the public, empowering communities and organisations to work with us towards the twin goals of biodiversity and sustainable development.

We have a vital role to play in bringing together people who are involved in the conservation of wildlife and natural features. We aim to be the catalyst, enabling all key parties to act in a common direction.

It is a task that requires skill, diplomacy and sometimes difficult choices. Nevertheless it is a task we approach with enthusiasm and commitment.

I am delighted that my term as Chairman has been extended for a further final year. I shall hand on to my successor an organisation that approaches its work with keenness, vigour and confidence.

Review

English Nature provides England's statutory conservation service for wildlife and natural features. This is our sixth annual report and covers the period from 1 April 1996 until 31 March 1997. English Nature was constituted on 1 April 1991 under the Environmental Protection Act 1990.

Our vision

- We will give the lead in sustaining and enriching England's natural heritage for all to enjoy, now and in the future.
- We will share our knowledge, understanding and practical experience to inspire, enable and empower people to achieve this with us.
- The service we deliver will be founded on a strategic approach to the conservation of wildlife and natural features.

Our nature conservation goals

Our eight strategic goals emphasise our commitment to conserving wildlife and natural features, both within and outside special sites; our intention to increase the commitment of landowners and managers to environmentally sustainable land management; our desire to make our knowledge and experience available and useful to all with an interest or role in nature conservation; and our eagerness to develop a strong body of support for nature conservation, which we believe matters to everyone.

English Nature's goals are to:

• Set the context for nature conservation through its Natural Areas approach



- Secure the integration of nature conservation objectives into all Government policies
- Achieve the sustainable management of all SSSIs by securing the commitment of owners and occupiers
- Increase the populations and distributions of priority species to specified levels
- Establish a strong constituency of support for nature conservation and for English Nature
- Increase the opportunities for people to take action for, and to experience, wildlife and natural features
- Develop the practice of sustainability, including the promotion of personal stewardship
- Seek widespread acceptance of environmental quality standards and the use of environmental appraisal and audit.

Our priorities for 1996/97 were summarised in our Work Plan, published in May 1996. The major items are listed here:

- To implement the UK Biodiversity Action Plan habitats and species targets, through our work on SSSIs and by extending the Species Recovery Programme to 35 species; by starting a new project on habitat restoration and by continuing our projects on lowland heathlands, estuaries, Natural Areas and veteran trees.
- Undertake consultation on the remaining sites proposed as Special Areas of Conservation (SACs) under the Habitats Directive and resolve casework which has arisen on sites subject to earlier consultation. Of particular importance will be the development of conservation objectives for marine SACs and the preparation of outline management plans for some of these sites.

- To provide high quality advice to Government, especially on statutory consultations, the reform of the Common Agricultural Policy and the implementation of the strategy on sustainable development.
- To continue to increase the area of Sites of Special Scientific Interest (SSSIs) appropriately managed through our Wildlife Enhancement Schemes and Reserves Enhancement Scheme, the preparation of site management statements, the regular recording of the condition of sites and contact with owners and occupiers of SSSIs.
- To complete the *Character of England* map jointly with the Countryside Commission and English Heritage and to complete full profiles for 116 Natural Areas.
- To ensure our information on the natural environment is made accessible, and to produce reports of the findings of our sample surveys of SSSIs.
- To ensure all National Nature Reserves have management plans and maintain the level of management necessary to ensure they achieve their management objectives.
- To implement our contribution to the UK Biodiversity Action Plan objectives in relation to public awareness and involvement through our publications and grant schemes, especially Rural Action, and through our work on community involvement and access to National Nature Reserves.
- To implement the agreed action plan with the Countryside Commission to strengthen existing collaborative projects and to implement new projects which provide good opportunities to share expertise and achieve good value for money.



- To continue to improve our resource management information systems.
- To update the IT network and install an electronic mail system, and to develop the next stage of English Nature's site information system (ENSIS)

Organisational development priorities included the completion of the pay and grading project with the introduction of a new pay banding system and adjustments to terms and conditions of service for staff.

English Nature's grant-in-aid for 1996/97 was £39.166 million. During the year English Nature also received a total of £716,078 from the European Life Funds, the first instalment of the £2 million grant for the Marine Special Areas for Conservation project. A sum of £2.517 million was allocated to the Joint Nature Conservation Committee (JNCC).

The following pages describe the programmes of work carried out during the year.

Natural Areas

Natural Areas provide English Nature with a way of interpreting the ecological variations of the country in terms of natural features, illustrating the distinctions between one area and another. Each Natural Area has a unique identity resulting from the interaction of wildlife, landforms, land use and human impact.

The character of each Natural Area is described in a Profile, and these form the basis for much of our work. The conservation community in each area has an input into developing its own Natural Area Profile, and several have been written jointly by ourselves and our partners.

Natural Area Profiles help us to plan local action in the context of the national picture. Through a process of description and evaluation we are now able to identify the actions necessary to deliver nature conservation at a range of levels, from local action by local groups, to national initiatives for targeted species and habitats, and policy developments at national or European level.

At every stage we can now identify the nature conservation benefits that each action or policy change will deliver, and where in the country they will be most effective.

During the year we were able to use a newly designed database to link Biodiversity Action Plan targets to Natural Areas. We published seven national overviews, prepared by specialists, showing the relative importance of different interest features, and we are currently working on four more.

In conjunction with the Countryside Commission, we launched *The Character of England* map showing landscape, wildlife and natural features. The map and 181 supporting statements summarising the essential nature conservation and landscape character of each area are available both in traditional paper and modern CD format. Ten thousand copies of the map have been distributed, reinforcing our commitment to involve the wider community in our work.

In addition, three papers about Natural Areas and the uses to which they can be put have been published in conference proceedings or books, reflecting the wider dissemination of information which is one of our objectives.

Maritime Natural Areas have proved harder to define than we expected and we have extended the time allowed to prepare these to ensure work on Marine Special Areas of Conservation proceeds as a priority.



Reporting on England's Natural Heritage

England's designated Sites of Special Scientific Interest (SSSIs) hold the best of our plants, animals and geological and landform features. They form the core of the country's variety and wealth of wildlife - its biodiversity.

Conserving them successfully demands the active involvement of the thousands of owners and managers of SSSI land. Gaining their commitment to help us deliver nature conservation objectives on SSSIs is vital. To achieve successful partnerships we need to meet owners and occupiers regularly and explain why their land is of special interest

Implementation of our SSSI monitoring strategy is now in its fourth year with all major programmes underway. The SSSI Information System (ENSIS), the SSSI National Sample Survey and the Site Objective and Site Management Statement programme are nearing the end of development and have become integrated into English Nature's core activities.

The Validation Monitoring and the Conservation Objectives Targets programmes are still being developed. A consultation and information collection exercise was carried out to secure the commitment of local teams and identify sites where work would be of value.

The Natural Areas will provide a framework around which monitoring and reporting can be carried out. During the year reports on heathland and woodland were drafted. The heathland report is now in its final stage awaiting editing while the woodland report is in its first draft, awaiting input from specialists. Collection of upland data for a similar report continues.

English Nature played an important role in establishing the Biodiversity Information Service through the Joint Nature Conservation Committee (JNCC). We worked with the Countryside Council for Wales and Scottish Natural Heritage to prepare the proposal for a National Biodiversity Network and presented a paper to the JNCC common standards workshop, securing agreement for a corporate project on state of the environment reporting.

Key partners in Europe have also been identified. The European Project, established in 1994, aims to ensure that English Nature, along with the JNCC and the Department of the Environment, has a voice in Europe by building links with key organisations and individuals. We are establishing closer working links with a number of European institutions including the European Environment Agency and the European Centre for Nature Conservation.

Government and Agency Policy

English Nature provides Government with specialist advice to provide for soundly based judgments on matters affecting the natural heritage. We play a critical role in informing debate and policy development.

During 1996 we helped to integrate nature conservation priorities into a range of policies relating to agriculture, forestry, the water sector, transport, industry and minerals, planning, local government, National Parks and coastal and marine activities such as flood defence and fisheries. Work was carried out in a variety of ways, using seminars, workshops, joint projects and secondments of staff where appropriate.

English Nature worked with MAFF to review advice on licensing for fish-eating birds, badgers and FEPA licenses. We also contributed to work on reform of the Common Agricultural Policy. We liaised with the RSPB and others to develop views on the proposed Wildlife Bill and we established groups to examine and develop our relationships with MAFF, the Department of the Environment and the Environment Agency.

A shift towards a more strategic approach to policy development, combined with more open debate based on conservation objectives in a Natural Areas framework, has proved powerful. The change has been welcomed by our partners and has enabled a joint approach to achieving biodiversity targets within the development needs of other sectors.

Designation of Special Sites

In England there are now nearly 4,000 Sites of Special Scientific Interest (SSSIs) covering about 935,000 hectares. They are looked after by 23,000 owners and managers. Many are farmers, while others come from statutory, voluntary, commercial and institutional bodies. We continue to work with them to help their stewardship of the country's most precious areas for wildlife.

Our 185 National Nature Reserves cover more than 70,000 hectares. They include the best of our natural heritage of species, habitats and landforms. Wherever possible, we welcome visitors to these special places.

'Approved Bodies' now manage 36 National Nature Reserves, either wholly or in part. They include local authorities, industry, wildlife trusts and other conservation organisations. We want to encourage this trend, to help others manage the new National Nature Reserves which represent the characteristics of each Natural Area within England. We intend to concentrate our resources on the nation's most vulnerable and delicate areas.

We agreed with the Department of the Environment to consult on 54 Special Areas of Conservation (SACs) which are either new or amended sites. Consultations with owners also took place on 12 potential SAC sites which are not yet designated SSSIs. These included five rivers. A third tranche of SACs was submitted to the European Commission.

We also continued to recommend outstanding wetlands and areas sustaining wild birdlife, suitable for international designation as Ramsar sites and Special Protection Areas.

A marine conservation handbook was produced jointly with other agencies and seminars were held for English Nature staff and other relevant authorities for all marine SACs.

Sustainable management of SSSIs

Conserving England's SSSIs is a task which must be undertaken in partnership with others. It demands the active involvement of thousands of owners and managers of land, and local communities which have an interest in their own areas.

We continue to build on the partnerships we have established to deliver our ambitious goal of securing positive management of all SSSIs for nature conservation by the year 2000.

In the last year 2,975 Site Management Statements have been discussed or agreed with owners and occupiers. A further 2,164 are in draft form and 710 of these are under discussion. Priority has been given to Natura 2000 sites, which form almost two thirds of the sites mentioned.

More than 18,000 owners and occupiers have been contacted by Local Teams and we have had face-to-face contact with almost six thousand of them. We have promoted the positive management of sites through agreements following the principles of the Wildlife Enhancement Scheme.

Compensation for profits lost by landowners and managers now represents only 57% of the funding for agreements compared to 81%

in 1992/93, the first year of the Wildlife Enhancement Scheme. Over 900 agreements have been concluded under Wildlife Enhancement Schemes and they cover more than 66,000 ha of SSSI - almost the target set by the Corporate Plan for 1998/9. Grants made to 32 voluntary conservation organisations under the Reserves Enhancement Scheme now cover 16,735 ha of SSSIs.

Four editions of *Sitelines*, our newsletter for owners and occupiers of SSSIs, have been published during the year and several Local Teams are now producing their own newsletters as a way of improving communication. An action plan based on the results of the recent survey of owner and occupier attitudes has been prepared to help us fine tune our products and services for this important group of customers.

National Nature Reserves

National Nature Reserves (NNRs) contain some of England's richest wildlife sites and provide the opportunity for research and demonstration of land management practices which are in sympathy with nature conservation.

An internal review of NNRs was completed in 1995 and a three year programme was set in place to implement its findings. Good progress has been made in the second year of the NNR Review Action Plan.

There are now three site managers' networks covering England to encourage communication and the exchange of best practice for both English Nature's own staff and others who have the responsibility for managing NNRs.

Of the 21 SSSIs where the land is owned or leased by English Nature, eight have been declared as National Nature Reserves and two sites have been leased to partners. Six further reserves have been extended and a number of other extension possibilities are being considered.

Management of three NNRs has been transferred to partners and 36 more are under discussion for transfer of management. In addition a new site acquisition process has been drawn up using the Natural Areas as a guide.

We are constantly looking for ways to encourage visitors and involve the local community in the management of NNRs. There were 37 demonstration events in the last year, showing land owners and others how to introduce sympathetic land management practices which will benefit wildlife.

The Capital Grant Scheme, which provides up to 50 per cent grants for capital works on S35 NNRs, was taken up only slowly. However, the agreed programme for 1997/98 has proved more popular, with £60,000 of the £75,000 available already allocated.

Priority species

The Species Recovery Programme is our primary means of delivering species targets in the *UK Biodiversity Action Plan*, and also contributes to the conservation targets for a range of species for which we have conservation obligations under national and European legislation and other international conventions.

Since the programme began six years ago, English Nature has undertaken projects on 67 species. 22 have now met the initial recovery targets. We have also carried out preliminary work on a further 40 species to determine whether recovery work is needed and feasible.

Plants and animals that are in rapid decline or actually threatened with extinction are our priority. Work on these species is carried out with a growing number of partner organisations and individuals.

Projects concerning popular species such as the dormouse, red kite, natterjack toad and lady's slipper orchid are extremely useful in raising public awareness of threats to species and their conservation needs. Using information from our work we advise land managers and owners on appropriate habitat management for priority species.

During the last year 21 new projects were initiated and 50 projects received money from the Species Recovery Programme Grants Scheme. The complementary Species Action Grants Scheme awarded funds to 11 schemes.

Working in partnership with others continues to be important. This year we set up the Botanical Network to provide advice on a wide range of species issues. We also established strong links with the Environment Agency's Species Protection Group and took forward surveys on a number of species listed under the Habitats Directive.

Our volunteer and contract support proved increasingly effective in dealing with the large volume of casework involving species protected by law. We were also able to provide an increasing input into the development of Local Biodiversity Action Plans. We aim to continue to drive the process of integrating species and habitat conservation targets through the Programme and through our role as champions of the Biodiversity Action Plan.

Increasing opportunities for wider public involvement

English Nature uses a wide range of methods to encourage support for nature conservation across a broad cross section of the public. We use the media, our own publications, events, education and our external training activities to raise awareness and generate enthusiasm.

Our campaigns can be very effective. For example our national publicity campaign centred on National Heath Week, 7 - 15 September 1996 staged more than 220 events across the country, and achieved local and national media coverage.

This year we focused on developing relationships with key allies through a range of initiatives designed to identify the products and services our local partners most need.

The Rural Action Programme continued to bring new people into community conservation projects and Local Teams made use of available grants to involve more people in nature conservation. Seven Voluntary Warden awards were made and a project was undertaken to explore the strategic involvement of volunteers within English Nature.

Our journals continued to be effective. Reader surveys were used to help us target our promotional efforts and maintain our reader interest. English Nature, published six times a year, plays an influential role in raising public awareness of nature conservation issues and attracts a readership of some 13,000 people.

The enquiry service also proved popular, with the number of queries handled rising by 16 per cent to 16,361. In addition an Internet link was established, resulting in 150 contacts each week.

Sustaining the quality of the environment

By 'sustainable development' we mean development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Our focus is on putting sustainable development ideas into practice and advising the Government as it develops a strategy for the UK. We have established partnerships to put sustainability into practice in a number of projects, including the development of estuary plans, work on sensitive marine areas, work with planners and contributions to Agenda 21 debates.

Sustainable development principles have formed the basis of much of our work with the Department of the Environment. We contributed to the relevant industry forum for minerals and waste planning, and supported our work with seminars at a local level on sustainable mineral extraction. We also submitted a number of papers concerning sustainable development in agriculture and forestry and continued our involvement with key Government committees which influence issues relating to land, air and water quality.

Once again, Natural Areas provided a framework for our action programme. We developed the characterisation of farming systems by Natural Area, and prepared guidance on environmentally sensitive farming methods.

A number of other agricultural initiatives were undertaken. For example we advised MAFF on modifications to the Water Fringe Habitat Creation scheme to increase uptake by farmers, and produced papers on subjects such as aerial spraying next to SSSIs and sheep dips and their safe disposal.

Water quality is of increasing public concern. We published *Wildlife* and fresh water: an agenda for sustainable management and continued to develop estuary management plans and shoreline management plans, which now cover virtually the whole of the English coastline. In addition we advanced our understanding of the impacts of air pollution and improved our ability to influence national and European strategies in this field.

Most importantly, we have won support for sustainable development strategies from a wide range of local interest groups with which our Local Teams are closely involved. The partnership approach has proved effective in achieving our goals, and it is one which we would wish to encourage.

The Habitat Restoration Corporate Project was initiated in April 1996 with the aim of demonstrating the extent to which habitat fragmentation can be reversed using existing techniques and incentives. The experience gained will help English Nature to assess the contribution that mechanisms can make towards achieving biodiversity targets in English lowlands.

During 1996/97 all main partners were contacted and their support gained. Trial Areas were established around the Alde Estuary, Suffolk and the Ouse Valley, Buckinghamshire. Contact was made with local farmers at an early stage as there are 70-100 land owners/occupiers in each Trial Area. A programme of baseline surveys have been undertaken within the Trial Areas, identifying the extent and quality of existing habitats. Two further Trial Areas were initiated in Nottinghamshire and Dorset. Local and national leaflets were produced and widely distributed. Local events were held within the Trial Areas.

Managing the organisation

During the year English Nature completed its evaluation of staffing levels and agreed a simplified structure, involving the abolition of 35 recognised grades and the creation of seven pay bands. Permanent staff numbers have declined from 630 in April 1996 to 605 in April 1997.

Team complements and structures have been improved and streamlined in the light of operational experience. The National Partnerships Team is now one entity with an overall team coordinator integrating the work of the three partnership sectors.

The Conservation Resource Monitoring and the Designations Teams have been merged into the Conservation Services Team. In addition, various Local Teams have made improvements to enable them to deliver Natural Area objectives more effectively.



There has been a move to open plan working in English Nature's offices in Peterborough and Monkstone House has now been vacated, with staff moving to Northminster House.

Improvements have also been made in defining overheads and moving toward resource accounting systems based on our nature conservation goals, with a simplified planning system involving fewer Action Programmes. A Human Resource management approach is to be integrated within English Nature's overall strategy following a review of the personnel function.

The introduction of modern information technology systems continued. There are clear signs that both our management and information systems are becoming more efficient and effective. Managers are making use of information in their decision taking with profiles and trends used regularly. Training in the use of ENSIS was completed and workshops held to develop further thinking.

Establishing the desired culture

English Nature has established a culture where flexibility, innovation and quality are actively encouraged. The exchange of positive ideas and best practice helps to ensure that our standards remain high, throughout the organisation.

A programme has been set in place to explore best practice in the teams. Each month a different topic is explored and good practice examples are published in ThENews.

We also look outside our own organisation and visits have been made to companies such as IBM and Anglian Water to compare ways of working. Service standards and the complaints procedure were reviewed in March 1997. Responses from Teams indicate that it will be possible to improve a number of standards. A revised version of English Nature's Charter will be issued during the 1997/98 financial year.

A series of senior executive meetings were programmed with our key partners and customer focus groups were established for the Department of the Environment, the Environment Agency, MAFF and the RSPB. Our partners were actively involved in our strategy review through major conference events at London Zoo and Sunningdale.

Our performance in relation to service standards has improved over the year and there is an acceptance that existing standards can be improved still further. Teams are fully committed to the principles of customer service and continuous improvement as a means of delivering nature conservation objectives.

Performance against the Standards

General conduct

61 per cent of the Teams reported that they met the Service Standards all of the time. The remaining 39 per cent met the Standards most of the time. Of these, the most common reasons given for failure were forgetting to give names on the telephone or not wearing name badges.

General enquiries

Most teams met the Standard. The average response time given was twelve days. Reasons given for not meeting the Standard were pressure of work or staff absences.

Telephone

62 per cent of Teams met the Standard for telephone response all of the time while the remaining 38 per cent met the standard most of the time.



Grants

86 per cent of the Teams met the Standard while 14 per cent did not. The average response time for those teams to whom this Standard is relevant was 18 days.

Publications
All teams met the Standard

Open Government

We are fully committed to the principles of Open Government. We have a public position statement on freedom of access to information on the environment which incorporates our responsibilities under the Environmental Information Regulations. We come under the jurisdiction of the Parliamentary Commissioner for Administration and incorporate this into our complaints system.

In 1996/97 we received 13 requests for information which specifically cited the Open Government Code of Practice or Environmental Information Regulations. Of these, six were refused either wholly or in part due to the sensitive nature of the information requested. All replies were given within the target timescale.

Prompt Payment Code

English Nature have followed the principles of the CBI prompt payers guidelines and our policy is to ensure that all payments are made by the due date. This policy is known throughout the organisation and we have a formal complaints procedure which enables us to deal with suppliers' complaints very quickly.

Complaints

We welcome suggestions and views about our services because they can lead to better working relationships with our partners and customers. Our complaints procedure, published in *English Nature's Charter*, provides an effective means for people to make suggestions

and complaints and have them resolved, whilst improving services and service delivery. During 1996/97 we received 159 complaints on a range of different issues such as standards of service, handling of casework and site management. Our complaints system is based on the principle that complaints are best dealt with on the spot, properly investigated and remedied as quickly as possible.



Sites of Special Scientific Interest

Sites of Special Scientific Interest (SSSIs) form a nationally important series which contributes to the conservation of our natural heritage of wildlife habitats, geological features and landforms. SSSIs are areas of land that have been notified as being of special interest under the Wildlife and Countryside Act 1981 or the National Parks and Access to the Countryside Act 1949. In England SSSIs are notified by English Nature and at 31.3.97 there were 3,912 SSSIs covering 951,680 hectares.

Since 1949, English Nature's predecessors and, more recently, English Nature itself have identified areas of land or water of special interest. Before 1981 these areas, known as SSSIs, were notified to local planning authorities so that consideration could be given to their conservation in the planning process. About 2,600 SSSIs in England were notified in this way.

In 1981 Parliament introduced new legislation to safeguard SSSIs. Under the 1981 Act SSSIs have to be formally notified to the owners and occupiers of the land and the Secretary of State for the Environment, the local planning authority, the Environment Agency, the Water Companies and the Internal Drainage Boards. Sites notified under the 1949 Act remain SSSIs, but the provisions of the 1981 Act relating to owners and occupiers do not apply until the land has been notified to them formally and to the Secretary of State. The process of notifying these existing SSSIs to owners and occupiers is often referred to as 'renotification'. This process is now virtually complete.

Surveys since 1981 have revealed further areas which are of special interest. We continue to notify these areas, which include extensions to some existing SSSIs.

If SSSIs or parts of SSSIs lose their special interest, the SSSI designation is withdrawn by English Nature. This process is known as 'denotification'.



	Number as at 31.3.97	Area (Hectares)
SSSIs notified under the 1981 act	3,904	951,431
SSSIs notified under the 1949 act and awaiting re/denotification	8	249
Total number of SSSIs	3,912	951,680
1949 act SSSIs (whole sites denotified during 1996/7	0	0
1981 act SSSIs (whole sites) denotified during 1996/7	0	0



Management agreements

Management agreements are concluded with owners and occupiers of SSSIs both to protect the sites from operations that would, if carried out, be damaging to them, and to support the management of their natural interest. With increased acceptance that land management for nature conservation is a positive activity, English Nature has been implementing a policy to move away from compensatory agreements and instead promote positive management in partnership with land managers. The development of the Wildlife Enhancement Scheme (WES) plays an important part in this change of emphasis. Management agreements which have been concluded under section 15 of the Countryside Act 1968, but are outwith the Wildlife Enhancement Scheme, are largely compensatory in emphasis, and in 1996/97 we achieved a reduction of 898 in such agreements, this amounting to a corresponding reduction in the area of such agreements of 33,053 hectares.

The agreements in force at 31 March 1997 were as follows:

	Number of	Hectares under	Cost in 96/97
	agreements	agreement	£
Agreements in force	_		
at 31 March 1997	1,432	61,664	4,651,000*
* This figure exc	ludes legal and a	gents fees.	

Our policy is to continue reducing the number and cost of such agreements, and to encourage the use of the Wildlife Enhancement Scheme. Nevertheless the scope for this shift will remain limited by contractual commitments under long term agreements.

Wildlife Enhancement Scheme

The Wildlife Enhancement Scheme gives financial support to land managers in achieving positive management on SSSIs by means of short term agreements of up to five years. These are devised so as to be easily understood by participating land managers. Standard payments may be made for achieving appropriate nature conservation management by means such as grazing, hay cutting, or water control over wet grassland. They may also be made for carrying out specific management works such as hedge laying, tree planting and scrub or bracken control.

In 1996/97 the Scheme was extended with White Peak launched as a further corporate scheme in May, local schemes were developed on the River Lugg in Herefordshire, the River Coquet in Northumbria, and on the wet lowland grasslands of the Vale of York. Throughout the country, wherever possible,



compensatory agreements under section 15 of the Countryside Act 1968 were replaced by individual WES agreements which now emphasise positive management. The total number of WES agreements in force at 31 March 1997 were as follows:

	Number of agreements	Hectares under agreement	Cost in 96/97
WES agreements in	O	O	
force at 31 March 199	937	66,873	1,731,000*
* This figure excludes	legal and agents	s fees.	

Corporate Wildlife Enhancement Schemes. Achievements in 1996/97

Corporate Wildlife Enhancement Scheme Agreements in force at 31 March 1997 and their expenditure:

Scheme	No.	Hectares covered	Annual Payments £k	Capital Works £k
Culm Grasslands	46	826.10	60	8
Pevensey Levels	83	2,031.84	151	16
Coversand Heaths & Peatlands	13	932.23	41	66
Craven Limestone Grasslands	85	3,642.18	182	26
Dorset Heathlands	36	1,991.27	70	140
Thames Basin & Wealden Heaths	31	1,371.75	24	142
Magnesian Limestone Grasslands	29	201.25	20	28
Hereford & Worcester Grasslands	31	100.16	13	32
Avon Levels & Moors	13	48.03	21	7
North Pennine Moorlands	25	6,145.00	37	49
White Peak	38	1,940.00	5	37
Total	430	19,229.81	624	551



Culm Grasslands

Status

The Culm Grasslands are a fascinating complex of wet, acidic grasslands, heaths, fens and mires which provide summer grazing, together with other habitats such as oak woodland, willow/birch scrub and waterlogged areas with meadowsweet and sedges. Since the beginning of the century agricultural improvement has greatly reduced the total area of this habitat. In Devon alone, it is estimated that of 27,000 hectares present in 1900 only a little over 2,700 hectares remain. In recent decades the remaining Culm Grasslands have been turning to scrub because traditional grazing has become uneconomic.

Launched

November 1991

Achievements by 31.3.97

The area of land within the Scheme has increased by 48 hectares, although the number of agreements has fallen marginally. Three agreement areas have been purchased by the Devon Wildlife Trust to establish new nature reserves. and the land in consequence removed from the Scheme. Grazing control on some common land has been enhanced with grazing associations installing cattle grids. Of concern has been the loss of some Culm Grassland to flax production: some other farmers have indicated their interest in taking advantage of the subsidy available for the crop, and have suggested that they may not renew their agreements.

Pevensey Levels

Status

Centuries of husbandry on the Levels has created a system of grazing meadow separated by natural and man-made watercourses. Traditional stock management has produced a rich patchwork of wetland habitats. The key to conserving this area is to keep water levels relatively high in summer for

grazing.

Launched

December 1991



Achievements by 31.3.97

There was a small increase in the number and total hectarage of agreements, but no further significant expansion of the Scheme is envisaged. The completion of Water Level Management Plans is helping to identify localised areas that benefit from seasonal flooding; this has led to increased investment in new sluices, with more effective water control being achieved.

Coversand Heaths and Peatlands.

Status The Coversand Heaths and Peatlands SSSIs are the last

remnants of habitats that were once a prominent feature of Humberside and the Vale of York. Drainage, agricultural improvement, housing and industrial developments and removal of sand and peat have destroyed all but a few

remnants.

Launched May 1992

Achievements by 31.3.97

The area managed under agreements increased from 746 ha to 932 ha, with a new grazing policy agreed on 535 ha of MOD land, and grazing reintroduced on a 34 ha site. In addition the Scheme has supported the erection of 2,500 metres of fencing and the clearance of 30 ha of scrub.

Craven Limestone Grasslands.

Status

The Craven uplands include one of the largest areas of limestone in Britain, most of which is notified as SSSI. Stock-rearing has been carried out here for thousands of years but in the last 40 years livestock numbers have increased significantly and large numbers of rabbits contribute to the heavy grazing. This means that many of the attractive grassland plants are rarely seen in flower or set seed.



Launched December 1992

Achievements

by 31.3.97

The agreements cover approximately 60% of the eligible area, with 3,191 ha managed as grazed land, and 451 ha in woodland enclosures. Payment levels for the grazed land have been revised, and 90% of agreements due for renewal have been completed. Increased resources were applied to woodland regeneration, both under the Scheme and through the Millennium Trust, leading to the restoration of existing woodland, and the creation of new woodland.

Dorset Heathlands

Status Once extending to 40,000 ha Dorset Heathland has now

been reduced to only 5,000 ha by agricultural reclamation, afforestation and development. Almost all of the surviving heathland is SSSI as it is such a rare habitat with a remarkable concentration of rare plants and animals. Without management the valuable open heathland would

gradually be lost to scrub invasion.

Launched August 1994

Achievements by 31.3.97

There was an increase of 154 ha in the area of land managed under the Scheme, with the part that is now grazed increasing from 560 hectares to 703 hectares. A new partnership approach between English Nature and Forest Enterprise, the National Trust and MoD to progressively reestablish grazing over the heathland is proving successful. Under one arrangement Forest Enterprise have agreed to reclaim heathland lost to forestry, and to integrate the management of the heathland with the needs of agriculture, forestry and recreation, over some 150 ha around Morden Bog.



Thames Basin and Wealden Heaths

Status The Thames Basin and Wealden Heaths represent a small

fragment of a once much more extensive habitat.

Historically, heathland has been lost through agricultural intensification, afforestation and development but now the

greatest threat is from neglect and lack of positive management. The decline in traditional commons

management has been a particular problem for many heaths in the area. A large number of rare and endangered species including all six native reptiles are dependent on this land.

Launched July 1994

Achievements by 31.3.97

Agreements have been established over an additional 400 hectares during the year. Although 1,263 ha are ungrazed, 45.5 ha were fenced to enable further land to be brought into grazing management in 1997/98. Bracken control was also achieved over some 47 ha. Expenditure to reclaim areas of heathland totalled over £140,000, with nearly £90,000 being allocated to scrub clearance and control.

Magnesian Limestone Grasslands

Status Magnesian limestone grassland is a nationally scarce habitat

with only 280 ha remaining in England. It is found on small sites scattered along the narrow band of magnesian limestone stretching from Tyne & Wear to Derbyshire. These grasslands support many special plants including rock-rose and bird's-eye primrose and insects such as the uncommon northern brown argus butterfly. Many sites are no longer grazed and are being invaded by coarser grasses and scrub; in other areas overgrazing by horses is a problem.

Launched October 1994

Achievements

by 31.3.97 Agreements have been established over an additional 35 ha, and the Scheme has now reached its target area of 200 ha.



Grazing was re-established over some 23 hectares of previously neglected grassland, with the aid of fencing and the Scheme's area payments. Several hectares were cleared of scrub.

Hereford and Worcester Grasslands

Status The Hereford and Worcester Grassland SSSIs are nationally

scarce, small (on average about 2-3 ha) neutral grassland meadows and pastures. They are rich in special plants such as bird's-foot trefoil, yellow rattle and lady's bedstraw as well as rarer plants like pepper saxifrage and dyer's greenweed. Traditionally these grasslands have been managed through hay cutting and grazing and it is these practices which need

to be supported or reinstated.

Launched January 1995

Achievements

by 31.3.97 Whilst the area of land managed under the Scheme increased by 5 ha, the main achievement has been to carry out works that have facilitated improved management.

out works that have facilitated improved management. Fencing has been erected and scrub cleared, with hay and grazing management restored on a regular basis over several

sites.

Avon Levels and Moors

Status The Avon Levels and Moors SSSIs are important for their

ditches and rhynes which support a wide range of plants and insects. Plants include the nationally scarce rootless duckweed (Britain's smallest flowering plant) and fen pondweed as well as water violet, frogbit and flowering rushes. Many beetles, snails, dragonflies and damselflies also live in the ditches and rhynes. The scheme aims to help farmers manage these watercourses and the land adjacent sympathetically for this wildlife.

Launched November 1995



Achievements by 31.3.97

There are three SSSIs within the Scheme, and 13 agreements have now been established over the majority of the largest farms with eligible land. The agreements serve to protect the wildlife of the rhynes or ditches, and each affords a 3 or 6 metre buffer protection to the rhyne from agricultural operations on adjoining farmland. Significant progress in the reinstatement of disused rhynes has also been made.

North Pennine Moorlands

Status

The North Pennine Moorlands SSSIs are the best examples of the range of moorland types found across the North Pennines. These sites in Yorkshire, Northumberland and Cumbria are important for their blanket bog and heather moorland which support a number of specialised plants and insects. The breeding bird communities associated with these habitats are internationally important for the numbers of species like merlin, short-eared owl, golden plover, curlew, red grouse and black grouse. The scheme is designed to manage the existing heather ground by traditional grazing and burning and to restore heather where it has been lost due to overgrazing to support this wildlife.

Launched

July 1995

Achievements by 31.3.97

The Scheme has been developing successfully, with an increase from 1,837 ha to 6,145 ha in the area managed under agreements. It is proving attractive to managers of both sporting and agricultural land. Changes in heather burning practices have been beneficial, some stock feeding practices have been adjusted, and grips or drains, that have adversely affected the moorland in the past, have been blocked up. Capital has also been provided to erect fences and so facilitate changes to grazing practices. Wintering of sheep off the moorland has been promoted, and the resulting reduction in grazing pressure has enabled the dwarf shrubs to develop.



White Peak

Status

This scheme targets SSSIs on a range of different habitats in the White Peak Natural Area. These habitats include hay meadows, unimproved pastures and dales, tall grasslands, grasslands on lead-rich soils, woodlands, ponds and geological sites. The scheme will pay for the maintenance or restoration of traditional management practices to benefit the wide variety of wildlife in this limestone area. The White Peak is the first major scheme to target a natural area and the first to address geological sites.

Launched

May 1996

Achievements by 31.3.97

In the first full year of the Scheme, agreements have been concluded to support effective conservation management of pastureland. In particular, stock are being put on to pastures later in the year, allowing plants to flower and set seed; the benefit of this practice, as it seeks to promote plant diversity, will be monitored in 1997/98. Capital has been provided to bring neglected pastures into grazing management regimes that enhance the conservation interest.



Joint Statements of Intent

Ministry of Defence

A revised declaration of intent, to replace that of 1992, was agreed and signed on 26 June 1996.

Environment Agency

A Concordat, building on earlier agreements on research and rivers protocol with the National Rivers Authority, was being developed.

Forest Enterprise

A new Joint Statement of Intent, to replace that signed in 1986 with the Forestry Commission, was under discussion at the end of March.

British Aggregate Construction Materials Industry, the Sand and Gravel Association and the Silica and Moulding Sand Association

Discussions with these bodies was well advanced.

Countryside Commission

A third annual Action Plan for closer working to implement the Joint Statement of Intent signed in March 1995 has been agreed for 1997/98 .

In addition, Joint Statements of Intent and rolling Action Plans continued to operate with-

British Association for Shooting and Conservation
British Trust for Conservation Volunteers
The Game Conservancy Trust
The Woodland Trust
The National Trust
English Heritage
The Forestry Commission and the Verderers of the New Forest
Crown Estate (Windsor Park)
National Parks



Nature Conservation Orders

These Orders are made by the Secretary of State for the Environment under Section 29 of the Wildlife and Countryside Act 1981 in order to conserve nature conservation interests on land of national importance or to comply with international obligations. By 31 March 1997, seventeen Nature Conservation Orders remained in force.

Name of Order	Date made	Hectares
The Sandford Heath (Dorset) Nature Conservation Order 1982	9 December 1982	33.18
The Carnkief Pond (Cornwall) Nature Conservation Order 1984	21 September 198	4 2
The Uddens Heath (Dorset) Nature Conservation Order 1984	22 October 1984	17.7
The Upton Heath (Dorset) Nature Conservation Order 1985	22 January 1985	50
The Tealham & Tadham Moors (Somerset) Nature Conservation Order 1985	8 July 1985	16.7
The Westhay Moor (Somerset) Nature Conservation Order 1987	17 June 1987	7.57
The River Hull Headwaters (Humberside) Nature Conservation Order 1989	15 May 1989	2.1
The Upton Heath (Dorset) Nature Conservation Order 1989	1 December 1989	0.5
The Grove Farm (Somerset) Nature Conservation Order 1990	16 February 1990	37
The Helmdon Disused Railway Cutting (Northamptonshire) Nature Conservation Order 1990	31 October 1990	2.8
The Sawston Hall Meadows (Cambridgeshire) Nature Conservation Order 1992	12 November 199	2 2.5



Name of Order	Date made	Hectares
The Kernick & Ottery Meadows (Cornwall) Nature Conservation Order 1993	27 April 1993	5.1
The Lindisfarne (Northumberland) Nature Conservation Order 1993	15 October 1993	344.76
The Lingwood Meadows (Suffolk) Nature Conservation Order 1994	8 February 1994	2.66
The Whetley Meadows (Dorset) Nature Conservation Order 1994	1 July 1994	8.5
The Leven Canal (Humberside) Nature Conservation Order 1995	7 August 1995	22.3
The Syresham Marshy Meadows (Northamptonshire) Nature Conservation Order 1995	1 March 1996	10.6

The following Nature Conservation Orders were revoked or have lapsed between 1 April 1996 and 31 March 1997:

Name of Order	Date revoked	Hectares
The Tealham and Tadham Moors (Somerset) Nature Conservation Order 1983	17 July 1996	28.39
The Wem/Cadney Moss (Shropshire/Clwyd) Nature Conservation Order 1995	24 July 1996	71.4
The Milborne Wick (Somerset) Nature Conservation Order 1996	Lapsed February 1997	1.3

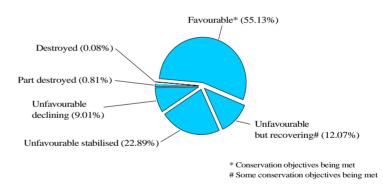


Condition of Sites of Special Scientific Interest 1 April 1996 to 31 March 1997 This year we report on the condition of features on Sites of Special Scientific Interest, in addition to aspects of loss and damage. This provides a better perspective of the overall state of the SSSIs in England, as outlined in *A Statement of Common Standards for Monitoring Designated Sites**.

In 1996/97 English Nature staff carried out over 3,000 visits to 1,714 SSSIs. Using Common Monitoring Standards, the condition of 3,667 features of interest on SSSIs were assessed and information was recorded on current management and causes of any decline in condition. Where a feature was judged to have declined in condition, an assessment was made of the degree of damage and the potential for recovery.

The data on feature condition include all assessments made between April and November 1996 when we began a phased change in our SSSI computer system. Our conclusion is that most SSSIs retain their nature conservation interest.

Overall condition of SSSI features



Overall, the condition of the SSSI series is good, with 67% of all features in favourable or unfavourable but recovering categories, and a further 23% stabilised from decline. The reasons for unfavourable condition of the remaining 10% can be placed in one of three broad categories: chronic long term or ongoing agricultural activities; inadequate positive management; or individual damaging incidents.

^{*}Agreed between the statutory nature conservation agencies and available from the English Nature Enquiry Service.



Chronic long term activities represent the main reason for unfavourable condition of SSSIs, with overgrazing by sheep on some upland grasslands being responsible for most of the reported deterioration by area. In most cases long term recovery is thought likely with appropriate management input.

Insufficient management was responsible for unfavourable condition in 16 reports, mainly on lowland heath, grasslands or wetlands. The largest single example involved the continued decline in condition of 15 hectares of wetland due to scrub invasion. Appropriate positive management can reverse these declines.

Individual damage incidents arising from agriculture occurred at 5 sites, totalling 25.7 hectares. This includes three incidents exceeding 4 hectares; unauthorised ploughing at two sites and drying out of a lowland moss as a consequence of over-deepened drainage.

Development related activities caused small areas of damage at 8 sites totalling 13.4 hectares. Of these, two cases of irrecoverable damage occurred with the loss of approximately 1 hectare of woodland associated with the Newbury bypass (Snelsmore Common) and where 0.9 hectares of grazing marsh were destroyed at Chichester Harbour due to improvements to the sea wall.

Miscellaneous damage accounts for 11 reported incidents, with accidental fire, drought, pollution and recreation the predominant causes. Most of the damage in this category is recoverable with appropriate management or change in weather patterns.

Recovery potential

The irrecoverable level of damage to SSSIs remains low, with only 10 recorded incidents resulting in total or partial loss of a feature of interest on a SSSI. This does not equate to loss of any SSSI as each SSSI may have more than one feature of interest. In 53% of all recorded cases recovery is possible through the application of appropriate management. In a further 19% of cases we anticipate that recovery will be achieved spontaneously through natural processes.



Summary

The general position is that the main adverse impact on SSSIs continues to be agricultural activities, particularly overgrazing in the uplands. The impact of development is limited to a few sites and reflects our strengthening links with local authorities. We accept that a low level of unavoidable damage will always occur due to natural or accidental causes. We have made considerable progress in developing systems for monitoring the condition of features on SSSIs and linking condition to causative factors (both beneficial and damaging). The result of the improvements in monitoring are already being fed into our policies and schemes. We believe that our advice to others is increasingly helping them to focus attention on agricultural impacts and neglect. We are confident that the impact of these developments will be seen in the overall improvement in SSSI condition in future years.

Total number of SSSIs where loss or damage has occurred

Sites with loss of whole (unit) feature	2
Sites with partial loss of (unit) feature	8
Sites with long term recovery of features	26
Sites with short term recovery of features	16
Sites with unknown feature recovery period	13
Total (sites)	65



Damage to Sites of Special Scientific Interest 1 April 1996 to 31 March 1997

- 1 The cases reported are those which involve damage exceeding any of these thresholds:
- a Greater than 0.5 Ha damaged, or
- b Greater than 10% of the SSSI area damaged, or
- c Greater than 100m of a linear feature on the SSSI damaged, or
- d Greater than 10% of a particular habitat or species feature damaged

These thresholds do not necessarily reflect English Nature's view on the severity of individual instances of damage. They are applied to enable comparisons to be made with former reports.

- 2 This report is not exhaustive, especially with regard to cases of gradual deterioration of the special interest due to lack of positive management.
- 3 The definitions below are those used by English Nature and are based on the 'Common Standards for Monitoring' report - Joint Nature Conservation Committee (1993)
- 4 The report is based on damage to site units (management or tenure parcels) rather than whole sites.

"No Recovery, whole feature" - Damage which may result in the

denotification of the whole feature

"No Recovery, part of feature" - Damage which may result in the denotification of part of the feature

"Long Term Recovery" - A reduction in the special interest

which will take more than 3 years for

recovery

"Short Term Recovery" - A reduction in the special interest

taking less than 3 years for recovery.

"Unknown" - Damage where the likelyhood of

recovery cannot be assessed.

Indication is given whether recovery from damage is likely to be spontaneous or requires management.



Cases reported on SSSIs notified under the 1949 Act or renotified under the 1981 Act

	Outcome of damaging activity	Cases	Area (hectares)
Agricultural	No recovery whole feature	1	0.75
activities	No recovery part of feature	4	24.9
	Long Term managed recovery	13	2,980.5
	Short Term managed recovery	5	18.2
	Short Term spontaneous recovery	2	4
Forestry activities	Long Term managed recovery	1	7
Development	No recovery part of feature	2	1.9
activities	Long Term managed recovery	2	2
	Unknown	4	9.45
Recreational	Long Term managed recovery	3	1
activities	Short Term managed recovery	1	1
	Unknown	1	1.5
Insufficient	No recovery whole feature	1	15
Management	Long Term managed recovery	4	17.8
	Short Term managed recovery	5	12.1
	Short Term spontaneous recovery	2	2
	Unknown	4	68
Miscellaneous	No recovery part of feature	2	1
activities	Long Term managed recovery	5	32
(including	Long Term spontaneous recovery		18.5
pollution,	Short Term managed recovery	5 2 5	9
unauthorised	Unknown	5	32.7
tipping and burning)	No Effect	3	1
Total (cases)		77	3,261.3



National Nature Reserves

In the year ended 31 March 1997 we declared 13 new NNRs and made extensions at 6 others - the suite now consists of 185 NNRs, covering 70,561 hectares, with 36 of them partly or wholly managed by an Approved Body (section 35(1)(c) of the Wildlife & Countryside Act 1981). One NNR was removed from the suite in 1996/97 - Braunton Burrows.

Bequest funds

Bequest funds received by English Nature, are used exclusively for the purchase of extensions to National Nature Reserves. We carried forward £114,441.76 from 1995/96 and gratefully received a total of £232,174.83 from the following benefactors -

A L Jones R A Graney V K Caldicott

A total of £72,100 was spent on extensions to the following NNRs during 1996/97 (these areas will be declared in due course)-

South Solway Mosses Fenns, Whixall and Bettisfield Mosses North Meadow Cricklade

Further information about each NNR, including details about access to it, is available from the appropriate Local Team (LT) office - see below.



National Nature Reserves in England: location, size and tenure type

This is a list of National Nature Reserves in England as at 31 March 1997 under section 19 of the National Parks and Access to the Countryside Act 1949 and Section 35 of the 1981 Act.

Key:	LT	=	to identify the relevant Local Team, refer to the listing on pages 134 to 136
	O	=	land owned by English Nature
	L	=	land leased to English Nature
	NRA	=	land held and managed by other parties under Nature Reserve Agreements with English Nature
	S35	=	land held and managed by the specified approved body, declared under section 35(1)(c) of the 1981 Act
	*	=	new NNR declared in 1996/97
	+	=	existing NNR extended in 1996/97
	†	=	existing NNR reduced in area in 1996/97

Reserve	LT	Area (Ha)	Tenure
Ainsdale Sand Dunes, Merseyside	3	492	O
Ant Broads & Marshes, Norfolk (Norfolk Naturalists' Trust and			
British Butterfly Conservation Society Limited)	11	178	S35
Aqualate Mere, Staffordshire	8	192	L
Arne, Dorset	19	9	0
Ashford Hangers, Hampshire			
(Hampshire County Council)	17	147	S35
Ashford Hill, Hampshire	17	23	O/L
Ashtead Common, Surrey			
(Corporation of the City of London)	15	181	S35



Reserve	LT	Area (Ha)	Tenure
Aston Rowant, Oxfordshire	16	129	O/L/NRA
Avon Gorge, Avon	20	63	NRA
Axmouth-Lyme Regis Undercliffs,			
Devon	21	321	O/L/NRA
Barnack Hills and Holes, Cambridgeshire	10	23	L
Barrington Hill, Somerset	20	18	O
Barton Hills, Bedfordshire	10	44	L
Bassenthwaite Lake, Cumbria			
(Lake District Special Planning Board)	2	523	S35
Beacon Hill, Hampshire	17	40	0
Benacre, Suffolk	12	393	O/NRA
Black-a-Tor Copse, Devon	21	29	L
Blackwater Estuary, Essex	13	1,031	L/NRA
Blakeney, Norfolk			
(National Trust)	11	1,097	S35
Blean Woods, Kent	14	90	O
Blelham Bog, Cumbria	2	2	L
Bovey Valley Woodlands, Devon	21	73	O/L
Bradfield Woods, Suffolk			
(Suffolk Wildlife Trust)	12	64	S35
Bredon Hill, Hereford and Worcester	9	45	O
Brettenham Heath, Norfolk	11	233	L
Bridgwater Bay, Somerset	20	2,559	O/L/NRA
Broxbourne Woods, Hertfordshire			
(The Woodland Trust and Hertfordshire			
County Council)	13	237	S35
Buckingham Thick Copse,	4.0	4 ~	T
Northamptonshire	10	45	L
Bure Marshes, Norfolk	11	412	NRA
Burnham Beeches, Buckinghamshire			
(Corporation of the City of London)	16	220	S35
Cabin Hill, Merseyside	3	28	L
Calthorpe Broad, Norfolk	11	44	0
Cassop Vale, Durham	1	24	O/NRA
Castle Bottom, Hampshire			
(Hampshire County Council)	17	29	S35
Castle Eden Dene, Durham	1	221	0



Reserve	LT	Area (Ha)	Tenure
Castle Hill, Lewes, East Sussex	15	47	L
Castor Hanglands, Cambridgeshire	10	90	L
Cavenham Heath, Suffolk	12	204	O/L
Chaddesley Woods, Hereford & Worcester	9	102	0
+ Chartley Moss, Staffordshire	8	44	O/L
Chimney Meadows, Oxfordshire	16	50	0
Chippenham Fen, Cambridgeshire	10	117	L
Chobham Common, Surrey & Berkshire			
(Surrey County Council)	15	517	S35
* Cliburn Moss, Cumbria	2	26	O/L
Clawthorpe Fell, Cumbria	2	14	O/NRA
Collyweston Great Wood & Easton Hornstocks, Northamptonshire			
& Cambridgshire	10	155	L
Colne Estuary, Essex	13	576	L/NRA
Coom Rigg Moss, Northumberland	1	36	L
Cothill, Oxfordshire	16	2	L
Cotswold Commons & Beechwoods,			
Gloucestershire	9	343	O/L/NRA
Dendles Wood, Devon	21	30	0
Dengie, Essex	13	2,366	L
Derbyshire Dales, Derbyshire	7	335	O/L/NRA
Derwent Gorge & Muggleswick			
Woods, Northumberland	1	71	L
Downton Gorge, Hereford & Worcester	9	48	L
 Drumburgh Moss, Cumbria (Cumbria Wildlife Trust) 	2	121	S35
* Duddon Mosses, Cumbria	2	53	O/L
Duncombe Park, North Yorkshire	4	103	NRA
	4	103	INKA
Dunkery and Horner Woods, Somerset (National Trust)	20	1,604	S35
Dunsdon Farm, Devon	21	38	NRA
Ebbor Gorge, Somerset	20	41	L
Farne Islands, Northumberland	~0		
(National Trust)	1	96	S35



Reserve	LT	Area (Ha)	Tenure
Fenns, Whixhall and Bettisfield			
Mosses, Shropshire	8	104	O
Finglandrigg Woods, Cumbria	2	65	0
Forge Valley Woods, North Yorkshire	4	63	NRA
Foster's Green Meadows, Hereford			
& Worcester			
(Worcestershire Wildlife Trust)	9	12	S35
Fyfield Down, Wiltshire	18	248	L
Gait Barrows, Lancashire	3	69	0
Gibraltar Point, Lincolnshire	6	414	S35
(Lincolnshire Trust)			
Golitha Falls, Cornwall	21	18	0
Gordano Valley, Avon	20	66	L
Goss Moor, Cornwall	21	482	O/L
Gowk Bank, Cumbria	2	15	O
Grain Heads Moss, Northumberland	1	18	L
Great Asby Scar, Cumbria	2	307	O/NRA
Greenlee Lough, Northumberland,			
(Northumberland National Park			
Authority and Forestry Commission)	1	57	S35
Hales Wood, Essex	13	8	L
Halsenna Moss, Cumbria	2	24	0
Hambledon Hill, Dorset	19	73	NRA
Hamford Water, Essex			
(Essex Wildlife Trust)	13	1,448	L/NRA/S35
Ham Street Woods, Kent	14	97	O
Ham Wall, Somerset			
(Royal Society for the Protection of Birds)	20	77	S35
Hardington Moor, Somerset	20	9	O
Hartland Moor, Dorset	19	243	O/L
Hatfield Forest, Essex			
(National Trust)	13	392	S35
Hickling Broad, Norfolk	11	487	NRA
Highbury Wood, Gloucestershire	9	47	O
High Halstow, Kent	14	52	NRA



Reserve	LT	Area	Tenure
THE SET YE	ы	(Ha)	Terrure
High Leys, Cumbria	2	9	О
Hog Cliff, Dorset	19	88	0
Holkham, Norfolk	11	3,851	L/NRA
Holme Dunes, Norfolk			
(Norfolk Naturalists' Trust)	11	187	S35
Holme Fen, Cambridgeshire	10	259	O
Holt Heath, Dorset	19	488	L
Holton Heath, Dorset	19	117	L
Humberhead Peatlands,			
South Yorkshire and Humberside			
(Lincolnshire Trust)	5	1,381	O/S35
Ingleborough, North Yorkshire,			
(Yorkshire Wildlife Trust)	4	989	O/L/NRA/S35
Kingley Vale, West Sussex	15	150	O/L
King's Wood Heath and Reach,			
Bedfordshire (Bedfordshire County Council,			
Redland Aggregates Limited and Bedfordshire			
and Cambridgeshire Wildlife Trust)	10	63	S35
Kingston Great Common, Hampshire	17	54	L
Knocking Hoe, Bedfordshire	10	9	NRA
Lady Park Wood, Gloucestershire	9	45	NRA
Leigh, Essex	13	257	L
Lewes Downs, East Sussex	15	49	NRA
Lindisfarne, Northumberland	1	3,541	L
Ling Gill, North Yorkshire	4	5	O
Lower Derwent Valley, East Riding of			
Yorkshire			
(Carstairs Countryside Trust)	4	467	O/NRA/S35
Ludham-Potter Heigham, Norfolk	11	82	0
Lullington Heath, East Sussex	15	63	L
Malham Tarn, North Yorkshire			
(National Trust)	4	137	S35
Martham Broad, Norfolk			
(Norfolk Naturalists' Trust)	11	59	S35
Martin Down, Hampshire			
(Hampshire County Council)	18	342	O/L/S35



Reserve	LT	Area	Tenure
		(Ha)	
Moccas Park, Hereford and Worcester	9	139	NRA
Monks Wood, Cambridgeshire	10	157	0
Moor House, Cumbria	2	3,894	O
Morden Bog, Dorset	19	149	L
Mottey Meadows, Staffordshire	8	37	O/L
Muckle Moss, Northumberland	1	170	NRA
Muston Meadows, Leicestershire	6	9	NRA
Newham Bog, Northumberland	1	13	L
Newtown Harbour, Isle of Wight			
(National Trust)	17	288	S35
North Fen, Cumbria	2	2	L
North Meadow, Cricklade, Wiltshire	18	40	0
North Solent, Hampshire	17	820	NRA
North Walney, Cumbria	2	144	L
Old Winchester Hill, Hampshire	17	63	0
Orfordness-Havergate, Suffolk	12	228	O/NRA
Park Wood, Cumbria	2	15	0
Parsonage Down, Wiltshire	18	276	O
Pevensey Levels, East Sussex			
(Sussex Wildlife Trust)	15	184	O/S35
Pewsey Downs, Wiltshire	18	166	O/NRA
Prescombe Down, Wiltshire	18	47	NRA
Redgrave and Lopham Fen, Norfolk			
and Suffolk	11	125	NRA
Ribble Estuary, Lancashire and			
Merseyside	3	4,520	O/L/NRA
Rodney Stoke, Somerset	20	35	O
Rostherne Mere, Cheshire	8	152	O/NRA
Roudsea Wood and Mosses, Cumbria	2	388	L
Roydon Common, Norfolk			
(Norfolk Naturalists' Trust)	11	181	S35
Rusland Moss, Cumbria	2	24	O/L/NRA
Saltfleetby-Theddlethorpe Dunes,			
Lincolnshire	6	440	O/L
Sandybeck Meadows, Cumbria	2	1	0



	Reserve	LT	Area (Ha)	Tenure
	Scolt Head Island, Norfolk	11	737	L
	Scoska Wood, North Yorkshire	4	10	0
	Shapwick Heath, Somerset	20	390	O/L/NRA
	Slapton Ley, Devon	21	192	NRA
	Somerset Levels, Somerset	20	299	O
	South Solway Mosses, Cumbria	2	560	O/L/NRA
*	Spurn, East Riding of Yorkshire (Yorkshire Wildlife Trust)	4	296	S35
	Stiperstones, Shropshire	8	448	0
	Stoborough Heath, Dorset	19	109	O
	Stodmarsh, Kent	14	163	0
	Studland Heath, Dorset	19	631	L
*	Sutton Park, West Midlands (Birmingham City Council)	8	812	S35
	Swanscombe Skull Site, Kent	14	2	O
	Swanton Novers Woods, Norfolk	11	84	NRA
	Tarn Moss, Cumbria	2	16	L
	Teesmouth, Cleveland	1	355	L
+	The Flits, Hereford and Worcester	9	28	L
	The Lizard, Cornwall	21	1,662	O/L/NRA
	The Swale, Kent	14	220	O/L
	The Wash, Lincolnshire	6	9,899	L
	Thetford Heath, Suffolk	12	94	NRA
	Thornhill Moss and Meadows, Cumbria	2	12	0
	Thrislington, Durham	1	24	NRA
	Thursley, Surrey	15	326	0
	Titchfield Haven, Hampshire			
	(Hampshire County Council)	17	119	S35
	Upper Teesdale, Durham	1	3,493	0
	Upwood Meadows, Cambridgeshire	10	6	NRA
	Walberswick, Suffolk	12	582	O/L/NRA
*	Walton Moss, Cumbria	2	20	O
	Weeting Heath, Norfolk	11	137	NRA
	Wern Moss, Shropshire (Shropshire Wildlife Trust)	8	29	S35



Reserve	LT	Area (Ha)	Tenure
Westhay Moor, Somerset			
(Somserset Wildlife Trust)	20	101	S35
Westleton Heath, Suffolk	12	47	0
Wicken Fen, Cambridgeshire			
(National Trust)	10	240	S35
Winterton Dunes, Norfolk	11	109	L/NRA
Wistman's Wood, Devon	21	170	NRA
Woodwalton Fen, Cambridgeshire	10	208	L
Wren's Nest, West Midlands	8	35	NRA
Wybunbury Moss, Cheshire	8	17	0
Wychwood, Oxfordshire	16	262	NRA
Wye, Kent	14	133	0
Wylye Down, Wiltshire	18	34	O
Wyre Forest, Hereford and Worcester	9	549	O/L/NRA
Yarner Wood, Devon	21	150	O



National Nature Reserves in England: A summary of tenure

By area:	
Tenure	Area declared (ha)
Owned	16,522
Leased	29,797
Nature Reserve Agreement	15,086
Held by Approved Body	9,156
Total	70,561

By number:

Tenure	Number of
N_{ϵ}	ational Nature Reserves
Owned	48
Leased	40
Nature Reserve Agreement	26
Held by Approved Body	30
Owned/leased	12
Owned/Nature Reserve Agreement	7
Leased/Nature Reserve Agreement	4
Owned/Leased/Nature Reserve Agreeme	ent 12
Owned/Leased/Held by Approved Body	1
Owned/Nature Reserve Agreement/Held	
by Approved Body	1
Owned/Held by Approved Body	2
Owned/Leased/Nature Reserve Agreeme	ent/
Held by Approved Body	1
Leased/Nature Reserve Agreement/Held	by
Approved Body	1
Total	185

Yearly totals since 1991

Date	Number of NNRs	Hectares
31 March 1991	128	42,270
31 March 1992	135	46,804
31 March 1993	140	57,424
31 March 1994	150	59,327
31 March 1995	164	65,071
31 March 1996	173	68,222
31 March 1997	185	70,561



Ramsar sites, SPAs and SACs

Ramsar sites

The UK Government signed the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (the Ramsar Convention) in 1973. The Ramsar Convention requires the conservation of wetlands, especially sites 'listed' (designated) under the Convention. Ramsar sites are areas which have been formally 'listed' (designated) as Wetlands of International Importance by the Secretary of State. English Nature carries out consultations on the proposed listing with owners, occupiers and local authorities. English Nature then submits the case for listing to the Department of the Environment.

All 'listed' Ramsar sites are also Sites of Special Scientific Interest. Many sites qualify for both Ramsar and SPA designations.

Details of the protection afforded to Ramsar sites are given in Planning Policy Guidance Note 9, Nature Conservation, HMSO 1994.

Proposed and listed Ramsar sites in England

Name	County	Area listed (ha)	Status	Date listed/ submitted*
Abberton Reservoir	Essex	716.3	Listed (Area revis	24 July 1981 sed September 1990)
Alde-Ore Estuary	Suffolk	2,554.3	Listed	4 October 1996
Avon Valley	Hampshire	-	Submitted	23 June 1994
Benfleet and				
Southend Marshes	Essex	2,251.3	Listed	14 February 1994
Breydon Water	Norfolk	514.5	Listed	29 March 1996
Extended	Norfolk	-	Submitted	26 March 1997
Broadland Ramsar sites				
Bure Marshes	Norfolk	412	Listed	5 January 1976
Hickling Broad and	Norfolk	883.8	Listed	5 January 1976
Horsey Mere				J
Broadland	Norfolk & Suffolk	3,350	Listed	21 September 1994
Chesil Beach				
and The Fleet	Dorset	763	Listed	17 July 1985
Chichester and	Hampshire &			ŭ _i
Langstone Harbours	West Sussex	5,764	Listed	28 October 1987



	_		_	
Name	County	Area	Status	Date listed/
		listed		submitted*
		(ha)		
Chippenham Fen	Cambridgeshire	114.8	Listed	1 March 1992
Deben Estuary	Suffolk		Listed	11 March 1996
Dersingham Bog	Norfolk	159.1	Listed	12 September 1995
Dorset Heathlands	Dorset	-	Submitted	26 March 1997
Duddon Estuary	Cumbria	-	Submitted	20 April 1994
Dungeness to Pett Levels	East Sussex &			·
	Kent	-	Submitted	10 September 1993
Esthwaite Water	Cumbria	133.6	Listed	7 November 1991
Exe Estuary	Devon	2,388.6	Listed	11 March 1992
Hamford Water	Essex	2,179.3	Listed	8 June 1993
Holburn Lake & Moss	Northumberland	d 22	Listed	17 July 1985
Humber Flats, Marshes a	nd Coast Rams	ar sites		
Humber Flats,				
Marshes and Coast				
Phase 1	Humberside 1	5,230.3	Listed	28 July 1994
Phase 1	Humberside 1: & Lincolnshire	5,230.3	Listed	28 July 1994
Phase 1 Phase 2		,	Listed Submitted	28 July 1994 30 March 1994
	& Lincolnshire	-		J
Phase 2	& Lincolnshire Humberside	608	Submitted	30 March 1994
Phase 2	& Lincolnshire Humberside Cumbria &	608	Submitted	30 March 1994
Phase 2 Irthinghead Mires	& Lincolnshire Humberside Cumbria & Northumberland	608 d 124	Submitted Listed	30 March 1994 17 July 1985
Phase 2 Irthinghead Mires Leighton Moss	& Lincolnshire Humberside Cumbria & Northumberland Lancashire	608 d 124 d 3,123	Submitted Listed	30 March 1994 17 July 1985 28 November 1985
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland	608 d 124 d 3,123	Submitted Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland	608 d 124 d 3,123 502.1	Submitted Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra Derwent Ings	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland	608 d 124 d 3,123 502.1	Submitted Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland msar sites North Yorkshire	608 d 124 d 3,123 502.1 e 783 306.4	Submitted Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992 17 July 1985
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra Derwent Ings	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland msar sites North Yorkshire Humberside &	608 d 1 124 d 3,123 502.1 783 306.4	Submitted Listed Listed Listed Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992 17 July 1985
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra Derwent Ings Lower Derwent Valley	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland msar sites North Yorkshire Humberside & North Yorkshire	608 d 1 124 d 3,123 502.1 783 306.4	Submitted Listed Listed Listed Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992 17 July 1985 8 June 1993
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra Derwent Ings Lower Derwent Valley Malham Tarn Martin Mere	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland msar sites North Yorkshire Humberside & North Yorkshire North Yorkshire	608 d 1 124 d 3,123 502.1 783 306.4	Submitted Listed Listed Listed Listed Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992 17 July 1985 8 June 1993 28 October 1993
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra Derwent Ings Lower Derwent Valley Malham Tarn	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland msar sites North Yorkshire Humberside & North Yorkshire North Yorkshire Lancashire	608 d 124 d 3,123 502.1 e 783 306.4 e 288.8 119	Submitted Listed Listed Listed Listed Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992 17 July 1985 8 June 1993 28 October 1993
Phase 2 Irthinghead Mires Leighton Moss Lindisfarne extended Lower Derwent Valley Ra Derwent Ings Lower Derwent Valley Malham Tarn Martin Mere Medway Estuary	& Lincolnshire Humberside Cumbria & Northumberland Lancashire Northumberland msar sites North Yorkshire Humberside & North Yorkshire North Yorkshire Lancashire	608 d 124 d 3,123 502.1 e 783 306.4 e 288.8 119	Submitted Listed Listed Listed Listed Listed Listed Listed Listed	30 March 1994 17 July 1985 28 November 1985 5 January 1976 11 March 1992 17 July 1985 8 June 1993 28 October 1993 28 November 1985



	_		_	
Name	County	listed	Status	Date listed/ submitted*
		(ha)		
Mid-Essex Coast Ramsar	sites			
Dengie (Mid-Essex Coast				
Phase 1)		3,127.2	Listed	24 March 1994
Colne Estuary (Mid-Essex	Essex			
Coast Phase 2)		2,701.4	Listed	28 July 1994
River Crouch Marshes				·
(Mid-Essex Coast				
Phase 3)	Essex	905.7	Listed	24 March 1995
Old Hall Marshes (Part of	Essex			
Blackwater Estuary)		627.1	Listed	11 March 1992
Blackwater Estuary (Mid-				
Essex Coast Phase 4)	Essex	3,657.1	Listed	12 May 1995
Foulness (Mid-Essex				
Coast Phase 5)	Essex	10,968.9	Listed	4 October 1996
Midland Meres and Moss	es Ramsar sit	es		
Rostherne Mere	Cheshire	79	Listed	24 July 1981
Midland Meres and				
Mosses Phase 1	Cheshire,	513.2	Listed	9 May 1994
Midland Meres and	Shropshire,			
Mosses Phase 2	Staffordshire			
	& Clwyd	1,588.26	Listed	2 February 1997
Minsmere-Walberswick	Suffolk	1,697	Listed	5 January 1976
extended		307.7	Listed	19 May 1992
Morecambe Bay	Cumbria &			
	Lancashire	39,759.5		4 October 1996
Nene Washes	Cambridgeshi		Listed	5 March 1993
New Forest	Hampshire	28,001.2		22 September 1993
Northumberland Coast	Northumberla			25 March 1994
North Norfolk Coast	Norfolk		Listed	5 January 1976
extended			Listed	20 January 1989
Ouse Washes	Cambridgeshi & Norfolk	ire 2,276	Listed	5 January 1976
extended		127		5 March 1993
Pagham Harbour	West Sussex		Listed	30 March 1988
Pevensey Levels	East Sussex		Submitted	7 February 1996
Poole Harbour	Dorset		Submitted	7 April 1994
Portsmouth Harbour	Hampshire	1,248.4	Listed	28 February 1995



Name	County	Area listed (ha)	Status	Date listed/ submitted*
Redgrave and South	Norfolk &			
Lopham Fens	Suffolk	124.9	Listed	15 February 1991
Ribble and Alt Estuaries I				
Alt Estuary	Merseyside	1,160	Listed	28 November 1985
Ribble and Alt Estuaries				4071
Phase 2	Lancashire & 1	12,120.2	Listed	16 February 1995
	Merseyside	1041		7 M 1 1000
Roydon Common	Norfolk		Listed	5 March 1993
Rutland Water	Leicestershire	1,339	Listed	4 October 1991
Severn Estuary Ramsar s		0.700	Titara	۳ I 1070
Bridgwater Bay	Somerset		Listed Listed	5 January 1976
Upper Severn Estuary Severn Estuary	Gloucestershire Avon. 2	20.512.7		5 February 1988 13 July 1995
Severil Estuary	Gloucestershire Somerset, Gwent & South Glamorg	,	Listeu	13 July 1993
Remainder of the Site	South Granier	-	Re-submitte	ed 1 June 1994
Solent and Southampton	Hampshire &			
Water	Isle of Wight	-	Submitted	31 March 1996
Water Somerset Levels		-	Submitted	31 March 1996
		-	Submitted Submitted	31 March 1996 6 March 1996
Somerset Levels	Isle of Wight	- 481.3		
Somerset Levels and Moors	Isle of Wight Somerset Kent	- 481.3 3,334.1	Submitted Listed	6 March 1996
Somerset Levels and Moors Stodmarsh	Isle of Wight Somerset Kent Essex &		Submitted Listed	6 March 1996 16 December 1993
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries	Isle of Wight Somerset Kent Essex &	3,334.1	Submitted Listed	6 March 1996 16 December 1993
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries Teesmouth & Cleveland	Isle of Wight Somerset Kent Essex & Suffolk	3,334.1	Submitted Listed	6 March 1996 16 December 1993 13 July 1994
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries Teesmouth & Cleveland Coast	Isle of Wight Somerset Kent Essex & Suffolk	3,334.1 941.7	Submitted Listed	6 March 1996 16 December 1993 13 July 1994
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries Teesmouth & Cleveland Coast Thanet Coast & Sandwich Bay Thames Estuary	Isle of Wight Somerset Kent Essex & Suffolk Cleveland Kent	3,334.1 941.7	Submitted Listed Listed Listed Listed	6 March 1996 16 December 1993 13 July 1994 15 August 1995 28 July 1994
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries Teesmouth & Cleveland Coast Thanet Coast & Sandwich Bay Thames Estuary and Marshes	Isle of Wight Somerset Kent Essex & Suffolk Cleveland Kent Essex & Kent	3,334.1 941.7	Submitted Listed Listed	6 March 1996 16 December 1993 13 July 1994 15 August 1995
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries Teesmouth & Cleveland Coast Thanet Coast & Sandwich Bay Thames Estuary	Isle of Wight Somerset Kent Essex & Suffolk Cleveland Kent	3,334.1 941.7 2,183	Submitted Listed Listed Listed Listed	6 March 1996 16 December 1993 13 July 1994 15 August 1995 28 July 1994
Somerset Levels and Moors Stodmarsh Stour & Orwell Estuaries Teesmouth & Cleveland Coast Thanet Coast & Sandwich Bay Thames Estuary and Marshes	Isle of Wight Somerset Kent Essex & Suffolk Cleveland Kent Essex & Kent Cheshire, Merseyside	3,334.1 941.7 2,183 - 13,055	Submitted Listed Listed Listed Listed Submitted	6 March 1996 16 December 1993 13 July 1994 15 August 1995 28 July 1994 10 December 1993



Name	County	Area listed (ha)	Status	Date listed/ submitted*
The Wash Ramsar sites				
The Wash	Lincolnshire & Norfolk	63,124	Listed	30 March 1988
Gibraltar Point	Lincolnshire	414	Listed	5 March 1993
Thursley & Ockley Bog	Surrey	265.2	Listed	14 February 1994
Upper Solway Ramsar sit	tes			
Rockcliffe Marshes Upper Solway Flats	Cumbria	1,897	Listed	1 October 1986
and Marshes	Cumbria, Dumfries & Galloway	28,053	Listed	30 November 1992
Walmore Common	Gloucestershire	51.4	Listed	5 December 1991
Wicken Fen	Cambridgeshire	254.4	Listed	12 September 1995
Woodwalton Fen	Cambridgeshire	208.1	Listed	12 September 1995

^{*} Submitted - English Nature has carried out public consultations on the proposed listing on behalf of the Department of the Environment. Area figures are only available for listed Ramsar sites.



Special Protection Areas

Directive 79/409 on the Conservation of Wild Birds ('the Birds Directive') was adopted on 2 April 1979. The Directive applies to birds, their eggs, nests and habitats. It provides for the protection, management and control of all species of naturally occurring wild birds in the European territory of Member States. It requires Member States to take measures to preserve a sufficient diversity of habitats for all species of wild birds naturally occurring within their territories in order to maintain populations at ecologically and scientifically sound levels. It also requires Member States to take special measures to conserve the habitats of certain particularly rare species and of migratory species. These special measures include the 'classification' (designation) of Special Protection Areas (SPAs). Special Protection Areas are classified by the Secretary of State.

English Nature carries out consultations on the proposed classifications with owners, occupiers, and local authorities. English Nature then submits the case for site classification to the Department of the Environment.

All classified SPAs are also Sites of Special Scientific Interest. Many sites qualify for both SPA and Ramsar designations.

Details of the protection afforded to Special Protection Areas are given in Planning Policy Guidance Note 9, Nature Conservation, HMSO 1994.

Potential⁺ and classified Special Protection Areas in England

Name	County	Area classified (ha)		Date classified/ submitted*
Abberton Reservoir	Essex	716	Classified	5 December 1991
Alde-Ore Estuary	Suffolk	2,437.3	Classified	4 October 1996
Ashdown Forest	East Sussex	3,206.8	Classified	11 March 1996
Avon Valley	Hampshire	-	Submitted	23 June 1994
Benacre Broad to				
Easton Bavents	Suffolk	516.8	Classified	4 October 1996
Benfleet and Southend				
Marshes	Essex	2,251.3	Classified	14 February 1994
Bowland Fells	Lancashire	15,759	Classified	16 December 1993
Breydon Water	Norfolk	514.5	Classified	29 March 1996
Extended	Norfolk	-	Submitted	26 March 1997
Broadland	Norfolk			
	& Suffolk	4,645.9	Classified	21 September 1994

⁺ Only those potential SPAs on which consultations with owners, occupiers and local authorities have been carried out are listed.



	~		~	5 1 10 11
Name	County		Status	Date classified/
	C	lassified		submitted*
		(ha)		
Chesil Beach and				
The Fleet	Dorset	763	Classified	17 July 1985
Chew Valley Lake	Avon	565	Classified	17 July 1985
Chichester and	West Sussex			-
Langstone Harbours	& Hampshire	5.764	Classified	28 October 1987
Coquet Island	Northumberla		Classified	17 July 1985
Deben Estuary	Suffolk		Classified	11 March 1996
Dorset Heathlands	Dorset		Submitted	23 March 1993
Extended	Dorset	_		26 March 1997
Duddon Estuary	Cumbria	_	Submitted	20 April 1994
Dungeness to Pett Levels		-	Submitted	10 September 1993
East Devon Heaths	Devon	-	Submitted	14 October 1992
Exe Estuary	Devon	2,388.6	Classified	11 March 1992
Farne Islands	Northumberla			17 July 1985
Flamborough Head and				,
Bempton Cliffs	Humberside	211.5	Classified	5 March 1993
Great Yarmouth North				
Denes	Norfolk	146.2	Classified	5 March 1993
Hamford Water	Essex	2,179.3	Classified	8 June 1993
Holburn Lake and Moss	Northumberla	nd 22	Classified	17 July 1985
Hornsea Mere	Humberside	230	Classified	5 March 1993
Humber Flats, Marshes a	nd Coast SPA	\S		
Humber Flats Marshes				
and Coast Phase 1	Humberside 8	Z		
	Lincolnshire	15,230.3	Classified	28 July 1994
Phase 2	Humberside	-	Submitted	30 March 1994
Lee Valley	Greater Londo	on -	Submitted	26 March 1991
Leighton Moss	Lancashire	124	Classified	28 November 1985
Lindisfarne	Northumberla	nd3,625.1	Classified	11 March 1992
Lower Derwent Valley SP	As			
Derwent Ings	North Yorkshi	ire 783	Classified	17 July 1985
Lower Derwent Valley	Humberside 8	306.4	Classified	8 June 1993
	North Yorkshi	ire		
Martin Mere	Lancashire	119	Classified	28 November 1985
Medway Estuary				
and Marshes	Kent	4,681.8	Classified	15 December 1993



Name	County	Area classified (ha)	Status	Date classified/ submitted*
Mersey Estuary	Merseyside & Cheshire	5,004.4	Classified	20 December 1995
Mid-Essex Coast SPAs				
Dengie (Mid-Essex Coast				
Phase 1)	Essex	3,127.2	Classified	24 March 1994
Colne Estuary (Mid-				
Essex Coast Phase 2)	Essex	2,701.4	Classified	28 July 1994
River Crouch Marshes				
(Mid-Essex Coast Phase 3)		905.7	Classified	24 March 1995
Old Hall Marshes (Part of	Essex			
Blackwater Estuary)		627.1	Classified	11 March 1992
Blackwater Estuary (Mid-E				
Coast Phase 4)	Essex	3,657.1	Classified	12 May 1995
Foulness (Mid-Essex	-	10.000.0	G1 +0 1	40.1.4000
Coast Phase 5)	Essex	10,968.9		4 October 1996
Minsmere-Walberswick	Suffolk	2,000.3	Classified	19 May 1992
Morecambe Bay	Cumbria &	00 750 5	C1 .C. 1	4.0 + 1 1000
N. 187 1	Lancashire		Classified	4 October 1996
Nene Washes	Cambridgeshi		Classified	5 March 1993
New Forest Northumberland Coast	Hampshire Northumberla	28,001.2	Classified Submitted	22 September 1993 25 March 1994
North Norfolk Coast	Northumberia			
North Pennine Moors SP		7,700	Classified	20 January 1989
Moor House	As Cumbria	2 904	Classified	21 August 1002
Moorhouse-Upper Teesdal		3,694	Classified	31 August 1982
(North Pennines Moors	ie			
Phase 1)	Cumbria &	_	Submitted	28 March 1996
Thase 1)	Durham		Submitted	20 March 1990
East Nidderdale Moors	Durnam			
(North Pennine Moors				
Phase 2)	North Yorksh	ire -	Submitted	26 March 1997
Geltsdale and Glendue	1 101 111 1 0111011		Submitted	201111111111111
Fells (North Pennine				
Moors Phase 4)	Cumbria &			
,	Northumberla	ınd -	Submitted	26 March 1997
Cotherstone and Bowes				
Moors (North Pennine				
Moors Phase 5)	Durham	-	Submitted	26 March 1997



Name	County	Area lassified (ha)	Status	Date classified/ submitted*
Orfordness-Havergate	Suffolk	117	Classified	31 August 1982
Ouse Washes	Cambridgeshir & Norfolk	e 2,372	Classified	5 March 1993
Pagham Harbour	West Sussex	616	Classified	30 March 1988
Poole Harbour	Dorset	-	Submitted	7 April 1994
Porton Down	Wiltshire & Hampshire	1,227.4	Classified	3 July 1992
Portsmouth Harbour	Hampshire	1,248.4	Classified	28 February 1995
Ribble and Alt Estuaries S	SPAs			
Alt Estuary	Merseyside	1,160	Classified	28 November 1985
Ribble Estuary	Lancashire	2,182	Classified	31 August 1982
Ribble and Alt Estuaries				
(Phase 2)	Lancashire &			
	Merseyside	8,768.4	Classified	16 February 1995
Rutland Water	Leicestershire	1,540	Classified	4 October 1991
Salisbury Plain	Wiltshire & Hampshire	19,690	Classified	3 November 1993
Severn Estuary SPAs	•			
Upper Severn Estuary Severn Estuary	Gloucestershire Avon,	e 1,357	Classified	5 February 1988
J	Gloucestershire	e,		
	Somerset, Gwe	ent		
	& South			
	Glamorgan	23,215.7	Classified	13 July 1995
Remainder of the site		-	Re-submitted	d 1 June 1994
Solent and Southampton Water	Hampshire & Isle of Wight	-	Submitted	31 March 1996
Somerset Levels and	<u> </u>			
Moors	Somerset	-	Submitted	6 March 1996



Name	County cl	Area assified (ha)	Status	Date classified submitted	
South Pennine Moors SP South Pennine Moors	As				
Phase 1	Derbyshire, Greater Manch South Yorkshir Staffordshire & West Yorkshire	ester, e,	Classified	29 March 199	6
South Pennine Moors					
Phase 2	West Yorkshire	&			
	Lancashire	-	Submitted	14 August 199	
Stodmarsh	Kent	481.3	Classified	16 December 199	
Stour and Orwell	Suffolk &	3,334.1	Classified	13 July 199	14
Estuaries	Essex				
Tamar Estuaries					
Complex	Cornwall	-	Submitted	31 March 199	16
Teesmouth and Cleveland	d				
Coast	Cleveland	941.7	Classified	15 August 199	15
Thames Basin Heaths	Berkshire, Hampshire & Surrey	_	Submitted	26 March 199	97
Thames Estuary and					
Marshes	Essex & Kent		Submitted	10 September 199	3
Thanet Coast and				•	
Sandwich Bay	Kent	1,877	Classified	28 July 199	4
The Dee Estuary	Cheshire, Merseyside& Clwyd	13,055	Classified	17 July 198	55
The Swale	Kent	113	Classified	31 August 198	12
extended		5,722	Classified	17 July 198	5
further extended		421.7	Classified	15 December 199	3
The Wash SPAs					
Gibraltar Point	Lincolnshire		Classified	5 March 199	13
The Wash	Lincolnshire & Norfolk	63,124	Classified	30 March 198	8



Name	County cl	Area assified (ha)	Status	Date classified/ submitted*
Upper Solway SPAs Rockcliffe Marsh (Part of Upper Solway Flats and Marshes) Upper Solway Flats and Marshes	Cumbria Cumbria,	1,897	Classified	1 October 1986
and iviaisnes	Dumfries & Galloway	28,053	Classified	30 November 1992
Walmore Common	Gloucestershire	51.4	Classified	5 December 1991
Wealden Heaths SPAs Thursley, Hankley and Frensham Commons				
(Wealden Heaths Phase 1) Wealden Heaths Phase 2	Surrey & Hampshire Hampshire, Surrey &	1,869.9	Classified	14 February 1994
	W Sussex	-	Submitted	17 June 1994

 $^{^{}st}$ Submitted - English Nature has carried out public consultations on the proposed classification on behalf of the Department of the Environment. Area figures are only available for classified SPAs.



Special Areas of Conservation

Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the 'Habitats Directive') was adopted on 21 May 1992. It contributes to the conservation of biodiversity by requiring Member States to take measures to maintain or restore habitats and species at a favourable conservation status in the Community, giving effect to both site and species protection objectives. Following a period of consultation, sites to be designated as Special Areas of Conservation (SACs) must be agreed with the European Commission by June 1998.

English Nature has carried out consultations on behalf of the Department of the Environment with owners, occupiers, local authorities and other interested parties on 127 possible SACs in England. On 20 June 1995, the Department of the Environment sent a list of 51 candidate SACs in England to the European Commission, followed by a further 50 sites on 8 January 1996 and 12 sites on 16 October 1996.

Details of the protection afforded to candidate SACs are given in Planning Policy Guidance Note 9, Nature Conservation, HMSO 1994.

Candidate and possible SACs⁺

Name	County A	rea (ha)+	Status*	Date sent to European Commission
A 1 C 1	G 1:	0.000.77	C 1: 1 :	0.1.00
Asby Complex	Cumbria	3,080.77	Candidate	8.1.96
Avon Gorge Woodlands	Avon	152.35	Candidate	8.1.96
Bath and Bradford-	Avon &			
on-Avon Bats	Wiltshire	131.42	Candidate	8.1.96
Beer Quarry and Caves	Devon	31.1	Candidate	20.6.95
Benacre to Easton				
Bavents Lagoons	Suffolk	367.08	Candidate	20.6.95
Berwickshire and North	Berwickshire &			
Northumberland Coast	Northumberland	65,280.6	Candidate	16.10.96
Birklands and Bilhaugh	Nottinghamshire	270.96	Candidate	20.6.95
Blean Complex	Kent	392.88	Candidate	20.6.95
Border Mires,	Cumbria &			
Kielder - Butterburn	Northumberland	8,188	Candidate	16.10.96

Area figures are only available for candidate SACs.



Name	County	Area (ha)+	Status	Date sent to
				European
				Commission
Borrowdale Woodland				
Complex	Cumbria	667.82	Candidate	20.6.95
Braunton Burrows	Devon	1,346.66	Candidate	8.1.96
Breckland	Norfolk &			
	Suffolk	7,600.12	Candidate	8.1.96
Bredon Hill	Hereford &			
	Worcester	359.86	Candidate	20.6.95
Cannock Extension Canal				
	& West Midlan		Candidate	20.6.95
Carrine Common	Cornwall	45.86	Candidate	20.6.95
Castle Eden Dene	Durham	191.11	Candidate	20.6.95
Castle Hill	East Sussex	114.67	Candidate	20.6.95
Chesil and the Fleet	Dorset	1,631.8	Candidate	16.10.96
Chilmark Quarries	Wiltshire	9.7	Candidate	20.6.95
Chilterns Beechwoods	Buckinghamshi	re		
	& Oxfordshire	523.02	Candidate	20.6.95
Cothill Fen	Oxfordshire	43.55	Candidate	20.6.95
Cotswold Beechwoods	Gloucestershire	585.85	Candidate	8.1.96
Craven Limestone				
Complex	North Yorkshir	e -	Possible	-
Culm Grasslands	Devon	768.68	Candidate	20.6.95
Dartmoor	Devon	22,864.57	Candidate	8.1.96
Dorset Heaths (Purbeck				
and Wareham)	Dorset	-	Possible	-
Dorset Heaths	Dorset & Hamp	oshire -	Possible	-
Downton Gorge	Hereford &			
8	Worcester	69.3	Candidate	8.1.96
Drigg Coast	Cumbria	1,390.56	Candidate	8.1.96
Duddon Mosses	Cumbria	313.06	Candidate	8.1.96
Dungeness	East Sussex			
6	& Kent	3,121.47	Candidate	8.1.96
East Devon Pebblebed		.,		
Heaths	Devon	_	Possible	_
East Hampshire Hangers		391.96	Candidate	20.6.95
Ebernoe Common	West Sussex	133.94	Candidate	20.6.95
Ensor's Pool	Warwickshire	3.8	Candidate	8.1.96
	, ar wicholine	0.0	Canadatt	0.1.00



NI	C	A (1) +	Ctataaa	D-4
Name	County	Area (ha)+	Status	Date sent to
				European
				Commission
Epping Forest	Essex	1,604.95	Candidate	8.1.96
Essex Estuaries	Essex	46,519.4	Candidate	16.10.96
Fal and Helford	Cornwall	5,677.2	Candidate	16.10.96
Fenland	Cambridgeshir	re 618.63	Candidate	20.6.95
Fenn's, Whixall,	Shropshire &			
Bettisfield, Wem and	Clwyd	946.97	Candidate	8.1.96
Cadney Mosses	· ·			
Flamborough Head	Humberside			
_	& North			
	Yorkshire	6,469.85	Candidate	8.1.96
Folkestone to Etchinghill				
Escarpment	Kent	181.95	Candidate	8.1.96
Fontmell and Melbury				
Downs	Dorset	261.1	Candidate	8.1.96
Gang Mine	Derbyshire	8.25	Candidate	20.6.95
Godrevy Head to				
St Agnes	Cornwall	128.07	Candidate	20.6.95
Great Yews	Wiltshire	28.71	Candidate	20.6.95
Helvellyn and Fairfield	Cumbria	2,487.64	Candidate	20.6.95
Holme Moor and				
Clean Moor	Somerset	7.58	Candidate	20.6.95
Ingleborough Complex	North			
	Yorkshire	-	Possible	-
Isle of Portland to				
Studland Cliffs	Dorset	-	Possible	-
Isle of Wight Downs	Isle of Wight	461.8	Candidate	20.6.95
Isles of Scilly Complex	Isles of Scilly	26,779.39	Candidate	8.1.96
Kennet and Lambourn	Berkshire,			
Floodplain	Wiltshire	-	Possible	-
Kingley Vale	West Sussex	208.04	Candidate	8.1.96
Lewes Downs	East Sussex	146.85	Candidate	20.6.95
Lower Derwent Valley	Humberside			
	& North Yorks		Candidate	8.1.96
Lundy	Devon	3,098.87	Candidate	8.1.96
Lydden and Temple				
Ewell Downs	Kent	61.69	Candidate	20.6.95



Name	County	Area (ha)+	Status	Date sent to European Commission
Mells Valley	Somerset	28.22	Candidate	8.1.96
Minsmere to Walberswick	K			
Heaths and Marshes	Suffolk	1,265.52	Candidate	20.6.95
Mole Gap to Reigate				
Escarpment	Surrey	569.54	Candidate	8.1.96
Moor House -	Cumbria &			
Upper Teesdale	Durham	38,795.99	Candidate	8.1.96
Morecambe Bay	Cumbria &			
Pavements	Lancashire	2,081.7	Candidate	8.1.96
Morecambe Bay	Cumbria &			
	Lancashire	55,304.3	Candidate	16.10.96
Newham Fen	Northumberlar		Candidate	20.6.95
Norfolk Valley Fens	Norfolk	602.63	Candidate	20.6.95
North Meadow and	*****	10100	G 11.1	0.4.00
Clattinger Farm	Wiltshire	104.88	Candidate	8.1.96
North Norfolk Coast and	Norfolk &	0.450.01	G 11.1 .	0.1.00
Gibraltar Point Dunes	Lincolnshire	3,453.81	Candidate	8.1.96
North Northumberland	NT -1 1 1	1 1 100 01	G 11.1 .	00.00
Dunes	Northumberlar		Candidate	20.6.95
North Pennine Dales	Cumbria, Durl North Yorkshir			
Meadows			C d: d-+-	20.0.0
Oak Mere	Northumberlar Cheshire	nd 466.62 68.78	Candidate Candidate	20.6.95
Orfordness-Shingle	Cheshire	08.78	Candidate	20.0.93
Street	Suffolk	1,357.72	Candidate	8.1.96
Ouse Washes	Cambridgeshir		Candidate	6.1.90
Ouse wasnes	& Norfolk	303.88	Candidate	8.1.96
Oxford Meadows	Oxfordshire	265.89	Candidate	20.6.95
Pasturefields Salt Marsh		7.67	Candidate	20.6.95
Peak District Dales	Derbyshire &	7.07	Canadate	20.0.00
Woodlands	Staffordshire	_	Possible	_
Peak District Dales	Derbyshire &		1 OSSIDIC	
	Staffordshire	828	Candidate	8.1.96
Penhale Dunes	Cornwall	625.57	Candidate	8.1.96
Pewsey Downs	Wiltshire	153.86	Candidate	20.6.95
J				



Name	County	Area (ha)+	Status	Date sent to European Commission
Plymouth Sound and Estuaries	Devon & Cornwall	6,298.5	Candidate	16.10.96
Prescombe Down	Wiltshire	76.14	Candidate	20.6.95
Queendown Warren	Kent	14.28	Candidate	20.6.95
Rex Graham Reserve	Suffolk	2.67	Candidate	20.6.95
River Avon	Hampshire, Wiltshire	£.07	Possible	20.0.00
River Itchen	Hampshire	-	Possible	
River Wye	Ceredigion, Gloucestershire Hereford & Wo Monmouthshir Powys	orcestershire,	Possible	
Rodborough Common	Gloucestershire	e 104.3	Candidate	8.1.96
Rooksmoor	Dorset	32.47	Candidate	20.6.95
Roudsea Wood and	201000	02.11	Garraraaco	20.0.00
Mosses	Cumbria	470.3	Candidate	8.1.96
Roydon Common and	NI CII	071.00	C 1:1 4	
Dersingham Bog	Norfolk	351.66	Candidate	8.1.96
Salisbury Plain	Hampshire & Wiltshire	21,113.6	Candidate	8.1.96
Sandwich Bay	Kent	1,190.1	Candidate	8.1.96
Sefton Coast	Merseyside	4,101.86	Candidate	8.1.96
Severn Estuary	Avon, Gloucestershire Somerset, Gwe South Glamor	ent &	Possible	-
Sidmouth to West Bay	Devon & Dorset	897.27	Candidate	8.1.96
Solent and Isle of Wight	Lagoons Hampshire &	001.21		0.1.30
	Isle of Wight	36.3	Candidate	16.10.96
Solent Maritime	Hampshire, Isle of Wight & West Sussex	-	Possible	_



Name	County	Area (ha)+	Status	Date sent to European Commission
				Commission
South Wight Maritime	Isle of Wight	-	Possible	-
Solway Firth	Cumbria,			
	Annandale &			
	Eskdale, Nithso	dale &		
	Stewartry	43,693.8	Candidate	16.10.96
Solway Mosses	Cumbria	1,318.9	Candidate	16.10.96
South Dartmoor Woods	Devon	1,422.63	Candidate	8.1.96
South Hams	Devon	129.97	Candidate	8.1.96
St Albans Head to				
Durlston Head	Dorset	278.61	Candidate	8.1.96
Staverton Park and The				
Thicks, Wantisden	Suffolk	81.45	Candidate	20.6.95
Studland Dunes	Dorset	336.74	Candidate	8.1.96
Thanet Coast	Kent	2,807.8	Candidate	16.10.96
The Broads	Norfolk &			
	Suffolk	4,636.37	Candidate	8.1.96
The Lizard	Cornwall	2,792.59	Candidate	8.1.96
The Mens	West Sussex	203.28	Candidate	20.6.95
The New Forest	Hampshire &			
	Wiltshire	28,714.97	Candidate	20.6.95
The Stiperstones and				
The Hollies	Shropshire	601.57	Candidate	20.6.95
The Wash and North	Norfolk &			
Norfolk Coast	Lincolnshire	107,802	Candidate	16.10.96
Thorne Moor	South Yorkshir	e 975.78	Candidate	20.6.95
Thrislington	Durham	22.72	Candidate	20.6.95
Thursley, Ash, Pirbright				
and Chobham	Surrey	1,867.3	Candidate	8.1.96
Tintagel-Marsland	Cornwall &			
Clovelly Coast	Devon	2,434.91	Candidate	8.1.96
Tregonning Hill	Cornwall	5.21	Candidate	20.6.95
Tyne and Allen				
River Gravels	Northumberlar	nd 36.83	Candidate	20.6.95
Wasdale Screes	Cumbria	343.96	Candidate	20.6.95



Name	County	Area (ha)+	Status	Date sent to European Commission
Wayanay and Little Ouse	Norfolk 8			
Waveney and Little Ouse Valley Fens	Suffolk	193.16	Candidate	8.1.96
West Midlands Mosses	Cheshire,			
	Shropshire &			
	Staffordshire	184.21	Candidate	20.6.95
Windsor Forest and	Berkshire &			
Great Park	Surrey	855.11	Candidate	20.6.95
Winterton-Horsey Dunes	Norfolk	425.94	Candidate	8.1.96
Wormley Hoddesdonpark				
Woods	Hertfordshire	335.52	Candidate	8.1.96
Wye Valley Woodlands	Gloucestershir	e,		
ŭ ŭ	Hereford & W	orcester &		
	Gwent	875.58	Candidate	8.1.96
Wye Valley and Forest	Gloucestershir	e &		
of Dean Bat Sites	Gwent	0.78	Candidate	8.1.96
Wye and Crundale Downs	sKent	112.24	Candidate	20.6.95

^{*} Candidate SACs are possible SACs which have been submitted to the European Commission. Area figures are only available for candidate SACs.



Marine Nature Reserves

In England the Secretary of State for the Environment has the power to declare Marine Nature Reserves. To date only one MNR has been declared.

Reserve	Team	Date of declaration
Lundy, Devon	21	21 November 1986



Environmentally sustainable agriculture

General agricultural policy

English Nature continues to work bilaterally with Government and other statutory agencies in all areas of agricultural policy development and formally through the National Agri-Environment Steering Group (NAESG) and its regional equivalents, and the National Agri-Environment Forum (NAEF). We have extended our technical advice on the interaction of agriculture and environmental issues to the European Commission and equivalent organisations in other Member States.

During 1996/7 we produced a common statement with 11 other European Environmental Advisory Bodies on sustainable land use and reform of the Common Agricultural Policy. This has been promoted within DGVI and DGXI of the European Commission and with non-signatory Member States. We have also presented reports to the Commission on options for change within the EU beef regime and possible implications for the environment of trade liberalisation.

English Nature has advised DoE on the agricultural components of the review of the EU's Fifth Environmental Action Programme and has submitted guidance to the Government Sustainability Panel on Agriculture and Biodiversity and on Subsidies.

In December 1996 we submitted a paper to the NAEF on approaches to an Integrated Rural Policy for the uplands. This follows on from the Cork Declaration in September which highlighted the need for an integrated approach to sustainable land use across the European Union.

To inform our discussions on "greening" the CAP with MAFF and other partners, the country agencies jointly commissioned policy analyses of the sheepmeat regime, further work on the environmental effects of trade liberalisation and a study into the general attitudes of other Member States to CAP reform in order to improve our understanding.

Agri-environment programme

During 1996/7, English Nature provided written and oral evidence to the House of Commons Agriculture Committee Inquiry into UK agrienvironment schemes and to the National Audit Office's review of the Environmentally Sensitive Areas Scheme. Technical advice and guidance was given nationally and locally to the policy review of the first five ESAs which were re-launched in Spring 1997. Initial work has been undertaken for the review of the stage II and III ESAs which will be re-launched in 1998.



We have provided advice to MAFF on the implications for wildlife of proposed changes to the Moorland Scheme and the Countryside Stewardship Scheme

In partnership with the RSPB and the Game Conservancy Trust, we have proposed a pilot Arable Incentive Scheme to MAFF. Ministers have announced that the Scheme will run from 1998 and English Nature will continue to give guidance to MAFF on its implementation.

With MAFF, we have considered the use of our Wildlife Enhancement Schemes for testing and demonstrating the practical implementation of possible future developments of agri-environment schemes, for example, on the River Lugg and the North Pennine moorlands.

We have participated in and provided advice to, NAEF Working Groups on information and advice, and the whole farm approach. We will continue to contribute to these during 1997/8.

Land management practice

During 1996/7, English Nature has continued to work on the Upland Management Handbook and a revised Lowland Grassland Management Handbook, for production later in 1997. These have been developed in conjunction with partners and are designed to be a reference manual for conservation and advisory staff in English Nature and other organisations.

Following the development of the Grazing Index for heather moorland, English Nature has been developing a method for the assessment of the condition of the most widespread upland habitats. The desired condition of a range of vegetation types has been expressed as a number of criteria which can be identified and measured on the ground. Work is now under way to develop a rapid and repeatable method of assessing vegetation against these criteria. It is hoped that this will aid the management and monitoring of upland vegetation by English Nature staff, other land management organisations and land managers themselves.

During 1996/7, we have issued and disseminated a reports on agricultural productivity and nutrient value of lowland semi-natural grassland, the indirect effects of pesticides on wildlife habitats and sustainable grazing practices on Dartmoor and Exmoor.



Species Recovery Programme

English Nature's Species Recovery Programme (SRP), initiated in 1991, consists of a range of partnership projects with, in phase 1, the objective of halting, and for many species reversing, the reduction of the range and numbers of plant and animal populations that are in severe decline or under threat of extinction. Once the initial recovery objectives are achieved, projects move into phase 2 where the longer term objective is to achieve favourable conservation status for these species by restoring sustainable populations in the wild.

In 1996/97 initial recovery projects were undertaken on 47 species, 20 of which were new to the Programme. In the year, initial recovery objectives were met for five of these species (bittern, fen violet, perennial knawel, red squirrel and shore dock). Major supporting projects included work by the Royal Botanic Gardens, Kew, on seed banking, orchid genetics and micropropagation; the Institute of Zoology, London, on conservation genetics and Birmingham University on lepidoptera genetics.

During the year work was continued on 8 species, and initiated on another 12, for which the initial recovery objectives had been met in previous years (the phase 2 programme). Also, preliminary work was carried out on another 37 species to investigate the feasibility of recovery.

Projects generally rely on a combination of survey work and ecological studies to achieve a better understanding of the habitat requirements of endangered species so that site management work can be carefully targeted. Common objectives for recovery projects are:

object	ives for receivery projects are:
	Survey to determine current status of the species.
	Conserving extant populations, monitoring extant and (re)introduced populations.
	Provision of guidelines on site management to site owners and occupiers.
	The production of species action plan targets to achieved favourable conservation status in the longer term.

Reintroduction of species to former sites or their introduction to suitable alternative areas is often undertaken to restore sustainable populations in the wild. All of these projects benefit greatly from the co-operation of the landowners and managers of sites of both existing and re-established populations.



The SRP continues as a high priority for us and makes an important contribution to the UK Biodiversity Action Plan. In 1996/97, work was targeted at 43 species in the Biodiversity Action Plan for which Species Action Plans have been prepared.

The budget for the Species Recovery Programme in 1996/97 was £609,000.

The associated Species Recovery and Species Action Grant Programmes are reported on page 87.



Licences issued by
English Nature's
licensing unit in
1996/97

Deer Act 1991 (Section 11)	Number of licences
Moving deer from one area to another Taking deer for scientific purposes	7 1
Wildlife and Countryside Act 1981 (Section 16)	
Taking, killing, injuring and possessing wild birds and taking destroying and possessing wild birds' nests and eggs	g, damaging,
for scientific purposes	62
for ringing or marking	
for photography	9
for conservation purposes	16
Disturbing wild birds included in Schedule 1 of the Act while	
building a nest or are in, on or near a nest containing eggs or	
disturbing dependent young of such birds	0
for scientific or conservation purposes	158
for photography	73
British Trust for Ornithology ringing scheme	249
British Trust for Ornithology nest recording	39
Royal Society for the Protection of Birds	130
Taking, killing, injuring and possessing wild animals in Sche	dule 5 or 6 of
the Act and disturbing such animals while they are occupying	
or place used for shelter or protection	
for scientific purposes	360
for ringing or marking	73
for conservation purposes	475
for photography	15
Picking, uprooting, destroying and possessing wild plants incl	uded in
Schedule 8 of the Act	
for scientific purposes	15
for conservation purposes	13



Number of licences

English Nature staff licences	
to disturb wild birds included in Schedule 1 of the Act to disturb and take bats	21 21
Protection of Badgers Act 1992	
Killing, taking and interfering with badger setts	
for marking	2
for scientific purposes	2
for conservation purposes	20
Interfering with badger setts	
for development of land	71
for investigation of offences	70
for archaeology	3
for fox control for protecting wildlife	0



Grants

Grants

English Nature is empowered to give grants under Section 134 of the Environmental Protection Act 1990. Our current priorities and policies for grant giving are directly related to our overall strategy. In 1996/97 grants totalling £2,239,000 were given. Of this £11,000 was provided to assist land purchase and £400,000 was English Nature's contribution to Rural Action.

A wide range of organisations in England received grants for a variety of nature conservation projects from the National Conservation Developments Grants Scheme. Some projects which covered Great Britain as a whole were grant-aided in partnership with our sister agencies Scottish Natural Heritage and the Countryside Council for Wales. A number of county based projects which had a national significance were also supported. The 1996/97 expenditure of £245,000 supported 56 projects.

English Nature Local Teams gave grants to support locally based conservation action projects concentrating effort on enriching local biodiversity and natural areas. The 1996/97 expenditure of £580,000 supported 418 projects including 11 Land Purchase Grants.

The Reserves Enhancement Scheme has been expanded to cover 32 Trusts within the Wildlife Trusts Partnership and 3 other Voluntary Conservation Organisations. The aims of the scheme are to enhance the management of SSSI nature reserves, to seek further involvement of volunteers with those reserves, to increase the accessibility of reserves to the public, and to increase the public's understanding and appreciation of the natural heritage. Five-year management grants are given based upon standard payments per hectare within broad habitat types, and 50% grants are also given for capital projects. The 1996/97 expenditure was £765,000.

The Species Recovery Grants Scheme augments the Species Recovery Programme by extending the range of species included and also encourages more partnerships with individuals and organisations. Grants were given for action directed at restoring, maintaining or enhancing populations of species of plants and animals which are in severe decline or under threat of extinction in England. Forty projects contributed to work on species already included in the Species Recovery Programme whilst ten targeted recovery work on additional species including black grouse, field cow wheat, fiery clearwing moth, great-crested newt, giant goby, glow worm, hydnoid fungi, mason wasp and red-barbed ant. The 1996/97 expenditure of £80,000 supported 46 projects.

The complementary Species Action Grants Scheme, new in 1996/97, is part of English Nature's contribution to the UK Biodiversity Action Plan. It targets those species in the UK Biodiversity Steering Group Report for which Species Action Plans have been prepared and which occur in England. Grants are offered to help meet targets for site and species management, research and monitoring, and communication and publicity. During the year grants were given for work on a number of species including brown hare, dormouse, great-crested newt, high-brown and pearl-bordered fritillary butterflies, large copper butterfly, native crayfish, natterjack toad, red squirrel and stone curlew. Grants were also given to Butterfly Conservation and Plantlife to co-ordinate action on a suite of butterflies and plants. The 1996/97 expenditure of £63,000 supported 11 projects.

The enhancement of vital wildlife habitat is also the aim of the National Lowland Heathland Programme. The programme provides grants for management and restoration projects to conserve the heaths of England. The heaths support a number of rare plants and animals and are very important in a European context. The 1996/97 expenditure of £60,000 supported 6 projects.

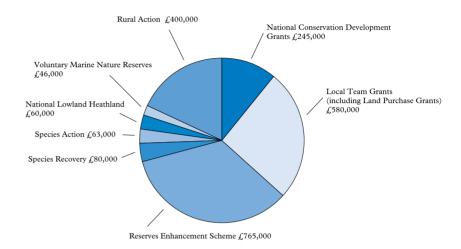
Grants were given to continue our support for marine and inter-tidal areas through the Voluntary Marine Nature Reserve Grants Scheme. The 1996/67 expenditure of £46,000 supported 10 projects (nine existing reserves and one combined reserves project).

Rural Action is sponsored by English Nature, the Countryside Commision and the Rural Development Council, who are working together with their partners: British Trust for Conservation Volunteers, The Wildlife Trusts, ACRE and Shell Better Britain Campaign. Rural Action aims to help people in rural communities to take action to protect and improve their local environment. In 1996/97 Rural Action supported 860 projects many of which involved local people who were new to working on projects to improve their environment. In 1996/97 English Nature contributed £400,000 towards the total budget of £1,200,000.00.

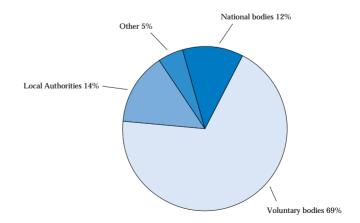


Grants

Funding by grant scheme



% funding by type of recipient (excluding Rural Action)



Land purchase grants

Applicant	Site	Area of land	Grant given
		purchased	given
		(hectares)	
Sussex Wildlife Trust	Ambarlay Woods	30	4 190
	Amberley Woods		4,180
Sussex Wildlife Trust	Eridge Rocks	8.38	5,000
Cairstairs Countryside			
Trust	Ings Land, Barn Farm	42.7	2,500
Tendering Wildfowlers	Hamford Water	60.7	9,000
Wiltshire Wildlife Trust	Clattinger Farm	61.53	75,000
Devon Wildlife Trust	Mambury and Stowford		
	Moors SSSI	15.8	4,375
Devon Wildlife Trust	Kismeldon Meadows SSS	I 6.36	2,750
Devon Wildlife Trust	Kismeldon Meadows SSS	6.31	2,313
Cheshire Wildlife Trust	Heswall Dales	2.9	2,500
Bodminton Trust for Conservation and Education in the			
countryside	Morton Pool	2.03	1,000
Lincolnshire Trust for			
Nature Conservation	Toby's Hill	8.6	2,500



Local Nature Reserves

In England Local Nature Reserves (LNRs) are declared by local authorities in consultation with English Nature under section 21 of the National Parks and Access to the Countryside Act, 1949. For land to be declared as an LNR it must be of special value locally and within the jurisdiction of the planning authority. The local authority must have a legal interest in the land. As a statutory consultee, English Nature can advise on procedures for declaration and the application of byelaws, and on site management. English Nature offers grants to community groups toward managing LNRs, to develop and protect their natural interest and to allow people to enjoy them.

Local authorities have maintained a steady rate of declarations of new LNRs and by the end of March 1997, 566, covering over 20,428 hectares, had been notified to English Nature. 45, covering 1,786 hectares, were listed for the first time in 1996/97.

New Local Nature Reserves in England, notified to English Nature in the year ended 31 March 1997

Reserve name	County/Local authority A		Date of
	he	ctares)	declaration
Anton Lakes	Test Valley Borough Council	33	1996
Ashtead Park	Mole Valley District Council	22	1996
Bourne Valley	Poole Borough Council	48	1996
Brickhill Allotments	Bedford Borough Council	5	1997
Bugdens Copse	East Dorset District Council	6	1996
Cleadon Hills	South Tyneside Metropolitar Borough Council	10	1997
Cocksherd Wood	Slough Borough Council	4	1996
Coppetts Wood and Glebelands	London Borough of Barnet	24	1997
Corfe Hills	East Dorset District Council	1	1996
Covert Way	London Borough, Enfield	7	1996
Crecy Hill (Tackley)	Oxfordshire County Council	2	1997



Reserve name	County/Local authority	Area (in nectares)	Date of declaration
Dearne Valley Park	Barnsley Metropolitan Borough Council	51	1996
Denham Country Park	London Borough of Hillingdon and Buckinghamshire	18	1997
Eldred/Withdean Woods	Brighton Borough Council	3	1996
Elsecar Reservoir	Barnsley Metropolitan Borough Council	13	1996
Ensor's Pool	Nuneaton and Bedworth Borough Council	6	1997
Eye Green	Peterborough City Council	12	1996
Firsby Reservoir	Rotherham Metropolitan Borough Council	7	1996
Griffiths Avenue	Cheltenham Borough Cour	ncil 1	1996
Heddon Common	Castle Morpeth	7	1996
Hill Rise	Bedford Borough Council	1	1996
Hollingbury/Wild Park	Brighton Borough Council	237	1996
Laugherne Brook	City of Worcester	9	1996
Logdean Elms	East Dorset District Counc	il 1	1996
Mayford Meadows	Woking Borough Council	4	1996
Moorcroft Wood	Walsall Metropolitan Borough Council	13	1996
Oak Hill Wood	London Borough of Barnet	7	1997
Oare Marshes	Swale Borough Council	67	1996
Paradise	Cambridge City Council	2	1996
Potter Holes Plantation	Barnsley Metropolitan Borough Council	9	1996
Primrose	South Tyneside Metropolit Borough Council	an 4	1997
Royate Hill	Avon County Council	2	1996



Reserve name	County/Local authority	Area (in nectares)	Date of declaration
Scratchwood and Moa		0.5	4007
Mount Open Spaces	London Borough of Barnet	65	1997
Sholes Coppice and Keppel's Field	Rotherham Metropolitan Borough Council	61	1996
Sot's Hole with Bluebell Wood	Sandwell Metropolitan Borough Council	55	1997
Southend on Sea Foreshore	Southend on Sea Borough Council	848	1996
Stanmer/Coldean Brighton	Brighton Borough Council	23	1996
Tilesheds	South Tyneside Metropolitan Borough		
	Council	1	1997
Walnut Tree Field	East Dorset District Counc	il 1	1996
Warren's Hall Country Park	Sandwell Metropolitan Borough Council	17	1996
West Park, Uckfield	East Sussex County Counc	il 11	1996
White Rose Lane	Woking Borough Council	4	1996
Whitehawk/Race Hill	Brighton Borough Council	48	1996
Whiteleaf Hill	Buckinghamshire County Council	11	1996

Area(Ha) 11,011 12,200



A full list of LNRs in England is available from Conservation Service Team, English Nature, Northminster House, Peterborough PE1 1UA, Tel 01733 455133. For advice in relation to specific sites, please refer to the appropriate Local Team - see pages 132 to 134.

Yearly totals of LNR	s since 1991	
Date	Number	
31 March 1991	222	
31 March 1992	280	

 31 March 1993
 337
 13,977

 31 March 1994
 393
 15,748

 31 March 1995
 444
 17,681

 31 March 1996
 519
 18,431

 31 March 1997
 566
 20,428

(+ 38 km of linear sites - canals, disused railways, etc.)

NB These figures take account of changes which include boundary amendments, amalgamation of sites and part/whole de-declarations



English Nature's research

Below is a list of research projects funded or carried out by English Nature during 1996/97. Only projects costing £1,000 or more are listed.

The projects are set out according to the themes in which they fit. The themes are designed to focus our science and research more strongly on the nature conservation outcomes which we seek to achieve. The results are intended to contribute to site management and safeguard; to further conservation in the wider countryside; to develop marine nature conservation programmes, and to improve the basis for the conservation of vulnerable species.

Project	Project Officer	Individual or	Cost
		organisation	
		carrying out	
		the work	

1. Natural Science Resource Base

1.1 Terrestrial, freshwater and marine habitats

River SSSI Notification - Cumbria	A Stewart	In-house	£30,200
River Frome pSSSI project	D Kite	In-house	£5,000
Blackdowns Natural Area Profile	C Pulteney	Somerset Environmental Records Centre	£2,000
Penwith Prime Biodiversity Area	J Clitherow	Cornwall Wildlife Trust	£1,000
Killas and Granites Natural Area Profile	J Stewart	CTNC Ltd	£3,000



Destant	Davis at Office	T . 1: 1 1 .1	$C \rightarrow I$
Project	Project Officer	Individual or organisation carrying out the work	Cost
Survey and evaluation of ancient semi-natural woods on Dartmoor	Dr R Wolton	Devon County Council	£3,000
Conservation and agriculture on the Culm	Dr R Wolton	Devon Wildlife	£8,500
Sustainable development in the uplands	Dr A Farmer	In-house	£13,000
Natural Areas and Freshwater Project Officer	D Withrington	In-house	£2,900
Riparian ecosystem nutrient transport	Ms M Gibson	University of Reading	£2,000
London hospital grounds and wildlife	R Howorth	In-house	£2,000
Vulnerability of wetland SSSIs	Dr C Newbold	S Bennett	£10,200
Angling and nature conservation	Ms M Gibson	University of Liverpool	£3,000
Cliff survey, Isle of Wight	Dr R Ekins	Isle of Wight Council	£7,000
Natural Area Profiles, Humber to Pennines	Dr R Meade	In-house	£17,500
Re-survey of Doncaster SSSI	T Kohler	Doncaster MBC	£3,000



Project	Project Officer	Individual or organisation carrying out	Cost
		the work	
Hydrological research on Humberhead Peatlands NNR	Dr R Meade	ECUS	£1,000
Natural Area Profiles: North Downs, Romney Marsh, North Kent Plain, Whitstable-N. Foreland N. Foreland- Folkestone		Henderson Ecological Consultants	£7,000
Production of county grassland inventories (Year 4)	Dr R Jefferson	In-house	£8,500
Ancient Woodland Inventory development	Dr K Kirby	In-house	£7,300
Review the extent and location of acid grassland in England	Dr H Robertson	Ecological Planning and Research	£7,400
Agricultural productivity of semi- natural lowland grassland	Dr R Jefferson	Institute of Grassland and Environmental Research	£10,000
Mapping of Lundy Reef	Dr P Gilliland	University of Newcastle	£6,400
Coastal directories	N Hailey	JNCC	£2,000



Project	Project Officer	Individual or organisation carrying out	Cost
		the work	
SACs acoustic survey programme - mapping of Plymouth SAC	Dr P Gilliland	Posford Duvivier	£40,000
SACs acoustic survey programme - SAC survey and mapping of sea caves	Dr D Laffoley	SNH	£10,000
SACs - resilience and sensitivity	Dr A Downie/ Dr P Gilliland	Port Erin Marine Laboratory	£8,500
Habitat mapping, Wash and Morecambe Bay	Dr P Gilliland	University of Newcastle	£12,000
Broadscale seabed habitat mapping	Dr D Laffoley	SNH	£26,000
Seabed sediment mobility study	Dr R Leafe/ T Collins	CIRIA	£7,000
SAC aerial photography interpretation	D Rogers	BKS Surveys	£30,000
Mapping selected marine sites	Dr D Laffoley	Posford Duvivier	£27,000
Tweed catchment rivers Phase 1 survey	W Smyth	A Walker & Partners	£3,431
Marine data collection, Northumberland coast	W Smyth	Dove Marine Laboratory University of Newcastle	, £1,000
City of York Biodiversity Audit and Action Plan - Phase I	S Woolven	City of York	£4,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Moorland assessment, North York Moors	D Clayden	R Jerram	£10,000
Renotification of Wye Dale-Monsal Dale SSS		J C Frith	£4,500
National sample survey of SSSI woodlands : Peak District and Derbyshire	R Williams	J C Frith	£1,000
Priority survey projects from 1993 Derbyshire SSSI validation exercise	•	J C Frith	£3,000
NVC survey of Cavenham Heath NNR and proposed SSSI extension, Suffolk	Dr A Brenchley	Ecological Surveys Ltd	£2,405
Grassland and ditch survey on Somerset Levels and Moors	R Bradford	Dorset Ecological Consultants	£5,000
West Sedgemoor NVC grassland survey	R Bradford	Ecological Surveys (Bangor)	£1,500
Heather utilisation in the Exmoor ESA	Dr F Ulf-Hansen	ADAS	£1,000
Evaluation of nature conservation outcomes of the Woodland Grant Scheme in Wye and Avon Conservancy: Phase 2 site surveys	M July	Pryor & Rickett Silviculture	£9,987



Project	Project Officer	Individual or organisation carrying out the work	Cost
Forest of Dean Phase 2 grassland survey	C Pagendam	Gloucestershire Wildlife Management	£1,553
Flying of aerial photography for Rodborough and Minchinhampton Commons and 22 Worcestershire grassland SSSIs	M July	Photoair	£2,950
Mesotrophic grassland survey, Buckinghamshire	G Steven	Mr J Halls	£1,000
Habitat condition assessment	A Drewitt	Rigby Jerram	£11,100
Phase 2 survey and evaluation of grassland sites in Shropshire and Staffordshire	C Walker	Eco Tech Ecological Consultants	£9,311
Vegetation survey of Wybunbury Moss	M Davey	East Midlands Environmental Consultants	£1,100
The Stiperstones Upland: A landscape appraisal of the English Nature conservation and restoration strategy	T Wall	Countryside Planning and Management	£4,030
An appraisal of RAF Chilmark, Wiltshire, for nature conservation purposes	G Wren	SGS Environmental	£20,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Dorset heathland and habitat map	Dr A Nicholson	ITE	£1,250
SAC Project Officer	D Kite	In-house	£8,400
Natural Areas report	R Williams	J C Frith	£1,200
Natural Area Profiles for: Isle of Wight, New Forest, Hampshire Downs, South Coast Plan and South Hampshire lowlands	S Wilson	Jonathan Cox Associates	£4,950
Surrey SNCI survey, Guildford and Surrey heaths	D Harvey	Surrey Wildlife Trust	£4,000
East Sussex SNCI survey, Wealden DC	D Harvey	Sussex Wildlife Trust	£4,000
Sussex Seasearch	D Harvey	Marine Conservation Society	£2,000
Sussex Environmental Survey Directory	J Patmore	Sussex Wildlife Trust	£2,000
Profile of Low Weald Natural Area	J Patmore	Dolphin Ecological Surveys	£1,000
Profile of Folkestone to Selsey Bill Natural Area		Dolphin Ecological Surveys	£1,000
Woking ponds survey	S Berry	Woking BC	£1,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Lincolnshire parish wildlife survey	R G Smith	Contribution to Community Council of Lincolnshire	£4,000
Conservation interest of highway verges in Cambridgeshire (desk study)	S Morley	ESL Ltd	£3,118
Preparation of material for Natural Areas profile documents	M Coleman	Ecological Services Ltd	£4,979
Intertidal survey of Leigh NNR/ Dengie NNR/ East Mersea NNR	I Black	University of Hull	£3,324
1.2 Terrestrial, fre	shwater and mari	ne species	
Bats in bridges in Cumbria	E Donnison	G Billington/G Norman	£1,800
Assessment of fish species using the Tollesbury managed set-back site	C Reid	Unico Marine Ltd	£7,500
Biodiversity Action Plan for invertebrates of the South Essex terrace gravels	Dr C Gibson	C Plant	£3,000
Basking shark tagging programme	P Knapman/ Dr S Warman	D Sims, Plymouth University	£10,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Enteromorpha survey, Lindisfarne	W Smyth	Environment Agency	£1,000
Lindisfarne NNR Wildfowl Refuge projec	W Smyth ct	S Percival, Sunderland University	£10,000
Yorkshire Dales species project	s R Wilson	Yorkshire Dales National Park	£3,000
Sandlings invertebrate survey	R Cottle	M Edwards	£1,500
Invertebrate survey of Exmoor	M Edgington/ Dr F Ulf-Hansen	Exmoor National Park	£2,000
Avalon Marshes breeding bird survey	R Bradford	David Chown	£1,000
Saproxylic Diptera survey of Bredon Hill SSSI/NNR, Worcs	Dr P Holmes	Dr P Skidmore	£2,000
Waterbirds and recreation handbook	P Grice	Wildfowl and Wetlands Trust	£5,000
Habitat and feature mapping of Lesser Horseshoe Bat roost environs in the Wye Valley & Forest of Dear cSAC	C Pagendam n	In-house & Halcrows	£1,936
Melbury Park SSSI - lichen and invertebrate survey	M Heath	Dorset County Council and Dorset Environment Records Centre	£1,130 al



Project	Project Officer	Individual or organisation carrying out the work	Cost
Great crested newt project	Dr C J Edwards	Peak Park Planning Board	£5,000
Black grouse project	Dr C J Edwards	Peak Park Planning Board	£3,500
Breeding bird survey of the Medina Estuary, Isle of Wight	Dr R Ekins	The Medina Valley Centre	£1,500
A survey of ditch flora at Stodmarsh NNR/SSSI	P Williams	In-house	£2,000
River plant surveys	Ms J Smith	Lee Donaldson Associates	s£3,800
River plant surveys	Ms J Smith	J Southey	£5,100
Barle valley lichen survey	Dr F Ulf-Hansen	Pat Wolseley	£3,200
Arable plant survey, Oxford Heights Natura Area	R Porley ll	Arable Plant Group	£1,700
Rare plant survey of Frilford Heath Ponds and Fens SSSI, Oxfordshire	R Porley	Dr C Lambrick, Oxford Rare Plant Group	£1,400
Wood white survey	S Berry	West Sussex CC	£1,000
Chara canescens survey at Orton Pit Cambridgeshire	C Pugsley	N Stewart	£2,990



Project	Project Officer	Individual or organisation carrying out the work	Cost
Mapping of <i>Victorella</i> pavida	Dr A Downie/ Dr P Gilliland	Dr P Gainey	£1,200
1.3 Earth science s	ites		
Cumbria RIGS project	P Glading	In-house	£2,500
GCR site notification project	Dr A King	In-house	£22,000
Cave conservation plans	Dr K Page	National Caving Association	£2,000
Assessment of minerals in Aire Point to Carrick Du SSSI		C Sparrow & B Gamble	£1,900
Various site clearance projects	Dr J Larwood	Various	£3,000
Geological predictions for borehole at Shirley Pool	Dr R K Morris	Entec UK Ltd	£2,302
2. Habitat and sit	e management		
Wet fens for the future	R Hall	G Kew, RSPB	£6,000
Kingfishers Bridge wetland creation projec	R Hall t	AC & RC Green Farming	g £3,000
Holme Fen NNR - bog restoration feasibility study	R Hall	Prof R W Radley, Silsoe College	£1,662



Project	Project Officer	Individual or organisation carrying out the work	Cost
Management and creation of Greensand Heath - Beds Heathland Action Plan	T Barfield	S O'Dell, Wildlife Trust for Beds, Cambs, Northants & Peterborough Ltd	£2,835
Site Management Statements - Cumbria	G Dalglish	In-house	£27,000
Mountain Massif Project	I Soane	Lake District National Park	£6,000
Cumbria farm link	I Soane	Business Link, Rural Cumbria	£5,000
Butterburn Flow conifer removal	S Webb	Forest Enterprise	£10,000
Duddon Estuary management plan	C Lumb	Cumbria County Council	£5,000
Haverigg Sand Dunes code of conduct	C Lumb	Millom Town Council	£1,000
Biodiversity Action Plan for Cornwall	J Stewart	Cornwall Wildlife Trust	£1,000
Generic management model for Uplands in southwest England	J Stewart	Penny Anderson Associates	£8,000
Implementation of Braunton Burrows water level management plan	Dr R Wolton	Environment Agency	£1,000
Lundy interpretation	Dr R Wolton	Shelley Signs	£5,500
Braunton Burrows water level management plan		, and the second	



Project	Project Officer	Individual or organisation carrying out the work	Cost
Devon hedge conservation initiative	Dr R Wolton	Devon FWAG	£5,000
Nutrient reconstruction of lakes	Dr C Newbold	ENSIS Ltd	£13,800
Game fisheries management	Ms M Gibson	V Lewis	£2,200
The Wash - site liaison	J Shackles	BASC	£7,400
Hertfordshire Biodiversity Action Plan - "A 50-year Vision"	Dr C Gibson	Herts & Middlesex Wildlife Trust	£1,500
Habitat Restoration Corporate Project (Year I)	P Horton	FWAG, Suffolk Wildlife Trust, Milton Keynes Parks Trust	£52,062
Horse grazing project	Dr H Robertson	Dr C Gibson, Bioscan UK	£10,000
ENPACT project (English Nature Practical Application of Conservation Techniques)	J Bacon	Various	£14,900
Developing new native woodlands in the English uplands	Dr K Kirby	Institute of Terrestrial Ecology	£9,400
Kirkby Moor Public Inquiry	Dr J Manley	East Midlands Environmental Consultants	£8,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Implementation of estuary management plans	D Rogers	Various	£127,900
Estuary management plan preparation	A Moffat	Various	£87,300
Estuary management: review of overseas experience	D Rogers	Posford Duvivier	£8,500
Coastal shoreline management plan advice	R Leafe/ T Collins	Cambridge Coastal Research Unit	£10,000
North Pennines project	J Barrett	In-house	£15,000
Durham coast : cliff grasslands re-creation	R Robbins	ADAS/Anthony Walker & Partners	£10,000
Marine SAC Project Officer	W Smyth	In-house	£20,000
Estuaries management plans (5)	W Smyth/ G Barber	Various	£23,000
Demonstration and training in conservation land management	P Welsh	P Lyth, FWAG	£5,000
North Pennines project	P Welsh	In-house	£10,000
Broadland fen management strategy	C Doarks	Broads Authority	£14,500
Shoreline management	P Lambley	In-house	£7,795



Project	Project Officer	Individual or organisation carrying out the work	Cost
Water level management plans and Site Managements Statements Officer	S Rothera	In-house	£11,941
Marine SAC, The Wash, North Norfolk	M Musgrave	In-house	£17,164
Site Management Statements - Peak District Natura 2000 Sites	I Taylor	M Bailey/ Dr S Mackenzie	£16,000
Preparation of Site Management Statements	M Wilkinson	Countryside Planning and Management	£10,218
Local Biodiversity Action Plans	K Payne	In-house	£3,000
Whole farm plans, Oxfordshire	H Whetter	D West, FWAG	£3,500
Upland management handbook - freshwater	Dr J Backshall	Scott Wilson Resource Consultants	£5,500
Upland management handbook - plants	Dr J Backshall	V Morgan	£3,500
Reintroducing stock grazing to Savernake Forest: a feasibility stud	Dr K Kirby ly	Bioscan	£5,000
Malvern Hills AONB management plan	Dr P Holmes	Malvern Hills Conservators	£2,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Site Management Statement project	J White	In-house	£36,000
Preparation of the Wye Valley AONB nature conservation strategy	C Pagendam	Wye Valley AONB	£1,500
Preparation of a local Biodiversity Action Plar for the Cotswold Water Park		RSPB	£3,000
Peak Park Biodiversity Action Plan	Dr C J Edwards	Peak Park Planning Board	£2,000
National Forest Biodiversity Action Plan	I Taylor	National Forest	£2,000
River SSSI conservation strategies Project Officer	D Withrington	In-house	£16,000
Whole ecosystem nitrogen manipulation	Dr A Farmer	I C Consultants Ltd	£17,400
Reservoir action plans	Ms M Gibson	Anglian Water	£2,000
Reinstatement works at Westfield Lakes	Dr R K Morris	Lincolnshire Trust	£1,351
Appraisal of CMPs and WLMPs in Humberhead Peatlands	Dr R Meade	W S Atkins	£4,037



Project	Project Officer	Individual or organisation carrying out the work	Cost
Sustainable flood defence and habitat conservation in estuarie	T Collins	Environment Agency	£4,200
Review of Estuary Management Plans in England	A Moffat	Posford Duvivier	£2,000
Feasibility study of reedbed creation, Kessingland, Suffolk	N Sibbett	Andrews Ward Associates	£3,550
Habitat restoration study : The Stiperstone	T Wall	ITE	£4,000
Wardening of Humber Wildfowl Refuge	Dr R K Morris	Upper Humber Wildfowling Committee	£2,000
Border Mires : trial management of afforested areas	P Merricks/ C Shaw	M Newson, University of Newcastle	£6,270
3. Autecological S	Studies		
South Pennines twite project	Dr A F Brown	H McGhie	£2,000
Breeding ecology of curlew	Dr A F Brown	University of Sunderland	£3,000
Population dynamics of golden plover	Dr A F Brown	M Whittingham, University of Sunderland	£2,000



Project	Project Officer	Individual or organisation carrying out the work	Cost
Pilot project on summer ecology and habitat use of the turtle dove	P Grice	Game Conservancy Trust	£9,200
Survey of breeding woodlark	P Grice	RSPB	£6,500
Winter twite (coastal passerines in winter)	Dr A F Brown	University of East Anglia	£5,000
4. Environmental	Monitoring		
4.1 Sites			
Licensing support	P Clement	In-house	£10,000
Local team issue of licences	J Murray	In-house	£10,000
Licence return report	P Clement	Rare Breeding Bird Pane	l £2,785
Braunton Burrows vegetation monitoring	J Breeds	In-house	£1,550
Kielderhead monitoring	C Shaw/ R Robbins	A Pickering, G Simpson	£2,800
ESA raised water level monitoring, Somerset Levels & Moors	R Bradford	Ms W Cox	£4,000
A demonstration study into the use of earth observation satellite data for river corridor management	J Marsden	Logica UK	£11,633



Project	Project Officer	Individual or organisation carrying out	Cost
		the work	
ENSIS Helpline	Dr K Porter	S Scott	£10,000
Monitoring of a Stewardship agreement at Prawle Point to Start Point SSSI	C Pulteney	W Cox	£1,300
4.2 Species			
Tree tagging and recording work at Yardley Chase SSSI & Whittlebury Park	Miss J Johnston	J Butler, Countryside Management Services	£1,065
4.3 Maritime			
SAC monitoring - SAC lagoons baseline monitoring	Dr A Downie/ Dr P Gilliland	Fawley Aquatic Research	£15,500
SAC monitoring - analysis of sub-tidal sand samples for the Severn Estuary	C Francis	Dr C Mettam	£3,500
Long-term trends in turbidity on the English coast	N Hailey	WRC plc	£13,500



Proje	ect	Project Officer	Individual or organisation carrying out the work	Cost
5.	Impact studies			
5.1	Terrestrial			
Corn l	bunting ntship	Dr A Burn	Game Conservancy Trus	t £8,100
Peat so	oils research	L White	ADAS	£2,500
5.2	Pollution			
	onia impacts for e conservation	Dr A Farmer	ITE (Bush)	£27,800
	ction of river from diffuse ion	Ms M Gibson	Quest Environmental	£2,500
	ation of metal in sensitive e areas	Dr A Burn	WRC plc	£12,300
Eutrop worksl	phication hop	Ms M Gibson	Environment Agency	£1,000
Seed a birds	vailability for	Dr A Burn	ADAS	£9,800
	ides and avian esources	Dr A Cooke	Game Conservancy Trus	t £7,500
and its Sphag with p	pheric pollution s implications for num growth - articular referenc l Moss, Greater	B F Fleming e	ECUS	£1,400



Project	Project Officer	Individual or organisation carrying out the work	Cost
6. Species Recove	ery Programme		
Red squirrel - Reversing the effects of habitat fragmentatio	Dr A Mitchell-Jones n	Hampshire and Isle of Wight Wildlife Trust	£11,000
Red squirrel	Dr A Mitchell-Jones	Forest Enterprise PTES	£15,366
New Forest cicada	Dr D Sheppard	ITE	£4,200
Sand lizard	Dr T Gent	Herpetological Conservation Trust	£33,000
Pine marten	Dr A Mitchell-Jones	Royal Holloway College, University of London	£27,917
Red kite	I Carter	Jointly funded with RSPB	£23,000
Ladybird spider	Dr R Key	Various	£1,887
Shad	Ms M Gibson	Environment Agency	£8,000
Conservation genetics	Dr R Mitchell	Zoological Society of London	£17,517
Creeping marshwort	Dr R Mitchell	Dr C Lambrick	£1,875
Fen orchid	C Doarks/ Dr R Mitchell	Norfolk Naturalists' Trust	£15,342
Perennial knawel	Dr R Mitchell/ Dr A Brenchley	Mrs Y J Leonard	£5,341



Project	Project Officer	Individual or organisation carrying out the work	Cost
Shore dock	Dr R Mitchell	ITE/Mrs R Parslow	£13,187
Cirl bunting	Dr A F Brown/ P Grice	Jointly funded with RSPB	£15,000
Stone curlew	Dr A F Brown/ P Grice	Jointly funded with RSPB	£25,000
Greater horseshoe bat	Dr A Mitchell-Jones	Dr R D Ransome	£3,000
Western rustwort	Dr R Mitchell/ Ms B Tonkin	Exeter University	£1,070
Vendace	Ms M Gibson	Dr P Maitland	£2,300
Fen ragwort	R Hall/ Dr R Mitchell	T Wells	£3,500
Blue ground beetle	Dr D Sheppard	C Turner	£4,000
Water vole	Dr A Mitchell-Jones	Oxford University	£4,000
Wart-biter cricket	Dr D Sheppard	International Institute of Entomology	£10,590
Reddish buff moth	Dr D Sheppard	Dr P Waring	£7,795
Field cricket	Dr D Sheppard	M Edwards	£4,287
Leaf beetle (<i>Cryptocephalus coryli</i>)	Dr R Key	P Hodge	£1,500
Pearl mussel	Ms M Gibson	National Museum of Wales	£21,130



Project	Project Officer	Individual or organisation carrying out the work	Cost
Mole cricket	Dr D Sheppard	H Inns/M Edwards	£1,950
Pool frog	Dr T Gent	Various	£7,994
Fen violet	Dr R Mitchell/ R Hall	ITE	£7,649
Black-veined moth	Dr D Sheppard	Dr P Waring	£5,784
Dormouse	Dr A Mitchell-Jones	Royal Holloway College	£3,960
Black grouse North Pennines recovery project	Dr A F Brown	Game Conservancy Trust	£10,000
7. Research to dev	velop and refine p	olicy	
7.1 Land-use			
Economics data acquisition and analysis	P Clough	ITE Monks Wood	£15,600
Roads research project	D Markham	RSPB	£800
Environmental effects of free trade in agriculture	M Tilzey	Scottish Agricultural College	£18,700
Options for change in CAP beef regime	M Tilzey	Cheltenham and Gloucester College of Further Education	£7,800



Project	Project Officer	Individual or organisation carrying out the work	Cost
Future of the agri-environment programme	G Hamersley	CCW	£4,600
European partnership initiative	G Hamersley	Countryside Commission	£3,500
Options for change in the CAP sheep regime	S Hooper	Countryside Commission	£7,500
BSE : beef farming and the countryside	S Hooper	Countryside Commission	£1,000
Socio-economics studies of the Norfolk coast	P Lambley	Environment Agency	£3,000
7.2 Community			
UK MAB Urban Forum	G Barker	UK MAB Urban Forum	£5,000
7.3 Planning			
RTPI joint publication	R G Smith	Contribution to Royal Town Planning Institute	£3,000
Rural strategies	R G Smith	Contribution to Rural Development Commission	£2,000
Conservation audit of second tier sites	I Butterfield	EMEC	£3,000
Nature Conservation Planning Advice	R G Smith	D Tyldesley & Associates	£20,400



Project	Project Officer	Individual or organisation carrying out the work	Cost
8. Data systems, o	collation and anal	ysis	
North Pennines : Natural Area project	J Barrett	In-house	£21,500
North and East Yorkshire Ecological Data Centre, stage 2	J Lunn	J Lavin	£3,000
Information service for Upland Strategy	S Hooper	In-house	£5,000
South Pennine Moors management unit digitisation	D Ramsey	Dataview Solutions	£1,106
A feasibility study for a BRC for London/ London Basin Natural Area	P Sinnadurai	In-house	£1,500
SSSI species data capture and storage	M Heath	Dorset Environmental Records Centre	£1,350
Licensing database	T Cox	Rogsoft	£2,835



Summary financial statement 1996/97

Summary foreword

This summary financial statement is only a summary of information in English Nature's financial statements and does not contain sufficient information to allow for a full understanding of the results and state of affairs of English Nature. For further information the full annual financial statements and the Comptroller and Auditor General's report on those statements should be consulted. These are published as a House of Commons Paper and can be purchased from the Stationery Office.

This summary financial statement has been prepared in accordance with the Companies Act 1985 section 251 and The Companies (Summary Financial Statement) Regulations 1995 (SI 1995 / 2092) and was signed by Dr Derek Langslow, the Accounting Officer, on 9 July 1997.

Review of activities

English Nature's purpose is to promote directly and through others the conservation of the wildlife and natural features of England within the wider setting of the United Kingdom and its international responsibilities.

In pursuit of this purpose, the Environmental Protection Act 1990 conferred upon English Nature the following functions:

- To establish and maintain and manage nature reserves (within the meaning of Section 15 of the National Parks and Access to the Countryside Act 1949).
- ii To advise Ministers on policies for or affecting nature conservation.
- iii To provide advice and disseminate knowledge about nature conservation.
- iv To commission and support or, if necessary, carry out relevant research.
- v Various duties, under other statutory provisions, notably:
- (a) To notify Sites of Special Scientific Interest (SSSI) and to take such steps as are open to it to protect them for example, by advice and/or by agreements under Section 15 of the Countryside Act 1968.



- (b) To issue or advise Ministers on the issue of licences affecting protected species, for example, under Section 16 of the Wildlife and Countryside Act 1981.
- (c) To take account as appropriate in the discharge of its functions of actual or possible ecological changes.

English Nature shall (under Section 133(3) of the Act), in discharging their functions have regard to any advice given to them by the Joint Nature Conservation Committee.

Further progress has been made in the development of Natural Areas as a way of identifying characteristic areas of wildlife and natural features. We published a character map of England jointly with the Countryside Commission. We have linked Biodiversity Action Plan targets to Natural areas and most of the 120 Natural Areas have profiles and objectives. A programme and framework for agreeing the second tranche of habitat and species action plans as part of the Biodiversity Action Plan was agreed through the UK targets Group.

A further 54 proposed Special Areas of Conservation (SAC's) were agreed with Department of the Environment for consultation. Six new proposed Special Protection Areas were submitted to DoE.

The programme to produce Site Management Statements for SSSIs continued and a total of 2,920 have been discussed or agreed with owners and occupiers with a further 1,457 in draft. Drafting statements is progressing well but gaining agreement to implement has been slower. The Reserve Enhancement scheme continues to be a success with grants to 32 voluntary organisations, covering 16,735 ha of SSSI. Over 930 Wildlife Enhancement Scheme style agreements have now been concluded with 66,900 ha now covered by such agreements. We carried out a total of 3,245 site unit recording visits to monitor the condition of SSSIs. Data from these visits is being entered onto the SSSI Information System. Analysis indicates that of the visits made 70% of natural features assessed fully met their management objectives.

National Nature Reserves continue to be well managed with progress being made on public access and demonstration events.



The Species Recovery programme initiated 21 new projects and work continued on 50 existing projects. Grant aid was given under the Species Recovery Grants Scheme and a new Species Action Grant Scheme was initiated as a contribution to the Biodiversity Action Plan. We successfully met the original recovery objectives on a number of species such as the bittern, fen violet, fen orchid, perennial knawel, red squirrel and shore dock.

The Enquiry Service responded to over 16,000 enquiries and continued to be well received and responsive to customer needs.

Work was undertaken with DoE on planning for sustainable development and with the Department of Transport on strategic and operational road issues. We published Wildlife and freshwater: an agenda for sustainable management. A corporate project on habitat restoration was established to demonstrate the extent to which habitat fragmentation can be reversed.

As part of the continuing drive to find efficiency savings, English Nature has reduced its office accommodation in Peterborough during the year. The pay & grading review was completed and a simplified pay structure implemented reducing 35 grades to 7 pay bands. Savings on staff costs continue to be made through an early departure scheme. English Nature is committed to developing its staff and several Teams began working towards the Investors in People award. Health and Safety training continued to be a top priority. 1996/97 was the final year of the successful Learning Organisation project. This project has identified many new ways of learning for English Nature and generated considerable external interest in English Nature's approach. Action Learning is one of the new ways of learning launched in 1996 and has already attracted over 40 participants. The new Employee Development Scheme and Career Guidance Scheme have also proved popular.

Events since the balance sheet date

There have been no significant changes since the date of the balance sheet.

Future developments

The Department of the Environment have announced that English Nature's grant in aid for 1997/98 is to be £38,743,000.



In setting our corporate priorities for 1997/98 in line with our current direction the Board and Council have taken account of the likely implications of our Strategy Review. Implementation of the UK Biodiversity Action Plan (BAP) and our obligations under the Habitats Directive continue to drive our priorities and the importance of Natural Areas as a framework for delivery will be re-emphasised. The importance of our advice to Government continues, and we will work closely with a wide range of partners to ensure efficient delivery of our nature conservation objectives.

Our Nature Conservation Priorities for 1997/98 are summarised below:

- Implementing our contribution to the UK Biodiversity Action Plan through lead agency work on five key habitats and lead partner for 29 species; contributing to the Targets Group habitat/species action plans, linking BAP objectives to our Natural Area targets and enabling the development of local Biodiversity Action Plans.
- Providing high quality advice to Government on statutory consultations and on the reform of the Common Agricultural Policy and Common Fisheries Policy.
- Securing the safeguard of wildlife sites important at the European level, particularly the completion of SSSI notification of possible Special Areas of Conservation (pSAC) rivers, planning for the delivery of favourable conservation status on Sites of European Community Importance; the progressing of work on schemes of marine management for marine Special Areas of Conservation (SACs) through leading the LIFE project.
- Extending the positive management of SSSIs through Wildlife Enhancement Scheme, Reserves Enhancement Scheme and other management incentive schemes.
- Continuing to review the SSSI series, seeking equilibrium by the year 2000.
- Managing the NNR series and continuing to increase the numbers of NNRs managed by approved bodies.
- Increasing further the Species Recovery Programme to cover 40 species.
- Continuing projects on habitat restoration, lowland heathland and veteran trees.



 Completing the development and use of ENSIS (our SSSI Information System) by teams to enhance reporting on the SSSI resource, publishing SSSI sample survey reports on heathlands and woodlands and working on the report for uplands, progressing with the JNCC the integration of data and information through the Biodiversity Information Service, the UK Database for Ranking Biodiversity (BURD database) and the Lottery consortium bid.

Members of the Council

See page 6

Summary Income and Expenditure Account for the year ended 31 March 1997

	1996/97 £000	1995/96 £000
Income	2000	2000
Grant in aid received	35,076	36,017
Ring-fenced grant in aid to the Joint Nature Conservation Committee (JNCC)	2,339	2,487
Other government grants	85	40
Income from activities	867	765
Transfers from reserves and provisions	1,659	2,471
Other operating income	396	295
	40,422	42,075



Summary Income and Expenditure Account for the year ended 31 March 1997 $\,$

	1996/97 £000	1995/96 £000
Expenditure		
Maintenance of National Nature Reserves (NNRs)	1,643	2,132
Management agreements	7,052	8,084
Conservation support	3,195	2,521
Information and publicity	1,000	996
Grants	2,248	2,718
Staff costs	15,910	15,478
Other operating costs	6,716	6,732
Depreciation	1,165	1,056
Annual contribution to the JNCC	2,385	2,507
Permanent diminution of fixed assets	207	1,012
Notional costs	1,150	1,311
	42,671	44,547



Summary Income and Expenditure Account for the year ended 31 March 1997 $\,$

	1996/97 £000	1995/96 £000
(Deficit) on operating activities before superannuation	(2,249)	(2,472)
Superannuation receipts	362	310
(Deficit) on operating activities	(1,887)	(2,162)
Profit / (loss) on sale of fixed assets	8	(105)
Interest receivable	160	167
Notional cost of capital	(445)	(432)
(Deficit) on ordinary activities	(2, 164)	(2,532)
Add back notional costs	1,580	1,703
Amount surrendered to the Department of the Environment	(51)	-
Transfer to revaluation reserve	(51)	-
Retained (deficit) for the financial year	(686)	(829)
Council Members' emoluments	110	109



Summary Balance Sheet for the year ended 31 March 1997

	1996/97 £000	1995/96 £000
Fixed assets	6,732	6,168
Current assets	2,830	2,409
Creditors: amounts falling due within one year	(1,387)	(1,321)
Net current assets	1,443	1,088
Total assets less current liabilities	8,175	7,256
Provisions for liabilities and charges	1,244	912
Accruals and deferred income	5,189	4,192
Capital and reserves	1,742	2,152
	8,175	7,256

The certificate and report of the Comptroller and Auditor General on the full financial statements for the year ended 31 March 1997 was unqualified and did not contain a statement made under either section 237(2) of the Companies Act 1985 (accounting records or returns inadequate or accounts not agreeing with records or returns) or section 237(3) (failure to obtain necessary information and explanations).

D R Langslow Accounting Officer

9 July 1997



Statement of the Comptroller and Auditor General to the Houses of Parliament

I have examined the summary financial statement on pages 120 to 127 which has been prepared in the form and on the basis set out in the summary foreword on page 120.

Respective responsibilities of the Council, the Chief Executive and auditors

The summary financial statement is the responsibility of the Council and Chief Executive. My responsibility is to report to you my opinion on its preparation and consistency with the full financial statements and foreword.

Basis of opinion

I have conducted my work in accordance with the Auditing Guideline *The auditors' statement on the summary financial statement* adopted by the Auditing Practices Board.

Opinion

In my opinion the summary financial statement is consistent with the full financial statements and foreword of the Nature Conservancy Council for England for the year ended 31 March 1997 and has been properly prepared on the basis set out in the summary foreword to the summary financial statement.

John Bourn Comptroller and Auditor General 18 July 1997 National Audit Office 157-197 Buckingham Palace Road Victoria London SW1W 9SP



Register of interests of Council Members

At the first meeting of the Council of English Nature in 1990, the Council resolved to establish a Register of Interests of Council Members. This was established in February 1991 and it is updated annually. A summary is published below. The complete register is open for public inspection and copies may be obtained from the Head of Private Office, Richard Findon, tel 01733 455356.

Synopsis of Council Members' Interests

The Earl of Cranbrook (Chairman): Biologist and farmer. Member, Broads Authority and Harwich Haven Authority. Non-executive director, Anglian Water plc. Chairman, Environmental Advisory Board of Shanks and McEwan plc. Chairman, ENTRUST, the Regulator of Environmental Bodies under the Landfill Tax Regulations (1996). President, Suffolk Wildlife Trust. Member, UK Roundtable on Sustainable Development.

Dr D R Langslow: Chief Executive, English Nature. Chairman, Asian Wetlands Bureau. Council Member, Wetlands International - Asia Pacific and Wetland International - The Americas.

Professor J M Anderson: Professor of Ecology, University of Exeter. Board of Management, IUBS/UNESCO Tropical Soil Biology Programme 1984-1996.

Ms J Barber: Independent consultant on organisational planning and evaluation of environmental programmes. Member, Groundwork Foundation Board and Tarmac plc's Environmental Advisory Panel. Severn Trent Water plc's Environment Panel. Trustee of Forum for the Future. Consultant to WWF, DoE, Environment Protection Strategy and European Division and National Lottery Charities' Board.

Professor D L Hawksworth: Director, International Mycological Institute. President, International Union of Biological Sciences. Chairman, Institute of Biology, Biodiversity Committee. Visiting Professor of Botany, University of Reading; Visiting Professor of Biology, University of Kent; Visiting Professor of Mycology, Royal Holloway, University of London.

Professor J Kear: Editor of Wildfowl, Journal of Wildfowl and Wetlands Trust. President of British Ornithologists Union 1991-1995. Council Member Jersey Wildlife Preservation Trust, and the Royal Society for the Protection of Birds. President, Devon Birdwatching and Preservation Society.



Miss J Kelly: Independent management consultant. Chairman, West Middlesex University Hospital NHS Trust. Lay Member, General Council and Register of Osteopaths 1990-1995. Trustee, Lifecare Charitable Trust. Member, Council of the National Trust. Visiting Fellow, Department of Health Studies, University of York.

Professor D Norman: Director, Synchrotron Radiation, Council for the Central Laboratory of the Research Councils, Daresbury Laboratory, and visiting Professor in Surface Science, University of Liverpool. Chairman, Merseyside Ringing Group and Mersey Estuary Conservation Group.

Dr D F Shaw: Chemist. Founder and Chairman of Irish Sea Forum. Member, Joint Nature Conservation Committee. Governor of University College, Chester.

Mr M T Thomasin-Foster: Farmer. Chairman, Essex Branch, Country Landowners Association - 1995. Member, CLA Executive Committee and Chairman of CLA Environment and Water Sub-Committee. Chairman, MAFF's Consultative Panel on Badgers and Tuberculosis. Chairman, Hawk and Owl Trust. Member, UK Round Table on Sustainable Development. Member of Agricultural Land Tribunal.

Mr S Tromans: Solicitor and Partner, Simmons & Simmons. Member of Environment Development and Advisory Panel (EDAP), National Grid Company.

Professor R C L Wilson: Professor of Earth Sciences, Open University. Fellow of Geological Society and Chartered Geologist. Consultant to petroleum exploration industry.

Mr G N Woolley: Managing Director of Woolley & Company. Director of Beaver Securities Ltd, Prudential Corporation in-hand farming company. Member, Environment and Water Committee, and Council of Country Landowners Association. Member, Council, Scottish Landowners' Federation.



Responsibility of Chairman and Council Members

Audit Committee

The Chairman and Council Members have approved accountability statements to delineate their functions and how they should be excercised. During the year Council approved a revised *Code of Best Practice for Council Members*. Copies can be obtained from the Head of Private Office, Richard Findon.

English Nature has had an Audit Committee since its creation. The Audit Committee is an advisory committee established by the Council in consultation with the Accounting Officer. The Committee is chaired by the Accounting Officer and has two Council Members, Nicholas Woolley and Jane Kelly plus one Director, Caroline Wood and one General Manager, Andrew Deadman as its members. Full details of the terms of reference and responsibilities of the Audit Committee can be obtained from the Head of Private Office, Richard Findon.



Main office addresses

For general enquiries about local issues, contact the appropriate team listed below. National Office contacts are listed on page 154.

1 Northumbria Team
(Darlington, Durham,
Hartlepool, Middlesbrough,
Northumberland, Redcar and
Cleveland, Stockton-on-Tees,
Tyne and Wear)
Archbold House
Archbold Terrace
Newcastle-upon-Tyne
NE2 1EG
■ 0191 281 6316

Tax: 0191 281 6316 Fax: 0191 281 6305

2 Cumbria Team
Juniper House
Murley Moss
Oxenholme Road
Kendal
Cumbria LA9 7RL

01539 792800

Fax: 01539 792830

3 North West Team
(North Cheshire, Lancashire,
Merseyside
& Greater Manchester)
Pier House
Wallgate
Wigan
Lancashire WN3 4AL
■ 01942 820342

• 01942 820342 Fax: 01942 820364

MAP



- 4 North & East Yorkshire Team (East Riding of Yorkshire (excluding area west of Goole), Kingston-Upon-Hull & North Yorkshire) **Institute for Applied Biology** University of York York YO1 5DD **4** 01904 432700 Fax: 01904 432705
- 4a Leyburn Office (Yorkshire Dales) Thornborough Hall Leyburn North Yorkshire DL8 5ST **9** 01969 623447

Fax: 01969 624190

- Humber to Pennines Team (East Riding of Yorkshire (area west of Goole). North East Lincolnshire, North Linclolnshire, South Yorkshire & West Yorkshire) **Bull Ring House** Northgate Wakefield West Yorkshire WF1 1HD **4** 01924 387010
- East Midlands Team (Leicester City, Leicestershire, Lincolnshire, Nottinghamshire & Rutland) The Maltings Wharf Road Grantham Lincolnshire NG31 6BH

• 01476 568431 Fax: 01476 570927

Fax: 01924 201507

- 7 Peak District & Derbyshire Team (Peak District National Park. Derbyshire & Derby City) Manor Barn Over Haddon Bakewell Derbyshire DE45 1JE **9** 01629 815095 Fax: 01629 815091
- 8 West Midlands Team (Cheshire, Shropshire, Staffordshire. Stoke-on Trent. Warwickshire & West Midlands) **Attingham Park** Shrewsbury Shropshire SY4 4TW • 01743 709611 Fax: 01743 709303
- 8a Banbury Office (Warwickshire) 10/11 Butchers Row Banbury Oxfordshire OX16 8JH **4** 01295 257601 Fax: 01295 275180
- Three Counties Team (Gloucestershire. Herefordshire & Worcester) **Bronsil House Eastnor** near Ledbury Herefordshire HR8 1EP **•** 01531 638500 Fax: 01531 638501

10 Bedfordshire. Cambridgeshire & Northamptonshire Team (Bedfordshire. Cambridgeshire, Northamptonshire and Luton) Ham Lane House Ham Lane Nene Park Orton Waterville Peterborough Cambridgeshire PE2 5UR **4** 01733 391100

Fax: 01733 394093

- 11 Norfolk Team 60 Bracondale Norwich Norfolk NR1 2BE • 01603 620558
- 12 Suffolk Team Norman Tower House 1-2 Crown Street **Bury St Edmunds** Suffolk IP33 1QX **9** 01284 762218

Fax: 01603 762552

Fax: 01284 764318



13 Essex, Hertfordshire & London Team Colchester Office Harbour House Hythe Quay Colchester Essex CO2 8JF

• 01206 796666 Fax: 01206 794466

13a London Office Ormond House 26/27 Boswell Street London WC1N 3JZ ■ 0171 831 6922 Fax: 0171 404 3369

14 Kent Team
The Countryside Management
Centre
Coldharbour Farm
Wye
Ashford
Kent TN25 5DB
■ 01233 812525
Fax: 01233 812520

15 Sussex & Surrey Team
(Brighton & Hove, East
Sussex, West Sussex & Surrey)
Howard House
31 High Street
Lewes
East Sussex BN7 2LU

101273 476595

Fax: 01273 483063

16 Thames & Chilterns Team
(Berkshire, Buckinghamshire,
Milton Keynes & Oxfordshire)
Foxhold House
Thornford Road
Crookham Common
Thatcham
Berkshire RG19 8EL
■ 01635 268881
Fax: 01635 268940

17 Hampshire & Isle of Wight Team (Hampshire, Isle of Wight, Portsmouth & Southampton)

1 Southampton Road Lyndhurst Hampshire SO43 7BU

• 01703 283944

Fax: 01703 283834

18 Wiltshire Team (Swindon & Wiltshire) Prince Maurice Court Hambleton Avenue Devizes Wiltshire SN10 2RT

● 01380 726344 Fax: 01380 721411

19 Dorset Team
(Bournemouth, Dorset & Poole)
Slepe Farm
Arne
Wareham
Dorset BH20 5BN

■ 01929 556688

Fax: 01929 554752

20 Somerset Team
(South Gloucestershire,
Bristol, Bath and North East
Somerset and North Somerset)
Roughmoor
Bishop's Hull
Taunton
Somerset TA1 5AA

© 01823 283211

Fax: 01823 272978

21 Devon, Cornwall & Isles of Scilly Team The Old Mill House 37 North Street Okehampton Devon EX20 1AR ■ 01837 55045

Fax: 01837 55046

21a Cornwall Office Trevint House Strangways Villas Truro Cornwall TR1 2PA ● 01872 262550 Fax: 01872 262551



National Office contacts

English Nature Northminster House Peterborough PEl 1UA

• 01733 455000 Fax: 01733 68834

Corporate Manager: Andy Clements • 01733 318369

General Managers: Tim Bines

◆ 01233 8125182Kevin Charman◆ 0191 281 6316Andrew Deadman

■ 01743 709611

Mark Felton

● 01733 455357 Jenny Heap

• 01733 455374

Sarah Priest

4 01635 268881

Deryck Steer

4 01733 455369

Private Office

Team Manager: Richard Findon

401733 455356

National Partnerships Team Team Manager: Michael Ford

4 01733 455106

Lowlands Team

Team Manager: Richard Wright

4 01733 455276

Uplands Team

Team Manager: Will Williams

4 01733 455276

Environmental Impacts Team Team Manager: Colin Prosser

4 01733 455213

Conservation Services Team Team Manager: Wyn Jones

4 01733 455148

Maritime Team

Team Manager: Geoff Radley

4 01733 455230

Human Resource Services Team

Team Manager: Margaret Bull

4 01733 455054

Information Systems Team Team Manager: Alan Williams

4 01733 455310

Information Resources Services Team

Team Manager: John Creedy

4 01733 455098

Publicity and Grants Team Team Manager: Sharon Gunn

4 01733 455179

Office Services

Team Manager: Geoff Cooper

■ 01733 455025

Finance Services Team Team Manager: Keith Little

4 01733 455172

Refereed publications produced by English Nature staff

BARKER, G.M.A. 1996. Alien and native - drawing a line. *Ecos*, 17(2), pp 18-26.

BARKER, G.M.A. 1996. Areas Verdes y Participación Social. *Documentos Ambiente*. Año 11, pp 41-46.

BATTEN, L., KIRBY, K., MARSDEN, J., WILKINSON, M., & WHITMORE, M. 1996. England: Natural Areas and Prime Biodiversity Areas. *Perspectives on ecological networks*, (ed P. Nowicki et al.) European Centre for Nature Conservation. pp 71-91.

[BENNETT, M.R., DOYLE, P.], LARWOOD, J.G., & PROSSER, C.D. 1996. *Geology on your doorstep: The role of urban geology in earth heritage conservation.* Geological Society, London, pp 270.

BROWN, A.F., & [ATKINSON, P.W.] 1996. Habitat association of Coastal Wintering Passerines. *Bird Study*, 43, pp 188-200.

CARTER, I. 1996. Red Kites in Britain. Naturopa, 82, p 14.

CLARKE, C., & [CARTER, I.] 1996. Changes in the Heathland Resource of the Suffolk Sandlings. *Geography*, pp 173-176.

CLIFTON, S.J., [WARD, L.K., & RANNER, D.S.] 1997. The status of juniper in north-east England. *Biological Conservation*, 79, pp 67-77.

CLOUGH, P.W.J. 1996. Planning and sustainable management: a re-examination of the peri-urban problem. *Review of Marketing and Agricultural Economics*, 64, pp 277-289.

COOKE, A.S., & [LAKHANI, K.H.] 1996. Damage to coppice regrowth by muntjac deer *Muntiacus reevesi* and protection with electric fencing. *Biological Conservation*, 75, pp 231-238.

COOKE, A.S., [GREEN, P. & CHAPMAN, N.G.] 1996. Mortality in a feral population of muntjac *Muntiacus reevesi* in England. *Acta Theriologica*, 41, pp 277-286.

COOKE, A.S. 1996. Conservation, muntjac deer and woodland reserve management. *Journal of Practical Ecology and Conservation. Special Publication* No.1, pp 43-52.



[DICKSON, J.H., BORTENSCHLAGER, S., OEGGL, K.,] PORLEY, R., & [McMULLEN, A.] 1996. Mosses and the Tyrolean Iceman's southern provenance. *Proclamations of the Royal Society of London*, 263, pp 567-571.

DRAKE, C.M., & BALL, S. G. 1996. The Second British record of *Cosmetopus dentimanus* (Diptera, Scathophagidae). *Dipterists Digest*, 2, pp 71.

DRAKE, C.M. 1996. The larva and habitat of *Lonchoptera nigrociliata* (Diptera: Lonchopteridae). *Dipterists Digest*, 3, pp 28-31.

EVANS, D.H. 1996. *Ugooloceras oblatum* Gen. and sp. nov., an annulate orthocerid (Orthocerida, Nautiloidea) from the Llanvirn Series of County Mayo. *Irish Journal of Earth Sciences*, 15, pp 1-6.

[GIBBONS, D.W., AVERY, M.I.,] & BROWN, A.F. 1996. Population trends of breeding birds in the United Kingdom since 1800. *British Birds*, 89, pp 291-305.

GIBSON, M., [JENNINGS, S., & HAYCOCK, N.] 1996. Protection of river SSSIs from diffuse pollution - a case study of the River Lugg catchment. *Buffer Zones: Their processes and potential in water protection.* Conference Handbook 30th August - 2nd September 1996. pp 38-39.

GILLILAND, P. 1996. Improving understanding and integration of coastal zone management information: a case study from Flamborough Head Sensitive Marine Area. *Littoral '96: the Third International Eurocoast Conference.* Sep 16-19 1996.

KEY, R.S., GREEN, E.E., & [ALEXANDER, K.N.A.] 1996. The management of over mature tree populations for nature conservation - the basic guidelines. *Pollard and Veteran Tree Management II*, pp 122-135.

KEY, R.S. 1996. Invertebrate conservation and Pollards. *Pollard and Veteran Tree Management II*, pp 21-28.

KEY, R.S. 1996. The dune tiger beetle *Cincindela maritima* Latreille and Dejean (Carabidae) on the North Norfolk coast. *The Coleopterist*, 5, pp 21.

KEY, R.S. 1996. The durability of laser printer and photocopier toners for data tables. *The Coleopterist*, 5, pp 20-21.



KEY, R.S. 1996. Leicestershire Red Data Books Beetles. Derek Lott 1995. 120pgs. Joint publication of Leicestershire County Museum Arts and Records Service and Leicestershire Rutland Wildlife Trust. *The Coleopterist*, 4, pp 93-94.

KEY, R.S. 1996. *Stenolophus skrimshiranus* Stephens & *Badister unipustulatus* Bonelli (Carabidae) in South Lincolnshire. *The Coleopterist*, 5, pp 22.

KIRBY, K.J., THOMAS, R.C., & [DAWKINS, H.C.] 1996. Monitoring of changes in tree and shrub layers in Wytham Woods (Oxfordshire) 1974-1991. *Forestry*, 69, pp 319-334.

[MITCHELL, F.J.G., HESTER, A.J.] & KIRBY, K.J. 1996. Effects of season and intensity of sheep grazing on a British woodland: browsing damage to planted saplings. *Botanical Journal of Scotland*, 48, pp 199-207.

PAGE, K.N. 1996. Mesozoic Ammonoids in Space and Time. *In:* Landman, N. *et al.*, *Ammonoid Palaeobiology*. Topics in Geobiology, 13, pp 755-794.

PAGE, K.N. 1996. Observations on the succession of ammonite faunas in the Bathonian (Middle Jurassic) of South-West England, and their correlation with a Sub-Mediterranean Standard Zonation. *Proceedings of the Ussher Society*, 10, pp 45-53.

PORLEY, R.D. 1996. A bryophyte flora of sarsen stones and an assessment of their bryological interest. *Journal of Bryology*, 19, pp 79-88.

PORLEY, R.D. 1996. Foliicolous *Metzgeria fruticulosa* on box leaves in the Chiltern Hills, England. *Journal of Bryology*, 19, pp 188-189.

PORLEY, R.D. 1996. Further observations on the bryophytes in Chawley Brick Pit, Oxford. *Journal of Bryology*, 19, pp 185-187.

REID, C.M., [FOGGO, A., & SPEIGHT, M.] 1996. Dead wood in the Caledonian pine forest. *Forestry*, 69, pp 275-279.

[SMITH, R.S]., CORKHILL, P., [SHIEL, R.S & MILLWARD, D] 1996. The conservation management of mesotrophic (meadow) grassland in Northern England. 2. Effects of grazing, cutting date, fertilizer and seed application on the vegetation of an agriculturally improved sward. *Grass and Forage Science*, 51, pp 292-305.



WALL, T. 1996. Strategies for Nature Conservation in Parklands: Some Examples from Moccas Park National Nature Reserve. *Pollard and Veteran Tree Management*, 11, pp 42-49.

WALL, T. 1996. Richard Noakes, Landscape Gardener; Richard Payne Knight, Conservationist. *The Picturesque. The Journal of the Picturesque Society*, 16, pp 15-24.



Learning and Development

English Nature is committed to developing its staff and during the year 10 teams in English Nature began working towards the Investors in People award. This is a nationally recognised standard based on the effective management of learning and development. Health and safety training continued to be a top priority for training. In total over 1,600 training days on a wide range of topics were provided by Learning Services Team for staff in English Nature

1996/97 was the final year of the successful Learning Organisation project. This project has identified many new ways of learning for English Nature and generated considerable external interest in English Nature's approach. Action Learning is one of the new ways of learning launched in 1996 and has already attracted over 40 participants. The new employee development scheme and career guidance scheme have also proved popular.

Full details can be obtained from Steve Dolan, Human Resource Services Team.



English Nature publications published during 1996/97

Reports and handbooks

•	
Reptile survey methods: proceedings of a seminar on Nov. 95 at Zoological Society of London's meeting rooms, Regents Park	1 85716 239 0
State of the environment - chalk grassland. Consultation Report.	1 85716 240 4
Impact of water abstraction on wetland SSSIs	1 85716 243 9
5th Annual Report	1 85716 248 X
Invertebrate conservation slide packs - Heathland and Grassland	1 85716 263 3
Invertebrate conservation slide pack - Woodland and Wetland	1 85716 264 1
Restoring moorland: Peak District Moorland Management Project	
Phase III Report	1 85716 268 4
English Nature Science	
11 The lowland heathland management booklet. Version 2.0	1 85716 266 8
28 English Nature's research programme 1996/97	1 85716 241 2
30 Opportunities for amphibians and reptiles in the designed landscape - proceedings of a seminar held on 24.1.96	1 85716 265 X
Booklets and leaflets	
Saltfleetby-Theddlethorpe Dunes NNR	1 85716 235 8
Progress 96	1 85716 236 6
WES - White peak leaflet	1 85716 237 4
Holt Heath	1 85716 238 2
Welcome to English Nature	1 85716 242 0
Veteran Trees	1 85716 244 7



1 85716 245 5
1 85716 246 3
1 85716 247 1
1 85716 249 8
1 85716 251 X
1 85716 252 8
1 85716 253 6
1 85716 254 4
1 85716 255 2
1 85716 256 0
1 85716 257 9
1 85716 258 7
1 85716 260 9
1 85716 261 7
1 85716 262 5
1 85716 267 6

In a move to improve the service to thousands of people who request books and leaflets, the distribution and sale of English Nature publications has been contracted out to Telelink Ltd. The Portsmouth based company will update and stock English Nature's catalogue which contains a list of current publications. For a copy of the catalogue or details of any free or priced publications, contact -

Telelink Ltd, PO BOX 100, Fareham PO14 2SX. Tel 01329 668600

Fax 01329 664725