

Directive on the Conservation of Wild Birds: 79/409/EEC

Eighth Report by the UK under Article 12:

Implementation of National Provisions 2002-2004

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Executive Summary

This is the eighth Triennial report for the United Kingdom (UK) on the implementation of Council Directive 79/409/EEC on the Conservation of Wild Birds. The first and second Triennial reports described in detail the legislation enacted to implement Directive 79/409 (as amended by Directives 85/411, 86/122, 91/244 and 92/43). The fourth Triennial Report recorded changes in legislation enacted between 1990 and 1992. The fifth Triennial Report reported on changes in legislation enacted, and other significant activities during the period 1993 -1995. The sixth and seventh Triennial Report reported on significant activities for the periods 1996-1998 and 1999-2001 respectively, while this report updates the situation for the period 2002-2004.

The key legal instruments relevant to the Birds Directive are the Wildlife and Countryside Act (WCA) 1981, the Wildlife (Northern Ireland) Order 1985, and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985, the Countryside and Rights of Way (CRoW) Act 2000 (for England and Wales), the Nature Conservation (Scotland) Act 2004, the Conservation (Natural Habitats, &c.) Regulations 1994, and the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004.

During the reporting period, the UK has taken a range of new measures, and further developed some existing initiatives, which support its implementation of the Birds Directive. These measures include strengthening the legislative framework, including introducing new stricter domestic measures to protect sites and species in Scotland. Measures have also been taken on a range of initiatives including ongoing review of the UK's Special Protection Area (SPA) network, wider initiatives to address wildlife crime in partnership with stakeholders and regulating use of lead shot to prevent poisoning of waterfowl. The report also contains information on the UK's bird monitoring programmes and on scientific research undertaken during the reporting period which supports implementation of the Birds Directive.

Article 2

Ongoing efforts are underway to ensure effective enforcement of the legislation to enforce the Birds Directive, including the measures below. Several long-term approaches have been described in previous reports, including the Partnership for Action Against Wildlife Crime (PAW).

Enforcement

Police Liaison

The partnership formed between the Countryside Council for Wales (CCW) and North Wales Police in October 2000 was further expanded in 2003 when an officer from South Wales Police was seconded to CCW (there are now two dedicated officers seconded in this way). This officer will assist the partnership further by raising awareness and building up a network of organisations sharing similar aims, assisting CCW in its enforcement role, provide training and sharing information and advice via shows and educational visits. A lack of information on the extent of Wildlife Crime has been an obstacle to effective wildlife law enforcement in the past. A project to record all instances of Wildlife Crime initially in North and South Wales was implemented by the partnership resulting in annual reporting which provides a clearer picture of trends and key areas to target. As a result of this work UK and regional conservation priorities for police wildlife crime officers were developed, targeting key areas where illegal activities were considered to be threatening a species, habitat or protected area. In relation to birds the persecution of hen harriers was adopted as a UK priority under *Operation Artemis*. In Wales further priorities were adopted including the problem of illegal burning on sites of special scientific interest which is known to affect bird survival and breeding success.

Status of Bird Populations

Population estimates for all regularly occurring species in the UK, based on data to 2004, were published in 2006 (Baker *et al.* 2006. Population estimates of birds in Great Britain and the United Kingdom. *British Birds* 99: 25-44).

Trend information is available in two major publications:

Wider Countryside Report: covers common breeding birds and is available online only (<http://www.bto.org/birdtrends2005/index.htm>).

Wetland Bird Survey Alerts System: covers non-breeding waterbirds and is available online only (<http://www.bto.org/survey/webs/webs-alerts-index.htm>).

A major review of the status of birds in the UK was undertaken by a group of government and non-governmental experts during the last reporting period. The results of this review were published in 2002 (Gregory *et al.* 2002. The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002-2007. *British Birds* 95: 410-450). The assessment method is not equivalent to regional or national IUCN Red Listing procedure, but relies on a broader set of criteria. The review produced a red list with 40 species of high conservation concern, and amber list of 121 species of medium conservation concern, and a green list of 86 species of least concern. The review is influential on conservation action in the UK, but is not adopted officially as a way of identifying UK BAP species; there is a separate ongoing review for this purpose that is more closely allied to IUCN Red Listing process.

(<http://www.jncc.gov.uk/page-2902>)

A summary of the status of the UK's birds is also provided in the annual publication *The State of the UK's Birds*; the 2004 report is relevant to the reporting period (Eaton *et al.* 2005. BTO, RSPB, WWT, CCW, EN, EHS & SNH, Sandy).

(http://www.english-nature.org.uk/News/news_photo/SofUKBIRDS04.pdf)

Goose Forum and Management Schemes

These schemes are explained in Appendix 4.

Lead poisoning of waterfowl / phasing out of lead shot

England: Statutory Instrument 1999 No. 2170 - The Environmental Protection (Restriction on Use of Lead Shot) (England) Regulations 1999 (as amended). Prohibits use of lead shot for the purpose of shooting with a shot gun- (a) on or over any area below high-water mark of ordinary spring tides; (b) on or over any site of special scientific interest (SSSI) included in Schedule 1 to the Regulations; or (c) any wild bird included in Schedule 2 to the Regulations.

Wales: Welsh Statutory Instrument 2001 No. 4003 (W.331) - The Environmental Protection (Restriction on Use of Lead Shot) (Wales) Regulations 2001. Came into force on 1st September 2002. Prohibits the use of lead shot for the purpose of shooting with a shot gun - (a) on or over any area below high-water mark of ordinary spring tides; (b) on or over any site of special scientific interest included in Schedule 1 to the Regulations; or (c) any wild bird included in Schedule 2 to the Regulations.

Scotland: Scottish Statutory Instrument 2004 No. 289 - The Environmental Protection (Restriction on Use of Lead Shot) (Scotland) Regulations 2004. Came into force on 1st September 2004. Prohibits use of lead shot for the purpose of shooting with a shot gun on or over wetlands (as defined in Article 1.1 of the Convention on Wetlands (Ramsar); with exceptions outlined in paragraph 3.2 of the Statutory Instrument).

In all of these regulations/instruments lead shot is defined as any shot made of - (a) lead, or (b) any alloy or compound of lead if lead comprises more than 1% of that alloy or compound.

Northern Ireland: No regulation on use of lead shot yet in place.

Species Action Plans

Detailed action plans exist for the species listed in the seventh triennial report. Reports on progress (up to 1999) were published in 2003 (<http://www.ukbap.org.uk/librarysearchresults.aspx?ID=611>). Further assessment of progress towards targets was initiated in 2002; a preliminary assessment of outcomes was published in 2003 (<http://www.ukbap.org.uk/Library/2002ReportPamphlet.pdf>). A revision of targets for SAPs was initiated in 2004 and a parallel process to review habitats and species listing under the UK Biodiversity Action Plan was also initiated.

Raptors

A Raptor Working Group was set up in 1995 following increasing concerns from grouse moor owners and racing pigeon fanciers over the impact of rising raptor populations on bird numbers. The group's report (Department of the Environment, Transport and the Regions (DETR) and JNCC 2000) aimed to provide an integrated solution to the problems presented by birds of prey to game bird managers and pigeon fanciers. A review of progress against the 25 recommendations from the 2000 report was published in 2003 (<http://www.jncc.gov.uk/PDF/comm03N06.pdf>).

A major conference on birds of prey was held in 2000 and papers published in 2003 (Thompson *et al.* Birds of Prey in a Changing Environment. TSO, Edinburgh). This volume presents a substantial synthesis of our understanding of status and population change in UK birds of prey, the impacts of land-use change on species, and describes conservation actions and conflict management.

Uist Wader Project

In the seventh triennial report we described a project to manage introduced hedgehog populations in part of the UK where the species is non-native and has been impacting on bird populations. This is an ongoing project and as yet there is no report against targets. However, active removal of hedgehogs was initiated under the project in 2003.

Jackson DB, Fuller RJ and Campbell ST (2004) Long-term population changes among breeding shorebirds in the Outer Hebrides, Scotland, in relation to introduced hedgehogs (*Erinaceus europaeus*). *Biological Conservation* 117: 151–166.

Conservation of Individual Species

Specific examples of efforts to conserve bird species are explained in Appendix 2.

Article 3

SSSI/ASSI Statistics

Summaries of the notified SSSIs/ASSIs in the UK at March 31st 2005 are provided in the tables below:

Country	Number of SSSIs	SSSI area (ha)
England	4,115	1,097,766
Scotland	1,451	1,005,000
Wales	1,022	257,064
Great Britain	6,588	2,359,830

Country	Number of ASSIs	ASSI area (ha)
Northern Ireland	225	93,130
Northern Ireland	225	93,130

Management agreement statistics

Management agreements are used to safeguard and enhance the management of sites and are an important mechanism for securing their favourable condition. Only SSSI management agreement figures are given. It should be noted that SSSI management agreements may relate to any of the reasons for which the sites were designated. This of course includes, but is not limited to, birds. It should also be noted that most Natura 2000 sites are underpinned by SSSIs.

In England 4,115 SSSIs covered 1,097,766 hectares of land by 31 March 2005, of which 159,262 hectares was subject to management agreements. Of the 2,502 agreements in place, 2,221 covering 152,262 hectares had been concluded under positive agreements, including English Nature's Wildlife Enhancement Scheme (see Appendix 4).

In Northern Ireland 225 ASSIs covered 93130 hectares of land by 31 March 2005. During the year 1 April 2000 to 31 March 2005, 21 ASSI management agreements were entered into.

In Wales 1,022 SSSIs covered 257,064 hectares of land by 31 March 2004. Of this, 61,513 hectares were subject to section 15 management agreements under the terms of the Countryside Act 1968.

In Scotland, *Natural Care* was launched in October 2001. Scottish Natural Heritage is charged with bringing the SSSI area under assured management arrangements to 80% by 31 March 2008. The management agreement schemes which form *Natural Care* are explained separately in Appendix 4.

Agri-environment Schemes

A number of Agri-environment Schemes are currently run in the UK, all of which are of benefit to farmland birds and in England will help contribute towards achieving the Public Service Agreement target. These schemes are explained in Appendix 3.

In England, Countryside Stewardship is set to rise from £29 million in 1999/2000 to £126 million by 2006/7. From 2002, following the success of the Arable Stewardship scheme, a number of its options (e.g. winter stubbles, nest plots, wild bird cover) were incorporated into the Countryside Stewardship Scheme.

Environmental Stewardship (ES) was introduced on 3 March 2005. This Scheme has three elements – Entry Level Stewardship, Organic Entry Level Stewardship and Higher Level Stewardship. ES is the centrepiece in delivering the Government's sustainable agriculture and rural policies and it contributes to Defra strategic priorities for natural resource protection. The Scheme is also the primary mechanism for delivering Defra's Public Service Agreement (PSA) targets on reversing the long term decline in the number of farmland birds by 2020 and for bringing 95% of Sites of Special Scientific Interest into favourable condition by 2010.

Habitat restoration

Habitat restoration and recreation can provide substantial benefits to birds. Specific examples of habitat restoration projects are explained in Appendix 5.

Habitat Action Plans

Forty-five Priority HAPs were completed in accordance with criteria set out in the 1995 UK Biodiversity Steering Group Report. Although HAPs do not relate specifically to birds, actions taken to implement them, such as habitat restoration and recreation, may provide substantial benefits to bird populations.

Reports on progress (up to 1999) were published in 2003 (<http://www.ukbap.org.uk/librarysearchresults.aspx?ID=611>). Further assessment of progress towards targets was initiated in 2002; a preliminary assessment of outcomes was published in 2003 (<http://www.ukbap.org.uk/Library/2002ReportPamphlet.pdf>). A revision of targets for HAPs was initiated in 2004 and a parallel process to review habitats and species listing under the UK Biodiversity Action Plan was also initiated.

Article 4

SPA network: background, rationale and statistics

The seventh triennial report described completion of a detailed review of the UK SPA network; *The UK SPA network: its scope and content* (Stroud *et al* 2001).

Towards the end of 2001, we established three fora for taking forward implementation of the findings of the review and further development of the UK SPA network. Several additions to the SPA network have been made in response to the findings of these fora, with particular emphasis on developing approaches for assessing the most suitable areas in the marine environment for SPA classification.

Approaches to the extension of terrestrial SPAs for breeding seabirds into marine waters were developed by JNCC (on the basis of findings detailed in JNCC Report 329) and are now under further consideration. Extensive surveys of waterbirds in marine waters have been undertaken (e.g. JNCC Reports 357 (2004), 345 (2004) and 333 (2003)) and the development of approaches to site identification and boundary determination initiated.

A summary of the classified SPAs in the UK at 31st March 2006 is provided in the table below:

Country	Number of SPAs	SPA area (ha)
England	77	609,249
England/Scotland	1	43,637
England/Wales	2	37,748
Northern Ireland	16	117,671
Scotland	140	598,276
Wales	17	123,007
UK	251	1,520,124

SPAs classified during the reporting period are listed in Appendix 1. Full details of the status of the UK SPA Network are available online (<http://www.jncc.gov.uk/page-162>).

Ramsar site information

In addition to SPA classification, many wetland sites in the UK have also been designated under the Convention on Wetlands of International Importance (the Ramsar Convention).

In the seventh triennial report we described the initiation of a Ramsar Review process, focusing specifically on reviewing the inclusion of globally and nationally under-represented habitats and species. As part of this process, a comparative study of the UK SPA, Ramsar and IBA networks was undertaken, as well as a review of representation in the Ramsar network of waterbirds on the UK red list. This study will inform a further review of the UK SPA network planned for 2008-2010.

A summary of the designated Ramsar Sites in the UK at 31st March 2006 is provided in the table below:

Country	Number of Ramsar sites	Ramsar site area (ha)
England	66	294,427
England/Scotland	1	43,637
England/Wales	3	39,336
Northern Ireland	19	88,093
Scotland	50	283,083
Wales	7	11,366
UK*	146	759,942

*Figure excludes 20 Ramsar sites designated in the UK Overseas Territories and Crown Dependencies.

Article 5

New offences in Nature Conservation (Scotland) Act 2004

The UK has introduced stricter domestic measures to the general system of protection implementing Article 5. The Nature Conservation (Scotland) Act 2004 introduced the offences of:

- (a) recklessly killing, injuring or taking any wild bird;
- (b) recklessly taking, destroying or damaging the nest of any wild bird while that nest is in use or being built;
- (c) intentionally or recklessly interfering with the nest of any wild bird while that nest is in use or being built,
- (d) at any time, intentionally or recklessly damaging or destroying or interfering with any nest habitually used by the White-tailed eagle, *Haliaeetus albicilla*;
- (e) intentionally or recklessly obstructing or preventing any wild bird from using its nest,
- (f) recklessly taking or destroying an egg of any wild bird;
- (g) recklessly disturbing any wild bird on Schedule 1 to the Wildlife and Countryside Act 1981 while it is building a nest or is in, on or near a nest containing eggs or young;
- (h) disturbing any dependent young of such a bird, and
- (i) intentionally or recklessly harassing any wild White-tailed eagle, *Haliaeetus albicilla*.

Article 6

The definition of “wild bird” was amended in 2004 in the Wildlife and Countryside Act 1981 in England, Scotland and Wales and in the Wildlife (Northern Ireland) Order 1985.

Article 7

There have been no further changes during the reporting period to the measures introduced in the UK to implement Article 7.

Article 8

Lead poisoning of waterfowl / phasing out of lead shot

The UK has introduced stricter domestic measures concerning methods of killing and taking wild birds, specifically in respect of use of lead shot in wetlands in England, Scotland and Wales. These measures are explained under the Article 2 section.

Article 9

Derogations report

The UK has compiled and submitted annual derogation reports to the European Commission (EC) as required under Article 9(3).

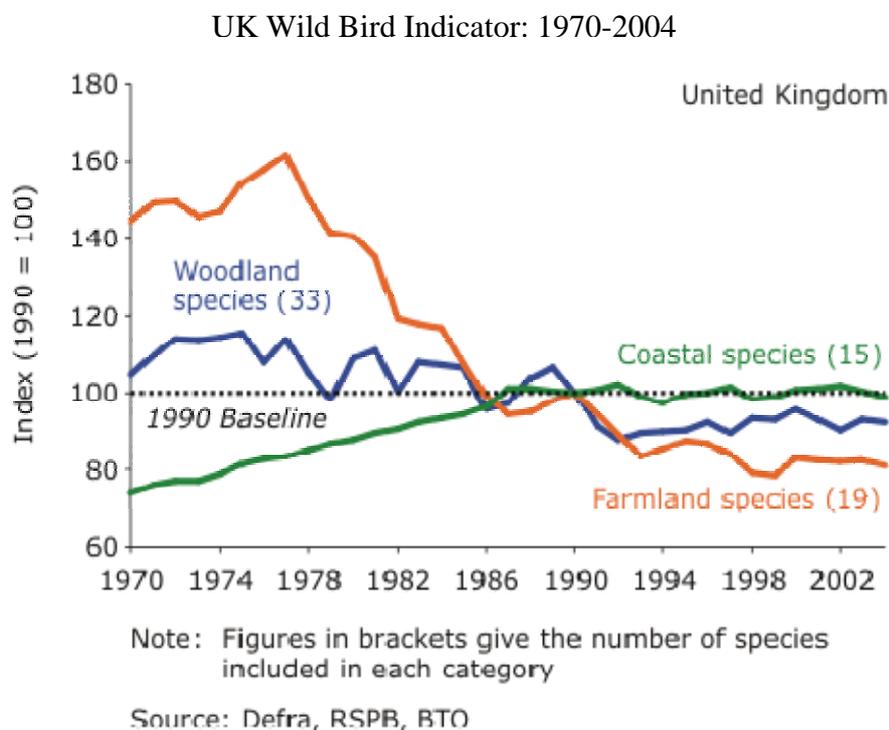
Article 10

Bird population monitoring

The national schemes for bird population monitoring were described in detail in the seventh triennial report; we provide updates where significant changes to the schemes or uses of data have occurred.

Wild Bird Indicator

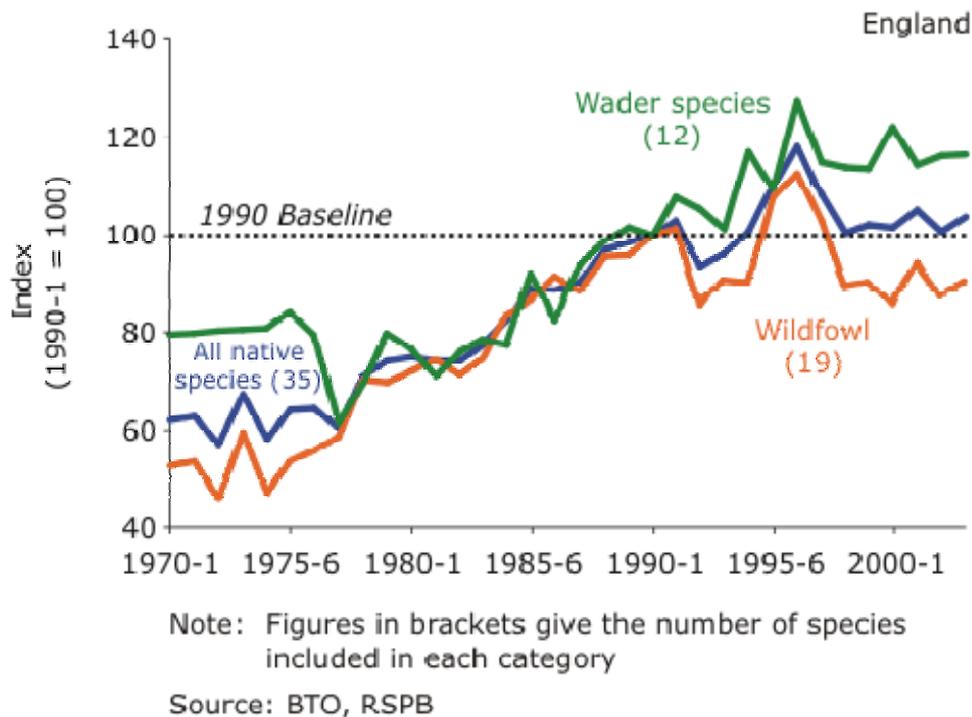
The UK wild bird indicator forms one of the 20 UK framework indicators for sustainable development, comprising indices of common farmland, woodland and coastal bird species.



Both farmland and woodland species have been generally declining from the mid-1970s. The farmland bird index declined by almost half between 1977 and 1993, but has been relatively stable since. Woodland bird populations in 2004 were about 20 per cent lower than the peak of the early 1970s but remained fairly stable from 1991. Populations of some farmland birds, such as the skylark *Alauda arvensis* and corn bunting *Miliaria calandra*, and of woodland birds such as the song thrush *Turdus philomelos* and bullfinch *Pyrrhula pyrrhula* have fallen by more than half. Britain's breeding coastal bird populations are of international importance. Populations increased between 1970 and 1987 by 37 per cent and have remained stable since then.

A waterbird indicator has also been developed to sit alongside the above indicator:

Wintering wetland birds, 1970-1 to 2003-4



Wetland Bird Survey

The Wetland Bird Survey (WeBS) is a joint scheme of the British Trust for Ornithology (BTO), The Wildfowl and Wetlands Trust (WWT), Royal Society for the Protection of Birds (RSPB) and JNCC to monitor non-breeding waterfowl in the UK. The principal aims of the scheme are to identify population sizes, determine trends in numbers and distribution, and to identify important sites for waterfowl.

- Annual reports covering the periods 2001/02 to 2003/04 were published by the scheme (<http://www.bto.org/survey/webs/index.htm>)
- *WeBS Alerts System*. WeBS Alerts have been developed to provide notification of significant changes in waterbird population levels at various spatial scales including the UK as a whole, its constituent countries and for designated sites (SPAs, SSSIs & ASSIs). The Alerts methodology is currently undergoing scientific peer review. The report is updated annually and is available only as an online publication (<http://www.bto.org/survey/webs/webs-alerts-index.htm>).
- *Low Tide Count Atlas*. Published in 2003: Musgrove, AJ, Langston, RHW, Baker, H and Ward, R. 2003. Estuarine Waterbirds at Low Tide: results of the Low Tide Count Scheme 1992/3 to 1997/98. International Wader Study Group, BTO, WWT, RSPB, JNCC, Thetford.
- *Population Estimates*. Two significant reviews were published during the reporting period: Rehfisch *et al.* 2003. Numbers of wintering waterbirds in Great Britain and the Isle of Man (1994/95–1998/99): II. Coastal waders (Charadrii). *Biological Conservation*, 112, 329-341. Kershaw & Cranswick 2003. Numbers of wintering waterbirds in Great Britain and the Isle of Man (1994/95–1998/99): I. Wildfowl and selected waterbirds. *Biological Conservation*, 111, 91-104.

- *Status assessments.* The status of Little Egret was reviewed and published by the BTO (<http://www.bto.org/survey/webs/webs-special-egrets.htm>).
- Online capture of WeBS data and access to raw data is currently under development.

Goose & Swan Monitoring Programme

The Goose & Swan Monitoring Programme is a joint initiative of the WWT and JNCC; it monitors numbers and productivity of geese and swans in the UK during the non-breeding season. During the reporting period a significant redevelopment of the programme's website was undertaken to improve access to information (http://www.wwt.org.uk/research/monitoring/goose_and_swan.asp).

Species	Global Status	UK Status	Population (Flyway)	Population (GB)	GB Trend	Productivity
Bewick's Swan	Least Concern	Amber	29,000	8,070	↓	5-25%
Whooper Swan	Least Concern	Amber	20,900	5,720	↑	10-20%
Bean Goose	Least Concern	Amber	<i>fabalis</i> : 100,000 <i>rossicus</i> : 600,000	<i>fabalis</i> : 400 <i>rossicus</i> : 100	≈	moderate?
Pink-footed Goose	Least Concern	Amber	240,000	241,000	↑	15-20%
European White-fronted Goose	Least Concern	Amber	1,000,000	5,790	↓	13-32%
Greenland White-fronted Goose	Least Concern	Amber	27,000	20,900	↓	10-20%
Iceland Greylag Goose	Least Concern	Amber	89,100	81,900	≈	10-20%
Northwest Scotland Greylag Goose	Least Concern	Amber	9,000	9,620	↑	20-30%
Re-established Greylag Goose	Least Concern	Amber	-	28,500	↑	24%
Greenland Barnacle Goose	Least Concern	Amber	54,100	45,000	↑	6-13%
Svalbard Barnacle Goose	Least Concern	Amber	23,000	22,000	≈	<5%
Dark-bellied Brent Goose	Least Concern	Amber	215,000	98,100	↓	0-31%
Canadian Light-bellied Brent Goose	Least Concern	Amber	20,000	20,000	↑	1-30%
East Atlantic Light-bellied Brent Goose	Least Concern	Amber	5,000	2,900	≈	5-31%

Waterbird Review Series

A series of individual species or population reviews based on 40 years of monitoring, providing an assessment of population change (numbers and distribution), information on productivity and inventories of important sites (<http://www.wwt.org.uk/research/waterbirdreviews>). During the reporting period reviews were published for most goose and swan populations in the UK.

Seabird 2000 survey

The results of the Seabird 2000 survey were published in 2004: Mitchell *et al.* Seabird Populations of Britain and Ireland. T & AD Poyser, London.

Numbers of seabirds breeding in Britain and Ireland have risen steadily over the last 30 years from around 5 million in 1969-70, to over 6 million in 1985-88, to almost 8 Million in 1998-2002. Twenty-five species of seabird currently breed in Britain and Ireland, the coastal populations of 13 species have increased in size by more than 10%, three have decreased by more than 10% and five have changed by less than 10% (trends for four species were impossible to assess due to incomplete previous surveys).

More information and access to spatial datasets is available on the JNCC website:
<http://www.jncc.gov.uk/page-1548>

Scottish Raptor Monitoring Scheme

Following publication in February 2000 of a significant review of raptor conservation in the UK (*The Report of the UK Raptor Working Group*) a number of government and non-governmental conservation organisations established a new agreement for monitoring raptor populations in Scotland.

The scheme has three main objectives:

- ♦ *Co-operation:* to promote better co-operation between the various bodies responsible for gathering information on Scottish raptors.
- ♦ *Survey and Monitoring:* to provide robust information on Scottish raptor populations, in order to determine trends in numbers, range, survival and productivity, and to understand the causes of population changes.
- ♦ *Data and information standards:* to maintain high and uniform standards for the collection, collation, auditing and analysis of data, and reporting of information.

In order to meet these objectives a part-time Raptor Monitoring Officer (RMO) was appointed in 2003 whose principal responsibilities are to co-ordinate raptor population monitoring in Scotland. An important function will be to liaise with Raptor Study Groups to develop systematic field monitoring methods. In addition the RMO will collate annual data records for all species and carry out appropriate analysis. The RMO will also be responsible for producing an annual raptor monitoring report for Scotland.

The scheme has produced two annual reports (2003 & 2004) since its establishment in 2002 and to improve information exchange has redesigned its website (<http://www.scottishraptorgroups.org/srmscheme.php>). Reports provide an overview of status and productivity for all raptor species in Scotland.

Predatory Bird Monitoring Scheme

The PBMS is a long-term, national monitoring scheme that quantifies the concentrations of contaminants in the livers and eggs of selected species of predatory and fish-eating birds in Britain. The Scheme is run by the Centre for Ecology and Hydrology (CEH) and is funded jointly by the Joint Nature Conservation Committee (JNCC), the Environment Agency (EA) and CEH. Annual reports are published by JNCC and are available to download from the PBMS website (<http://pbms.ceh.ac.uk/default.htm>). Publications during the reporting period include:

Shore *et al.* 2002. Proposals for modifications to the Bird of Prey Monitoring Scheme. JNCC Report 320, JNCC, Peterborough.

Broughton, R.K., Osborn, D., Shore, R.F., Wienburg, C.L. & Wadsworth, R.A. (2003). *Identifying pollution hotspots from PCB residues in birds of prey*. Environmental Toxicology and Chemistry 22: 2519-2524.

Wienburg, C.L. & Shore, R.F. (2004). *Factors influencing PCB concentrations in sparrowhawks (Accipiter nisus), kestrels (Falco tinnunculus) and herons (Ardea cinerea) in Britain*. Environmental Pollution 132: 41-50.

National surveys of rarer species (SCARABBS)

SCARABBS (Statutory Conservation Agencies/RSPB Annual Breeding Bird Scheme) provides a framework for undertaking full national surveys of breeding populations of rarer species that are not readily monitored by other surveillance schemes. During the reporting period surveys of peregrine (2002; with BTO), chough (2002), bearded tit (2002), golden eagle (2003), curlew (2003), corncrake (2003), hen harrier (2004) and nightjar (2004; with BTO and Forestry Commission) were undertaken.

Breeding waders of wet meadows in England and Wales 2002

A survey organised jointly by the RSPB, BTO, English Nature and Defra, which aimed to assess trends in abundance of several breeding wader species specifically in wet meadow habitats by comparison with the previous national survey in 1982.

A summary of results is available on the BTO website (<http://www.bto.org/survey/complete/bwwm.htm>):

Country	Number of sites	Area (hectares)	Oystercatcher	Lapwing	Snipe	Curlew	Redshank
England	781	112,336	53	-35	-62	-33	-15
Wales	58	10,797	17	-69	9	-76	-63

Wilson, A.M., Vickery, J.A., Brown, A. Langston, R.H.W., Smallshire, D., Wotton, S. & Vanhinsbergh, D. 2005. Changes in the numbers of breeding waders on lowland wet grasslands in England and Wales between 1982 and 2002. *Bird Study* 52: 55-69.

Population Status of Birds in the UK

A major review of the status of birds in the UK was undertaken by a group of government and non-governmental experts during the last reporting period. The results of this review were published in 2002 (Gregory *et al.* 2002. The population status of birds in the United Kingdom, Channel Islands and Isle of Man: an analysis of conservation concern 2002-2007. *British Birds* 95: 410-450). The assessment method is not equivalent to regional or national IUCN Red Listing procedure, but relies on a broader set of criteria. The review produced a red list with 40 species of high conservation concern, and amber list of 121 species of medium conservation concern, and a green list of 86 species of least concern. The review is influential on conservation action in the UK, but is not

adopted officially as a way of identifying UK BAP species; there is a separate ongoing review for this purpose that is more closely allied to IUCN Red Listing process.

Bird conservation science

A wide range of research projects that focus on conservation management of bird populations has been commissioned by government during the reporting period, some of which has yet to be published.

Raptors

A major conference on birds of prey was held in 2000 and papers published in 2003 (Thompson *et al.* *Birds of Prey in a Changing Environment*. TSO, Edinburgh). This volume presents a substantial synthesis of our understanding of status and population change in UK birds of prey, the impacts of land-use change on species, and describes conservation actions and conflict management.

Farmland Birds

A significant number of research projects have been undertaken during the reporting period, focussed on finding management solutions for reversing the declines of farmland specialist species. Two major farmland bird conferences were held; *Birds and Agriculture* in 2002 and *Ecology and Conservation of Lowland Farmland Birds II: the Road to Recovery* in 2004. Proceedings from these conferences have been published by the Association of Applied Biologists (*Aspects of Applied Biology* 67) and the British Ornithologists' Union (*Ibis* volume 146 Supplement 2, Nov 2004) respectively. The farmland bird research has been influential in the continued development of agri-environment provisions in the UK.

Article 11

Rare Breeding Birds Panel

Annual reports on the status of monitoring of those breeding birds which are not native to the UK but still rare (*i.e.* excluded non-native breeding bird populations with large or well-established populations) is undertaken by RBBP. The most recent of the Panel's reports on rare, non-native breeding birds covered the breeding year 2001 (Ogilvie and the RBBP 2003. *British Birds* 96: 620-625).

Non-native Waterbirds

Non-breeding, non-native waterfowl and hybrids are routinely monitored by both the Wetland Bird Survey and the Goose & Swan Monitoring Programme (see Article 10 section). In addition, a naturalised goose survey was conducted in 2000 (Rowell *et al.* 2004. WWT, Slimbridge).

Ruddy Duck

Ruddy ducks *Oxyura jamaicensis* are native to North American and were historically kept in wildfowl collections in the UK. Escapees and releases from these collections were the founders of a free-flying population, which by the start of the reporting period was estimated to number 5,946 birds.

The white-headed duck *Oxyura leucocephala* is classified as globally threatened, with the latest estimated world population of no more than 10,000 birds. The West European population of white-headed ducks is estimated to be around 2,300 birds, most of which are found in Spain. This population has grown from only 22 individuals in the 1970s due conservation effort. Ruddy ducks hybridise with the white-headed duck in Spain. This poses one of the greatest threats to the survival of the white-headed duck as a distinct species. To address this threat, the UK commenced a limited control trial of ruddy ducks from 1999 to 2002. Further trials were conducted through to the reporting period, the aims being to establish whether it is feasible to eradicate ruddy ducks in Britain within ten years and to estimate the cost of such a control strategy. Following conclusion of the trials in June 2002, the Government agreed in March 2003 that eradication of the Ruddy Duck in the UK is the preferred outcome, but also recommended further trials of control techniques. These trials continue beyond the end of the reporting period and a more detailed report on progress will be given in the next UK report.

In addition, Defra issued a general licence to allow the shooting or taking of ruddy ducks by landowners (a similar licence has been issued in Wales by the Welsh Assembly Government).

Policy development

A review of non-native species policy was published in 2003 (Defra 2003):
www.defra.gov.uk/wildlife-countryside/resprog/findings/non-native/index.htm

List of Abbreviations

AEWA	African-Eurasian Waterbird Agreement
ASSI	Area of Special Scientific Interest
BAP	Biodiversity Action Plan
BBS	BTO/JNCC/RSPB Breeding Bird Survey
BTO	British Trust for Ornithology
CCW	Countryside Council for Wales
CEH	Centre for Ecology and Hydrology
CRoW Act	Countryside and Rights of Way Act 2000
cSAC	candidate Special Area of Conservation
DARD	Department of Agriculture and Rural Development
Defra	Department for Environment, Food and Rural Affairs (formerly DETR and MAFF)
EA	Environment Agency
EC	European Commission
EHS	Environment and Heritage Service
EN	English Nature
ESA	Environmentally Sensitive Areas
EU	European Union
FC	Forestry Commission
GSMP	WWT/JNCC Goose and Swan Monitoring Programme
HAP	Habitat Action Plan
HHRP	Hen Harrier Recovery Project
HLF	Heritage Lottery Fund
IBA	Important Bird Area
IUCN	The World Conservation Union
JNCC	Joint Nature Conservation Committee
LIFE	L'Instrument Financier pour l'Environnement
NAW	National Assembly for Wales
NGMRG	National Goose Management Review Group
PAW	The Partnership for Action Against Wildlife Crime
pSPA	potential Special Protection Area
PBMS	CEH/JNCC/EA Predatory Bird Monitoring Scheme
RBBP	Rare Breeding Birds Panel
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SAP	Species Action Plan
SCARABBS	Statutory Conservation Agencies/RSPB Annual Breeding Bird Scheme
SE	Scottish Executive
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
TSO	The Stationery Office
UK	United Kingdom: England, Scotland, Wales and Northern Ireland
WCA	Wildlife and Countryside Act 1981
WeBS	BTO/WWT/RSPB/JNCC Wetland Bird Survey
WWT	Wildfowl and Wetlands Trust
ZSL	Zoological Society of London

Appendix 1: List of sites classified as SPAs between 2001 and 2004

SPA Name	Administrative Region	Classification Date	Extension Classification Date	Area (ha)
Ynys Seiriol / Puffin Island	Gwynedd	01-Feb-02		31.21
Glannau Ynys Gybi/ Holy Island Coast	Gwynedd	29-May-02		608.04
Outer Ards	Northern Ireland	11-Dec-02		1410.41
Cnuic agus Cladach Mhuile	Strathclyde	20-Dec-02		29248.97
Cuillins	Highland	20-Dec-02		29490.01
Arran Moors	Strathclyde	07-Mar-03		10736.51
Glen App and Galloway Moors	Dumfries and Galloway/Strathclyde	07-Mar-03		8942.38
Muirkirk and North Lowther Uplands	Strathclyde/Dumfries and Galloway	07-Mar-03		26330.31
Killough Bay	Northern Ireland	23-Mar-03		104.23
Migneint–Arenig–Dduallt	Gwynedd/Clwyd	26-Mar-03		19968.23
Bae Caerfyrddin/ Carmarthen Bay	Marine/Dyfed	10-Jun-03		33411.27
Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal	Gwynedd	10-Jun-03		373.55
Imperial Dock Lock, Leith	Lothian	23-Sep-04		0.11
Ribble and Alt Estuaries	Lancashire/Merseyside	16-Feb-95	28-Nov-02	12412.31
Forth Islands	Fife/Lothian	25-Apr-90	16-Feb-04	106.01
Mersey Estuary	Merseyside/Cheshire	20-Dec-95	23-Jun-04	5023.35

Appendix 2: Reports on the Conservation of Individual Species

Red kite

The red kite recovery programme continued through the reporting period, with releases of young birds at three locations in England and Scotland (42 in 2002, 44 in 2003 and 30 in 2004). A total of seven areas now hold a growing population: 222 pairs in 2002; 274 in 2003 and 416 in 2004. The natural Welsh population has continued to increase and the population was estimated to be 400-450 pairs in 2004.

Hen harrier

Hen Harrier Recovery Project: HHRP was established by English Nature in 2002. Initial results were encouraging, and during years one and two of the project (2002 & 2003), both the hen harrier's breeding population and distribution increased. During 2004 the national hen harrier survey took place, but despite the increase in observer effort, the number of breeding sites dropped from six sites in 2003 to one site, Bowland Fells in Lancashire, in 2004. The number of breeding attempts also declined to less than half of the total from the previous year. HHRP continues to work with landowners to resolve conflict and the local situation in the Bowland Fells was more positive, where good relationships were maintained between HHRP staff and the shooting estates. Both breeding success and productivity were high: there were eight successful nests from ten attempts, and 28 young fledged. A number of juveniles have been radio-tagged to enable their progress to be monitored during the winter as they disperse away from their natal area. Evidence of hen harrier persecution at numerous sites has been collected during the course of the project. During 2004 hen harriers were absent at sites where persecution had been recorded during years one and two of the HHRP.

During spring 2004 a police initiative named '*Operation Artemis*' was launched throughout Britain to combat hen harrier persecution. The police asked grouse moor owners and managers to sign a code of best practice to assist the police tackle hen harrier persecution, but the majority refused. Heightened tensions between conservationists and grouse moors owners, which further polarise views about raptor conservation, are likely to hinder the progress of the HHRP. As a necessary first step towards resolving this conflict, the HHRP organised a workshop involving key stakeholders from both shooting and conservation organisations to submit their views, and present options for hen harrier conservation.

Corncrake

The Corncrake Project was initiated in England, which is a species recovery programme initiative involving English Nature, Zoological Society of London (ZSL) at Whipsnade Wild Animal Park and the RSPB. A breeding programme is being run at Whipsnade Wild Animal Park, which will provide young birds to be released. English Nature has been working to establish and manage a suitable habitat, on part of an internationally protected wildlife site, into which the birds will be released.

The Corncrake SPA Management Scheme is explained in Appendix 4.

Capercaillie

A LIFE Nature project ‘Urgent Conservation Management for Scottish Capercaillie’ was initiated in 2002 and will run to 2007. The project will focus on habitat restoration and species protection measures within and adjacent to eight capercaillie SPAs (see Appendix 5). The third National Capercaillie Survey was carried out in the winter of 2004 and has revealed that the population decline has been halted; the population has increased to about 2000 birds. Halting the decline was one of the major objectives of the LIFE project. Achievements between 2002 and 2004 are described on the project’s website (<http://www.capercaillie-life.info/index.php>).

Bittern

A LIFE Nature project ‘Reedbeds for Bitterns’ was initiated in 2003 and will end in 2006. The overall aim of the project is to increase the numbers of booming bitterns to 65 by 2012 and to widen the range and number of places where bitterns breed; the population in 2004 was 55 booming males. The project partners will develop a network of 19 wetlands across England, which are suitable for bitterns.

Appendix 3: Agri-environment schemes

Environmentally Sensitive Areas

The Environmentally Sensitive Areas (ESAs) scheme was introduced in 1987 in order to protect landscape, wildlife and historic interests in areas of environmental significance, where changes in farming methods posed a threat to the environment and where conservation depended on adopting, maintaining or extending particular farming practices. ESA schemes are administered by Defra (England), the Agriculture and Rural Affairs Department (Wales), Scottish Executive Environment and Rural Affairs Department (Scotland), and Department of Agriculture and Rural Development (DARD) (Northern Ireland). Under these schemes, farmers and land managers enter ten-year management agreements (with an option of termination after five years). Annual payments are made on each hectare of land entered into the scheme and are based on income forgone. Payments may include incentives to encourage positive management. A detailed monitoring programme is in place to examine the environmental effects of the scheme. ESA's closed to new applications on 31 December 2000.

The Countryside Stewardship Scheme

The Countryside Stewardship Scheme was introduced in 1991 to encourage farmers and landowners, by means of incentive payments (over a ten-year period), to manage their land in an environmentally beneficial way. The scheme operates throughout England and aims to sustain landscape beauty and diversity, protect and extend wildlife habitats, conserve archaeological sites and historic features, restore neglected land or features, create new habitats and landscapes and improve opportunities for people to enjoy the countryside. The eligible areas and features, all of which are habitats relevant to birds, include chalk and limestone grassland, waterside land, lowland heath, the coast, the uplands, old meadows and pastures, historic landscapes, old orchards, field boundaries, field margins and countryside around towns. Following the economic and ecological evaluation of the Arable Stewardship Scheme pilot, a suite of new arable options has now been incorporated into the Scheme. Detailed objectives for each area are agreed through a process of consultation and targeting at county and regional level.

Habitats Scheme

The Habitats Scheme was launched in England in 1994 to create or improve a range of important wildlife habitats (waterside habitats alongside designated watercourses or lakes, valuable habitats created under the five-year set-aside scheme and saltmarsh on suitable coastal land). Farmers with land containing the target habitats were invited to enter into long-term (mainly twenty-year) agreements to manage it in an environmentally beneficial way. The scheme was closed to new applicants in December 1999 and incorporated into the Countryside Stewardship in January 2000.

The Scheme was extended to Wales in 1995, with the aim of protecting and enhancing the wildlife value of broadleaved woodland, species rich grassland, water fringe and coastal belt. Agreements were for a maximum of ten years. The scheme was closed to new applicants in May 1999 and incorporated into Tir Gofal.

Environmental Stewardship

Environmental Stewardship was introduced in England in 2005. The new scheme is made up of 3 strands:

Entry Level (ELS) is open to all eligible farmers in England. It focuses on delivering a basic set of environmental management options, chosen by the individual to suit the farm type, for a flat-rate payment across the whole farm area (£30/ha on most land).

Organic Entry Level (OELS) is essentially the same scheme as ELS, but it has been designed to cater for land being farmed organically and recognises the greater environmental benefits which organic farming contributes (hence a higher flat rate payment of £60/ha).

Higher Level (HLS) replaces and builds on the former CSS and ESAs to target particularly valuable landscape and features. It is competitive and delivers more targeted environmental management options with a range of payment rates, including payments for capital works such as hedge restoration and access.

Moorland Scheme

Heather moorlands support a wide range of wildlife and are particularly important for ground nesting birds such as curlew *Numenius arquata* and merlin *Falco columbarius*. The Moorland Scheme aims to protect and improve the moorland environment by encouraging upland farmers outside ESAs to graze fewer sheep where this will improve the condition of heather and other moorland vegetation. Though the scheme is now closed to new applications, upland options were included in the Countryside Stewardship Scheme (England) and Tir Gofal scheme (Wales) in 1999.

Arable Stewardship Scheme

The Arable Stewardship Scheme was introduced as a three-year pilot scheme in two areas (East Anglia and West Midlands) in January 1998. Farmers were offered five- or six-year agreements. The aim of the scheme was to test the effectiveness of a range of options that have been devised to maintain and enhance wildlife in arable areas. The options include cropped arable fields being left as stubble over the winter following harvest, over-wintered stubble fields being sown in spring with cereals, grass field margins around arable fields, and sowing of wildlife seed mixtures within arable fields. This scheme is now closed to new applications but a suite of new arable options is now available as part of the Countryside Stewardship Scheme.

Tir Cymen

Tir Cymen is a whole farm scheme launched by CCW in 1992. Restricted to the three pilot areas of Swansea, Dinefwr and Meirionydd, the purpose of the scheme is to integrate farming practices with the conservation of wildlife, landscape, historic features and public access. In return for annual payments per hectare, all existing wildlife habitats and environmental features across the whole farm must be managed according to scheme prescriptions. Additional annual and/or capital payments are available for landscape protection and the provision of new public access. Agreements last for ten years. The scheme closed to new applicants in October 1998.

Tir Gofal

Launched by the National Assembly of Wales in 1999, Tir Gofal is a whole farm scheme run by CCW. Available throughout Wales, the scheme incorporates elements of a number of predecessors including Tir Cymen, ESA, Habitat Scheme, Moorland Scheme and Farm Conservation Grant. The purpose of the scheme is to integrate farming practices with the conservation of wildlife, landscape, historic features and public access. In return for annual payments per hectare all existing wildlife habitats and environmental features across the whole farm must be managed according to scheme prescriptions. Additional annual and/or capital payments are available for habitat restoration (including the re-establishment of arable cropping and protection of watercourses), landscape protection and the provision of new public access. Agreements last for ten years with a five year break clause. A notable feature of the scheme is the integrated approach to woodland management, incorporating close links between agri-environment prescriptions and the Woodland Grant Scheme.

Rural Stewardship Scheme

This scheme replaced the Countryside Premium Scheme, which closed to new entrants after the 2000 applications round. It was launched throughout Scotland in 2001 and more than 312 applicants joined the Scheme that year. It has been designed to encourage farmers, crofters and common grazings committees to adopt environmentally friendly practices and to maintain and enhance particular habitats and landscape features. The scheme has more than 30 management options to reflect all types of conditions to be found on Scottish farms and crofts, and aims to deliver a wide range of conservation benefits, with many options focussing on safeguarding and enhancing endangered species and biodiversity. The Scheme takes account of sites which are subject to national or international designation including land in ESAs. The scheme management agreements last for five years.

Countryside Management Scheme (Northern Ireland)

The Countryside Management Scheme is administered by DARD in Northern Ireland. It offers farmers in areas outside of ESAs in Northern Ireland the opportunity to increase the biodiversity of habitats, improve water quality, enhance the landscape and protect heritage by integrating good farming practice with care and protection of the countryside. The Countryside Management Scheme is broadly similar to the ESA Scheme by offering a 'whole farm' scheme requiring all participants to comply with Good Farming Practice and a series of basic environmental prescriptions. Participants will also be required to follow specific management prescriptions for the habitats and features present, develop and follow a nutrient management plan for the whole farm and attend a training programme designed to develop the land owner's skills which should aid them in the management of their habitats.

Appendix 4: Management Agreements/Schemes

Scottish Natural Heritage (SNH) operates a suite of schemes through its Natural Care programme which was launched in October 2001. It offers financial help to support land managers to actively manage SSSIs and Natura sites for their conservation interest. SNH's aim is to use the knowledge and skills of land managers to help develop Management Schemes that will bring benefits to the natural heritage. The Management Schemes provide standard management requirements and offer standard payments usually over a 5 year management agreement. More detail about the SNH's Natural Care management schemes is available at:

<http://www.snh.org.uk/about/ab-pa08.asp>

<http://www.snh.org.uk/publications/on-line/corporate/factsandfigures/0405/reportindex.asp>

Peatland Management schemes

SNH operates 4 peatland management schemes under its Natural Care programme, all of which provide better management for peatland habitats and their breeding birds. The aim of these schemes is to ensure sensitive use of peatland areas in Northern Scotland by providing payments for specified good practices.

Peatland management scheme agreements, coverage and expenditure as at 31 March 2005:

Scheme	Launch Year	Number of Agreements	Area (ha)	Payments over 2003/4 and 2004/5
Caithness and Sutherland Peatlands Management Scheme*	2002	52	104,869	£214,312
The Lewis Peatlands Management Scheme	2000	81	6,600	£21,418
Mointeach Scadabaigh Peatlands Management Scheme	1998	10	79,390	£235,010
Inverasdale Peatlands Management Scheme	2004	1	600	£0
Sub-total Peatland MS		144	191,459	£470,740

*The Caithness and Sutherland Peatlands Management Scheme was reviewed in light of the changes to agri-environmental measures and a revised scheme was re-launched in 2002.

Moorland Management Schemes

As part of its Natural Care programme, SNH operates six moorland management schemes, all of which provide better management for moorland (and upland) SPAs, especially those for breeding hen harriers.

Moorland management scheme agreements, coverage and expenditure as at 31 March 2005:

Scheme	Launch Year	Number of Agreements	Area (ha)	Payments over 2003/4 and 2004/5
Forest of Clunie Moorland MS	2001	10	12,124	£84,292
Muirkirk and North Lowther Moorland MS	2003	6	4,080	£48,343
Orkney Hen Harrier MS*	2003	29	7,80	£47,383
Arran Moors Moorland MS	2003	4	2,130	£62,386
<i>Glen App & Galloway Moors MS</i>	2003	1	2,913	£2,500
Forth and Borders Moorland MS	2004	0	0	£2,005
Sub-total Moorland MS		50	22,027	£246,909

*The Orkney Hen Harrier Scheme aims to support management on the hills, and on the nearby farmland outside the SPA, which will help the birds and habitats of special interest.

Corncrake Schemes

SNH operates 3 Natural Care management schemes for corncrake SPAs. The schemes provide financial incentives to help safeguard populations of breeding corncrakes within SPAs by encouraging sympathetic management of agricultural land.

Corncrake management scheme agreements, coverage and expenditure as at 31 March 2005:

Scheme	Launch Year	Number of Agreements	Area (ha)	Payments over 2003/4 and 2004/5
Argyll Islands (Coll, Tiree and Islay) Corncrake MS	1998	23	108	£34,218.40
Western Isles Corncrake MS	2003	43	90	£19,809.60
Ness and Barvas Corncrake MS	2003	82	142	£90,494
Sub-total Corncrake MS		148	340	£144,522

Eagle schemes

There are two Natural Care eagle schemes:

Cuillins SPA Management Scheme

The Cuillins Special Protection Area (SPA) Management Scheme was launched in 2004 and allows managers of land to be paid for positive management aimed at benefiting golden eagles. The Scheme is run and paid for by Scottish Natural Heritage under its Natural Care programme. The Scheme has been developed following the classification of the Cuillin mountain range and surrounding area as a SPA for golden eagles, under the EC Birds Directive. The Aims of the Scheme are:

- To maintain existing golden eagle population and productivity
- To improve overall biodiversity within the Cuillins SPA
- To provide socio-economic benefits to land managers within the site

At 31 March 2005 there were 6 scheme agreements recently concluded covering 7,008ha although no payments were required by that date.

Mull Eagle Scheme

The island of Mull supports one of the largest concentrations of eagles in Britain. This scheme was originally launched as a pilot in 1998 and offers support to hill farmers on Mull who have sea eagles and/or golden eagles on their land. It has the following objectives:

- Helping to safeguard the sea eagle and golden eagle populations on Mull, through increased wardening and monitoring of eagles, in conjunction with RSPB and Police Wildlife Liaison officer led initiatives.
- Fostering the pride and commitment of land managers towards the eagle populations on Mull and the recognition that eagles are an asset to the island.
- Supporting land managers in measures aimed at reducing vulnerability of sheep flocks to sea eagle predation.
- Trialling a number of habitat improvements aimed at increasing levels of wild prey taken by eagles.

At 31 March 2005 there were 22 scheme agreements over 42,767 ha entailing payments of £40,182 over 2003/4 and 2004/5.

Goose Management Schemes

In addition to the suite of four Goose Management Schemes described in the seventh triennial report, which are still operational, a further three schemes were approved by the National Goose Management Group. These were launched in Scotland during the 2000-04 period, as part of SNH Natural Care programme. The Uist Local Goose Management Scheme is a summer scheme designed to address agricultural damage caused by resident native greylag geese to machair habitat. The resident native greylag population breed in the hills in spring, moving down onto machair and crops to feed during the summer. Machair is internationally important habitat which relies on the continuation of cereal cropping practices to enable its survival. The Tiree and Coll Local Goose Management Scheme is both a summer and a winter scheme and was set up to manage agricultural damage caused to machair and crops by the native greylag goose population in the summer; and to manage localised agricultural impacts from over-wintering populations of Greenland barnacle and Greenland white-fronted geese. The Loch of Strathbeg Local Goose Management Scheme is a spring scheme designed to manage the agricultural damage caused by large numbers of pink-footed geese and a number of Svalbard barnacle, Icelandic and native greylag geese which use the Loch of Strathbeg as a final staging post prior to migrating north.

Solway Merse Management Scheme

The Solway Merse Management Scheme, established in 1996, aims to maintain and promote improvements to saltmarsh habitats, which are of interest in their own right, and which support important populations of wintering wildfowl, waders, and natterjack toads. The scheme was reviewed and relaunched in 2003. At 31 March 2005, 34 Solway Merse Management Scheme agreements, covering 1,034 ha, were operational at an expenditure of £84,167 over 2003/4 and 2004/5.

Several other *Natural Care* schemes in operation which, while not targeting SPAs, should have a beneficial impact on habitats for birds: Perthshire Lunan Lochs Management Scheme, Grampian Lowland Bog Scheme, and The Lendalfoot Grassland Scheme.

Wildlife Enhancement Scheme (WES)

English Nature operates the Wildlife Enhancement Scheme giving financial support to land managers in achieving positive management on Sites of Special Scientific Interest (SSSIs) by means of short term agreements of up to five years. 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 or managing coastal wet grassland.

Appendix 5: Habitat Restoration Projects

A number of projects that are still active were described in the seventh triennial report.

Salisbury Plain LIFE Project

English Nature is leading a major four-year restoration project, which began in September 2001, called the Salisbury Plain LIFE Project to improve the conservation management at four sites. Salisbury Plain is the largest unbroken expanse of calcareous grassland in northwest Europe (approximately 14,000 ha) and represents 41 per cent of the United Kingdom's resource. Since the beginning of the 20th century this type of habitat has declined across Europe as a result of agricultural 'improvement' and the fragmentation of land. Such a large expanse of semi-natural grassland is now very rare. The project aims to address a number of issues, which affect the favourable condition of the grassland habitats. These include grazing, scrub invasion and afforestation. The Salisbury Plain candidate Special Area for Conservation (cSAC) boundary is consistent with the boundary of Porton Down and Salisbury Plain Special Protection Areas (SPAs), which together support 20% of UK breeding stone-curlew. Nearby farmland supports an additional 12.4 per cent. The birds use the grasslands for feeding.

Living with the Sea

Some of the primary organisations responsible for planning and managing England's coastlines came together in the *Living with the Sea* project, initiated in 2001 and completed in 2003. The project aimed to develop new ways of tackling the impact of sea level rise and flood and coastal defences on areas identified as important for wildlife. *Living with the Sea* aimed to promote understanding of how sea level rise will affect our coasts over the next 30 to 100 years, create sustainable and integrated coastal management policies, and share the challenges and the solutions. Leading this work were English Nature, the Environment Agency, Defra, the Natural Environment Research Council and the European Commission through its LIFE Natura fund.

Three crucial areas of coastal planning and management have been studied:

- How we designate and subsequently manage our internationally important coastal habitats and species;
- How we evaluate our flood and coastal management policies and schemes; and
- How we can restore or re-create our threatened and rapidly diminishing inter-tidal habitats, to protect wildlife and maintain their role as natural sea defences.

LIFE Peatlands Project 2001-2005

Although much of Caithness & Sutherland's blanket bogs remain in good condition, parts have been seriously damaged by various management practices. Hill drainage and commercial forestry have particularly affected this fragile ecosystem causing both direct loss of habitat as well as increasingly impacting on adjacent unplanted areas. The aims of the project are:

- To restore areas of damaged peatland
- To promote awareness of the international importance of the peatlands
- To develop a strategic plan for the sustainable management of the peat

Over the next four years the RSPB hopes to purchase about 900ha of afforested peatland adjacent to their Peatlands reserves and remove the trees. Forest Enterprise and a number of private owners will carry out similar work on selected parts of their land holdings in the peatlands. The RSPB will also embark on an ambitious programme of hill drain blocking across their peatland reserves. A strategy for the future management of the peatlands in association with other interested parties is also being developed.

The Project is a partnership of the RSPB, Forest Enterprise, SNH, Plantlife Scotland and the Forestry Commission with 60% co-funding from the European Union's LIFE Nature Programme.

Urgent Conservation Management for Scottish Capercaillie

A LIFE Nature project 'Urgent Conservation Management for Scottish Capercaillie' was initiated in 2002 and will run to 2007. The project will focus on habitat restoration and species protection measures within and adjacent to eight capercaillie SPAs (see Appendix 5). The third National Capercaillie Survey was carried out in the winter of 2004 and has revealed that the population decline has been halted; the population has increased to about 2000 birds. Halting the decline was one of the major objectives of the LIFE project. Achievements between 2002 and 2004 are described on the project's website (<http://www.capercaillie-life.info/index.php>).

Reedbeds for Bitterns

A LIFE Nature project 'Reedbeds for Bitterns' was initiated in 2003 and will end in 2006. The overall aim of the project is to increase the numbers of booming bitterns to 65 by 2012 and to widen the range and number of places where bitterns breed; the population in 2004 was 55 booming males. The project partners will develop a network of 19 wetlands across England, which are suitable for bitterns.