

Convention on the Conservation of Migratory Species of Wild Animals, 1979
Agreement on the Conservation of African-Eurasian
Migratory Waterbirds

First report by the United Kingdom on the implementation of the Agreement
during the period 1999 and 2002

Department for Environment, Food and Rural Affairs

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Convention on the Conservation of Migratory Species of Wild Animals, 1979
Agreement on the conservation of African-Eurasian Migratory Waterbirds
Implementation during the period 1999 and 2002

Contracting Party: United Kingdom

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1. Overview of Action Plan Implementation

1. Overview of Action Plan implementation

The United Kingdom (UK) has strongly supported the development of the African-Eurasian Migratory Waterbird Agreement (AEWA). The UK has a long history of support for international collaboration to conserve waterbirds since it holds important waterbird breeding areas, is a major wintering area, and is located on important migration routes. Many of the basic techniques of waterbird research and conservation were pioneered in the UK. The UK has developed an Implementation Plan for AEWA (Appendix 1). This will be used to take forward the development of Agreement requirements by the UK, both domestically and internationally.

1.1 Summary of progress to date

This report for the second Meeting of the Parties (MoP) covers the implementation period 1999-2002. It provides information about UK initiatives and best practice in relation to the conservation of migratory waterbirds and their wetland habitats, in the context of the AEWA Action Plan.

The report is based on information drawn from a wide range of organisations including: government departments, devolved government administrations in Northern Ireland, Scotland and Wales, statutory nature conservation agencies, and non-governmental organisations (NGOs). The UK has a comprehensive legal framework that provides for the conservation of species and habitats. There is considerable active conservation activity in the UK. In the last decade this has been particularly driven by the implementation of the Convention on Biological Diversity (CBD), with action plans developed for many priority species and habitats. Legal frameworks as well as other activities are described in the following sections of this report.

Species conservation

- An account of UK legislation regarding the conservation of waterbird populations listed in Table 1 of the AEWA Action Plan;
- The status of international and national single-species action or management plans;
- An account of procedures for responding to emergency situations in place;
- A review of non-native species control; and
- An appendix (appendix 2) that summarises key information on the status and conservation activity related to each AEWA species (and population) regularly occurring in the UK.

Habitats conservation

- An account of UK legislation regarding the conservation of habitats important for waterbird populations listed in Table 1 of the AEWA Action Plan, especially internationally important sites;
- The status of national habitat action plans;
- An account of the UK's recent review of Special Protection Areas (SPAs) designated under Directive 79/409/EEC on the conservation of wild birds; and
- The status of management plans for important sites and rehabilitation/restoration projects which aim to improve the conservation status of waterbirds.

Management of human activities

- The phasing out of the use of lead gun-shot in UK wetlands; and
- The extent of eco-tourism in the UK and human activities which are of relevance to waterbird conservation.

1. Overview of Action Plan Implementation

Monitoring and research

- A review of the main research and monitoring projects on waterbirds in the UK.

Education and Information

- A review of the training, education and public awareness projects which are specifically linked to waterbird conservation; and
- A description of the work of the Darwin Initiative.

1.2 *Outline of priorities for national implementation over the next three years*

The UK Implementation Plan (Appendix 1) provides a framework for the domestic implementation of the Agreement over the next three years. It builds upon two key documents from AEWA MoPI, the AEWA Action Plan and AEWA Implementation Priorities for 2000-2004.

1.3 *Outline of priorities for international co-operation over the next three years*

The UK Implementation Plan lists current and potential future UK actions for international co-operation over the next three years. The main areas of activity are:

- Working with Wetlands International and other organisations to develop further the scope and strategic importance of the International Waterbird Census (IWC) and associated waterbird monitoring throughout Africa and Eurasia. The further development of the IWC is essential to be able better to monitor the effectiveness of AEWA and other policy measures in positively influencing the conservation status of migratory waterbirds and their wetland habitats.
- The Darwin Initiative in the UK seeks to assist countries that are rich in biodiversity but poor in financial resources to implement the CBD. It has an important role in helping to build capacity and assist in training initiatives for waterbird conservation. Over 80 British institutions have been involved in setting up collaborative projects, including The Natural History Museum, the Royal Botanic Gardens (Kew) and the World-Wide Fund for Nature. For more information and links see the Department for Environment, Food & Rural Affairs (DEFRA) website on the Darwin Initiative¹.
- Ascension Island is a dependency of St Helena in the South Atlantic Ocean and a UK Overseas Territory. The Royal Society for the Protection of Birds (RSPB) and Ascension Island Government, with funding from the Foreign and Commonwealth Office (FCO), are attempting to eradicate feral cats. Research has shown that introduced cats are the main predators of seabirds on the island and together with Black Rats *Rattus rattus*, have had a profound influence on the size and composition of seabird communities on the island and thus throughout the tropical Atlantic Ocean.²

¹ <http://www.defra.gov.uk/environment/darwin/index.htm#aim>

• ² For more information and links see the Ascension Island Administrator's website: <http://www.ascension-island.gov.ac/restoration.htm>

2. Species conservation

Legal measures

2.1 Has a national policy/strategy or legislation to protect and conserve species covered by the Agreement (Table 1: column A; column B) and their supporting important areas been developed? If so:

a. What are the main features of the policy/legislation?

The UK has a wide range of strategies, policies and plans alongside a comprehensive legislative framework which affords statutory protection to all wild birds. These are used to deliver conservation objectives for species and habitats. UK biodiversity conservation is achieved through partnerships between Government, statutory nature conservation organisations, NGOs and public participation.

Species protection

The UK meets its obligations for the protection of endangered migratory waterbird species (listed in Table 1 of the AEWa Action Plan) through a comprehensive legal framework. This differs between the countries comprising the UK. In England, Scotland and Wales, the Wildlife and Countryside Act 1981 (as amended), provides the main legal framework for the protection of species listed by AEWa. More recently, the Countryside and Rights of Way Act 2000 (CRoW) was enacted in England and Wales. CRoW strengthened the protection of certain species by increasing penalties and enforcement powers with regard to offences under the Wildlife and Countryside Act. The CRoW Act also strengthened the protection of sites from damage caused by competent authorities in the exercise of their functions and damage caused by third parties (see section 3.4 for more details on CRoW). In Northern Ireland, the relevant species legislation is the Wildlife (Northern Ireland) Order 1985 (see section 2.2 (a) below for further details).

Areas

The UK's legal obligations under AEWa closely relate to existing obligations under the EC Directive on the Conservation of Wild Birds (79/409/EEC). Domestic legislative mechanisms, as described above for the conservation of species, also provide for the conservation of land important to wildlife, establishing a national network of designated sites (see section 3.3 below for more details of site designations).

Wider countryside

Site-based mechanisms are supported by various wider countryside policies. Agri-environment schemes are one example of these wider policies (see section 3.3). The UK also has comprehensive regulations governing emissions to the air and freshwater, which have the potential to affect waterbirds. Further details on the UK's town and country planning and development control system can be found in section 4.7.

b. Which organisations are responsible for implementation?

Government is responsible for the implementation of wildlife legislation. The three statutory nature conservation agencies, the Countryside Council for Wales (CCW), English Nature (EN), and Scottish Natural Heritage (SNH) together with the Environment and Heritage Service (EHS) of Northern Ireland, are responsible for providing advice to government and its devolved administrations on policies for, or affecting, nature conservation. The agencies³ also have a responsibility to notify land of special interest for its biological, geological and landscape features.

³ the Country conservation agencies' web-sites are given in Appendix 5.

2. Species Conservation

c. *How does it relate to other national initiatives (e.g. national Biodiversity Action Plans)?*

As a response to the 1992 CBD, the UK developed a national Biodiversity Action Plan⁴ (BAP) for the conservation and enhancement of biological diversity and the sustainable use of biological resources. The plan also contributes to the conservation of global biodiversity through appropriate mechanisms.

2.2 *What legal measures or practices has your country developed to prohibit or regulate for the following (refer also to section 4 on hunting):*

a. *Taking of, and trade in birds listed in Column A and B of Table 1 (where utilisation or trade contravenes the provisions set out in paragraphs 2.1.1 (a) and 2.1.2 of the Action Plan)?*

The taking of, and trade in, birds listed in Table 1 of the AEW A Action Plan is regulated under the Wildlife and Countryside Act 1981, the Wildlife (Northern Ireland) Order 1985 and the 1831 Game Act. The 1981 Wildlife & Countryside Act prohibits the killing, injuring or taking of any wild bird, the taking or destroying of their nests whilst in use or being built and the destruction of wild birds' eggs. The 1981 Act and 1985 Order contain three schedules concerned with the status of individual species.

Species listed in Schedule 1 are afforded a high level of protection by the imposition of penalties for their killing or disturbance, protection also covers their nests, eggs and young. This Schedule protects (by special penalties) birds which are particularly scarce or threatened, especially (but not exclusively) during the breeding season. It includes the following species listed in Table 1 of the AEW A Action Plan (Table A below):

Table A. UK waterbirds listed under AEW A which are protected by special penalties during the close season

		Great Britain	Northern Ireland
Greylag Goose	<i>Anser anser</i>	✓ (NW Scotland only)	
Pintail	<i>Anas acuta</i>	✓	✓
Goldeneye	<i>Bucephala clangula</i>	✓	
Gadwall	<i>Anas strepera</i>		✓
Pochard	<i>Aythya ferina</i>		✓
Scaup	<i>Aythya marila</i>		✓
Shoveler	<i>Anas clypeata</i>		✓
Wigeon	<i>Anas penelope</i>		✓
Golden Plover	<i>Pluvialis apricaria</i>		✓

⁴Anon. 1994. *Biodiversity: the UK Action Plan*. HMSO, London.

Biodiversity Steering Group 1995. *Biodiversity: the UK Steering Group Report*. Two volumes. HMSO, London

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Species listed which are not mentioned in the Schedules are protected at all times (Table B below), as are their eggs and nests, unless an exemption is granted (see 2.2 (e) below).

Table B. UK waterbirds listed under AEWa which are protected by special penalties at all times

		Great Britain	Northern Ireland
Divers (all species)	<i>Gavia</i> spp.	✓	just Red-throated <i>Gavia stellata</i>
Slavonian Grebe	<i>Podiceps auritus</i>	✓	
Purple Heron	<i>Ardea purpurea</i>	✓	
Little Bittern	<i>Ixobrychus minutus</i>	✓	
Bittern	<i>Botaurus stellaris</i>	✓	✓
Spoonbill	<i>Platalea leucorodia</i>	✓	
Whooper Swan	<i>Cygnus cygnus</i>	✓	✓
Bewick's Swan	<i>Cygnus bewickii</i>	✓	✓
Garganey	<i>Anas querquedula</i>	✓	✓
Scaup	<i>Aythya marila</i>	✓	
Long-tailed Duck	<i>Clangula hyemalis</i>	✓	
Common Scoter	<i>Melanitta nigra</i>	✓	✓
Velvet Scoter	<i>Melanitta fusca</i>	✓	
Goosander	<i>Mergus merganser</i>		✓
Spotted Crake	<i>Porzana porzana</i>	✓	
Black-winged Stilt	<i>Himantopus himantopus</i>	✓	
Avocet	<i>Recurvirostra avosetta</i>	✓	
Little Ringed Plover	<i>Charadrius dubius</i>	✓	
Kentish Plover	<i>Charadrius alexandrinus</i>	✓	
Dotterel	<i>Charadrius morinellus</i>	✓	
Black-tailed Godwit	<i>Limosa limosa</i>	✓	✓
Whimbrel	<i>Numenius phaeopus</i>	✓	✓
Greenshank	<i>Tringa nebularia</i>	✓	✓
Green Sandpiper	<i>Tringa ochropus</i>	✓	
Wood Sandpiper	<i>Tringa glareola</i>	✓	
Temminck's Stint	<i>Calidris temminckii</i>	✓	
Purple Sandpiper	<i>Calidris maritima</i>	✓	
Ruff	<i>Philomachus pugnax</i>	✓	✓
Red-necked Phalarope	<i>Phalaropus lobatus</i>	✓	✓
Mediterranean Gull	<i>Larus melanocephalus</i>	✓	
Sandwich Tern	<i>Sterna sandvicensis</i>	✓	✓
Roseate Tern	<i>Sterna dougallii</i>	✓	✓
Common Tern	<i>Sterna hirundo</i>		✓
Arctic Tern	<i>Sterna paradisaea</i>		✓
Little Tern	<i>Sterna albifrons</i>	✓	✓
Black Tern	<i>Chlidonias niger</i>	✓	

2. Species Conservation

Schedule 2, Part 1 lists all those species which can be taken outside of the close season. This list includes all those species for which can be shot and whose populations are deemed to be able to withstand hunting. In general, these species may be shot from 1 September to 31 January (to 20 February in areas below the high water mark in Great Britain). These species are listed in Table C:

Table C. UK waterbirds listed under AEWA which can be taken outside the close season

		Great Britain	Northern Ireland
Pink-footed Goose	<i>Anser brachyrhynchus</i>	✓	✓
White-fronted Goose	<i>Anser albifrons</i>	✓ (England and Wales only)	
Greylag Goose	<i>Anser anser</i>	✓	✓
Wigeon	<i>Anas penelope</i>	✓	✓
Gadwall	<i>Anas strepera</i>	✓	✓
Teal	<i>Anas crecca</i>	✓	✓
Mallard	<i>Anas platyrhynchos</i>	✓	✓
Pintail	<i>Anas acuta</i>	✓	✓
Shoveler	<i>Anas clypeata</i>	✓	✓
Pochard	<i>Aythya ferina</i>	✓	✓
Tufted Duck	<i>Aythya fuligula</i>	✓	✓
Scaup	<i>Aythya marila</i>		✓
Goldeneye	<i>Bucephala clangula</i>	✓	✓
Golden Plover	<i>Pluvialis apricaria</i>	✓	✓
Common Snipe	<i>Gallinago gallinago</i>	✓	✓
Jack Snipe	<i>Lymnocyptes minimus</i>		✓
Curlew	<i>Numenius arquata</i>		✓

The Secretary of State may, by order, vary the close season if it appears that any wild birds included in Part II of Schedule 1 or Part I of Schedule 2 should be protected during any other period.

Schedule 3, Part III of the 1981 Act lists those species which may be sold when dead between 1 September and 28 February. These species are listed in Table D:

Table D. UK waterbirds listed under AEWA which may be sold when dead (between 1 September to 28 February)

		Great Britain	Northern Ireland
Wigeon	<i>Anas penelope</i>	✓	
Teal	<i>Anas crecca</i>	✓	
Mallard	<i>Anas platyrhynchos</i>	✓	
Pintail	<i>Anas acuta</i>	✓	
Shoveler	<i>Anas clypeata</i>	✓	
Pochard	<i>Aythya ferina</i>	✓	
Tufted Duck	<i>Aythya fuligula</i>	✓	
Golden Plover	<i>Pluvialis apricaria</i>	✓	
Common Snipe	<i>Gallinago gallinago</i>	✓	

2. Species Conservation

Species protection has been re-enforced by the CroW Act. Penalties have been increased up to six months imprisonment and fines of up to £5000.

b. Methods of taking?

Certain modes of killing and taking of all populations listed in Table 1 of AEWA's Action Plan are controlled under the Wildlife and Countryside Act 1981 and the Wildlife (Northern Ireland) Order 1985. Legal restrictions on the modes of taking are aimed primarily at avoiding indiscriminate and non-selective kills. The use of traps, nets, bird lime, baits, gas, electricity, poisons and other stupefying substances, mechanically-propelled vehicles for immediate pursuit, artificial light, bows and crossbows, certain clubs and hammers is prohibited. Automatic and semi-automatic weapons (i.e. weapons that cannot fire more than three cartridges without reloading), shotguns with an internal barrel diameter of more than one and three-quarter inches, night-vision devices, chemical wetting agents and sound recordings are also prohibited (see the 1981 Act and the 1985 Order for further details).

c. Setting of taking limits and monitoring these limits?

There are no statutory limits established to the number of waterbirds that may be killed, nor is there any monitoring of numbers taken through statutory bag-returns. On many important sites and through many British Association for Shooting and Conservation (BASC) affiliated wildfowling clubs, bag limits and bags monitoring occur. There is increasing recognition of the need for such information. A trial is currently being undertaken within Scotland to collect information on numbers of geese killed by holders of shotgun licences. This is in response to a recommendation from the (Scottish) National Goose Forum in 2000 that '*annual monitoring of hunting mortality of geese should be undertaken by means of surveying a sample of shot-gun certificate holders in order to establish the numbers of quarry geese shot in Great Britain each winter.*'⁵ The trial is being conducted jointly by shooting interests and the Scottish Executive.

d. Sustainable hunting of species listed in Categories 2 and 3 (and marked by an asterisk) in Column A only?

Only two UK quarry species are listed in Categories 2 & 3 (and marked by an asterisk).

Greenland White-fronted Geese *Anser albifrons flavirostris* are protected through most of their range (Scotland) but are potentially quarry species in England and Wales. At their only regular site in west Wales, there is a long-standing no-shooting policy by BASC-affiliated wildfowling clubs.

The Golden Plover *Pluvialis apricaria* is also listed.

e. Exemptions to the provisions set out in paragraphs 2.1.1, 2.1.2 and 2.1.3?

Exemptions to the prohibitions laid down in paragraphs 2.1.1, 2.1.2 and 2.1.3 are granted through specific licences issued on behalf of the UK government by the country agencies, DEFRA, Department of Environment (Northern Ireland), and Department of Agriculture (Northern Ireland) (DANI). The legislation that controls such exemptions is the Wildlife and Countryside Act 1981 and the Wildlife (Northern Ireland) Order 1985.

Licences may be granted giving exemption from the statutory protection for a variety of purposes, including protecting public health, preventing serious damage to agriculture, scientific and educational work (including ringing), conservation purposes, keeping birds in collections, public exhibition or competition, taxidermy and photography.

⁵ For more information on the policy and recommendations of the National Goose Forum please see the Scottish Executive's website on: <http://www.scotland.gov.uk/nationalgooseforum/ngf-00.asp>

2. Species Conservation

2.3 *Of the species covered by the Agreement (species listed in Table 1: column A), which spend part or all of their life history in your country, which have formal international (Category 1, species marked with an asterisk) or national (column A) Single Species Action Plans:*

a. *Proposed?*

A list of species proposed for the development of priority UK conservation actions can be found in the UK Implementation Plan (Annex 3 of Appendix 1).

b. *In preparation?*

See the list in the UK Implementation Plan in (Annex 3 of Appendix 1).

c. *Being implemented?*

The UK species action plans for the Bittern *Botaurus stellaris*, Common Scoter *Melanitta nigra*, Red-necked Phalarope *Phalaropus lobatus* and Roseate Tern *Sterna dougallii* can be found on the UK Biodiversity Action Plan website: <http://www.ukbap.org.uk>.

Please append a list of species and their action plan status. (For international plans indicate which other countries are involved in plan development/implementation.)

See Annex 3 of Appendix 1.

Emergency measures

2.4 *Describe any bilateral or multilateral co-operative action that your country has undertaken to develop and implement emergency measures to conserve species in response to unfavourable or endangering conditions occurring in the Agreement area.*

Suspension of shooting in severe cold weather

Under the Wildlife and Countryside Act, 1981 and the Wildlife (Northern Ireland) Order 1985, the Secretary of State has the power to make a protection order temporarily suspending the shooting of wildfowl and waders, inter alia, in periods of prolonged severe winter weather. The Meteorological Office under contract to the Joint Nature Conservation Committee (JNCC) monitors conditions at 23 coastal weather stations around Britain.

The criteria for deciding when there should be a suspension of waterfowl shooting were agreed jointly by government departments, conservation agencies, shooting organisations and other NGOs in the early 1980s⁶. A formal review is undertaken each time a statutory shooting suspension occurs. This helps to improve the system through learning from the experience of implementation. For more information on the suspension of shooting in cold weather, including the voluntary restraint ahead of statutory suspensions, see the BASC's website: <http://www.basc.org.uk> and the guidance on the JNCC's website: <http://www.jncc.gov.uk/species/wildfowling/default.htm>.

During the reporting period voluntary restraint was called for twice, but suspension of shooting was not invoked in full due to an improvement in the weather before the statutory ban became necessary.

Oil spill clean-up

The Environment Agency (EA) is the body responsible for managing environmental pollution including in rivers, coastal waters and groundwater in England and Wales; its equivalent in Scotland is the Scottish Environment Protection Agency (SEPA). EA has powers under the Water Resources Act 1991 to prosecute for offences of polluting controlled waters in England and Wales. Every year

⁶ Stroud, J.M. 1992. *Statutory suspension of wildfowling in severe weather: review of past winter weather and actions*. JNCC (Report No.75), Peterborough.

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more than 5,000 oil incidents are reported to EA. In 2000, one-sixth of all pollution incidents affecting the environment involved oil. Most incidents were caused by oil leaking from tanks either during storage or delivery. As a consequence there is a tight regulatory regime related to the storage of oil. For more information on the Control of Pollution (Oil Storage) (England) Regulations (SI2954) please see EA's website: <http://www.environment-agency.gov.uk>

The EA has also developed a CD-ROM database containing information on the storage and disposal of oil contaminated materials on existing facilities for use by organisations involved with major oil-spill clean-up operations. The database will provide technical support in identifying best options for disposal of oil contaminated waste. The project was a collaboration with the Maritime and Coastguard Agency, SEPA and the Northern Ireland Environment and Heritage Service (EHS). For more information on the Oily Waste Database see: <http://www.environment-agency.gov.uk>.

The Marine and Coastguard Agency (MCA) is the government body responsible for managing marine environmental pollution. The MCA along with Department for Transport, Local Government and the Regions and the Department of Trade and Industry have produced a national contingency plan (NCP) for marine pollution from shipping and offshore installations. The aims of the NCP are firstly to prevent pollution occurring; secondly to minimise the extent of any pollution that occurs; and lastly to mitigate the effects of any pollution. In the event of an emergency the NCP provides a structured approach based upon the use of expert groups including a Marine Response Centre, a Salvage Control Unit, a Shoreline Response Centre and an Environment Group (EG). In order to facilitate an effective and quick response in an emergency, Standing Environment Groups have been set up to cover the UK. These EGs provides advice on public health and environmental issues to all other groups and will usually include representatives from the statutory nature conservation body, the fisheries department, the public health body and the environmental regulator. Large scale exercises of the NCP take place every year with the lessons learnt used to develop the NCP further. For further information visit the MCA website at: <http://www.mcagency.org.uk>.

Re-establishments

2.5 *Has a policy on species re-establishments been developed in your country? If yes, please outline the main features of the policy and give details of any re-establishment programmes for species covered by the Agreement.*

An Inter-agency Translocations Working Group (JNCC, CCW, EN, SNH) has issued a consultation document⁷ 'Biological Translocations: a Conservation Policy for Britain', which includes guidance on conducting translocations for conservation purposes. World Conservation Union Guidelines for Re-introductions (1995) have been adopted as the basis for implementing conservation translocations in Great Britain.

Introductions

2.6 *Has your country developed and implemented legal measures to prohibit the introduction of non-native species? Please provide details, particularly describing measures to control the release or introduction of non-native species (please indicate which species and their status).*

The introduction of non-native animal species is prohibited by Section 14 of the Wildlife and Countryside Act 1981, in Great Britain, and Section 15 of the Wildlife (Northern Ireland) Order 1985. These sections make it an offence to release or allow to escape any animal which is not ordinarily resident or a regular visitor to the UK in a wild state.

The prohibition of release of non-native species is extended to a number of animals that have been established in the UK, but are considered detrimental to native fauna and flora. These species are listed on Schedule 9 to the Wildlife and Countryside Act 1981. Captive non-native birds are the responsibility of their curators who must ensure that they do not escape into the wild. Research into

⁷ Available from the JNCC website (<http://www.jncc.gov.uk>).

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new ways of suppressing or eradicating non-native species is funded by a range of government agencies according to the impacts of the species concerned. For example, a report was commissioned from the British Trust for Ornithology (BTO) to assess the status of introduced and non-native waterbird species within the AEWA area and the extent to which these introduced species may negatively affect native species. The report has been published by DETR (now DEFRA).⁸

The UK Government recently announced a comprehensive review of the current policies that deal with the control of non-native species to be undertaken in co-operation with the conservation agencies and other stakeholders. It will put forward practical and proportionate costed proposals for improving measures to limit the ecological and economic impact of non-native species. Additionally, the review will consider measures to limit the impact of the introduction of native species beyond their natural range. The review should be completed by June 2002.

Section III of the UK's Convention of Migratory Species report gives details and information concerning the threat posed to the White-headed duck *Oxyura leucocephala* by the North American Ruddy Duck *Oxyura jamaicensis*, and consequent action taken by the UK.

Monitoring

Non-native birds are included in all UK bird monitoring schemes. For waterbirds, three schemes are of major importance.

- The status of rare breeding non-native waterbirds is monitored by the Rare Breeding Birds Panel (RBBP)⁹. The Panel's remit is to monitor the populations of rare breeding birds (both native and non-native) in the UK using data collated via the national network of County Bird Recorders and collected by volunteers.
- A national survey of non-native geese was organised by Wetland Bird Survey (WeBS) in 1999 and aimed to assess the distribution and population sizes of non-native goose species in Britain, focusing in particular on Canada Geese *Branta canadensis*.
- Non-breeding, non-native waterfowl and hybrids are routinely monitored by the WeBS (see section 5.2 below for details) and totals recorded are reported annually. A total of 48 species of non-native waterbirds have been recorded by WeBS during the period 1997/8 to 1999/2000 (Table E). Of these, at least 13 species are known to have bred during this period. The BTO's recent report of non-native waterbirds (see footnote 9) listed 79 species of introduced waterbirds which had been recorded in the UK.

Table E. Non-native waterbirds recorded by WeBS during the period 1997/8 to 1999/2000.

Those species known to have bred in the UK during this period are shown in bold.

White Stork *Ciconia ciconia*

Ruddy Shelduck *Tadorna ferruginea*

Cape Teal *Anas capensis*

⁸ Blair, M.J., McKay, H., Musgrove, A.J. & Rehfisch, M.M. 2000. *Review of the status of introduced non-native waterbird species in the agreement area of the African-Eurasian Waterbird Agreement*. Report to DETR. BTO Research Report No. 229. BTO, Thetford, UK.

⁹ Most recent reports: Ogilvie M.A. & the Rare Breeding Birds Panel 2001. Non-native birds breeding in the United Kingdom in 1999. *British Birds* 94: 518-522.

2. Species Conservation

Table E. Non-native waterbirds recorded by WeBS during the period 1997/8 to 1999/2000.

Those species known to have bred in the UK during this period are shown in bold.

Sacred Ibis <i>Threskiornis aethiopicus</i>	Cape Shelduck <i>Tadorna cana</i>	Silver Teal <i>Anas versicolor</i>
Lesser Flamingo <i>Phoenicopterus minor</i>	Australian Shelduck <i>Tadorna tadornoides</i>	Blue-winged Teal <i>Anas discors</i>
Greater Flamingo <i>Phoenicopterus ruber</i>	Paradise Shelduck <i>Tadorna variegata</i>	Cinnamon Teal <i>Anas cyanoptera</i>
Chilean Flamingo <i>Phoenicopterus chilensis</i>	Magellan Goose <i>Chloephaga picta</i>	Red Shoveler <i>Anas platalea</i>
Fulvous Whistling Duck <i>Dendrocygna bicolor</i>	Muscovy Duck <i>Cairina moschata</i>	Ringed Teal <i>Callonetta leucophrys</i>
Black Swan <i>Cygnus atratus</i>	Wood Duck <i>Aix sponsa</i>	Maned Duck <i>Chenonetta jubata</i>
Trumpeter Swan <i>Cygnus buccinator</i>	Mandarin Duck <i>Aix galericulata</i>	Red-crested Pochard <i>Netta rufina</i>
Swan Goose <i>Anser cygnoides</i>	Crested Duck <i>Lophonetta specularioides</i>	Rosybill <i>Netta peposaca</i>
Bar-headed Goose <i>Anser indicus</i>	Chiloe Wigeon <i>Anas sibilatrix</i>	Ferruginous Duck <i>Aythya nyroca</i>
Snow Goose <i>Anser caerulescens</i>	Falcated Duck <i>Anas falcata</i>	New Zealand Scaup <i>Aythya novaeseelandiae</i>
Ross's Goose <i>Anser rossii</i>	Baikal Teal <i>Anas formosa</i>	Bufflehead <i>Bucephala albeola</i>
Emperor Goose <i>Anser canagicus</i>	Speckled Teal <i>Anas flavirostris</i>	Hooded Merganser <i>Lophodytes cucullatus</i>
Canada Goose <i>Branta canadensis</i>	Chestnut Teal <i>Anas castanea</i>	Ruddy Duck <i>Oxyura jamacensis</i>
Red-breasted Goose <i>Branta ruficollis</i>	Yellow-billed Pintail <i>Anas georgica</i>	Argentine Blue-bill <i>Oxyura vittata</i>
Egyptian Goose <i>Alopochen aegyptiacus</i>	Red-billed Teal <i>Anas erythrorhyncha</i>	

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Habitat inventories

3.1 *Has your country developed and published inventories of important habitats for species covered by the Agreement? If yes, please provide details, including any provisions to maintain or update these inventories.*

There have been many surveys of wetland habitats in the UK. These have generally been undertaken for specific habitat inventories (e.g. for salt-marshes, estuaries or raised bogs). A more synoptic assessment of the extent of habitats in UK landscape has come from the *Countryside 2000* survey¹⁰. This is made up of sample-based field surveys including vegetation, freshwater, soil and landscape features combined with a comprehensive census of land-cover which was derived from the analysis of satellite imagery (Land Cover Map 2000). Changes in habitat condition and extent can be assessed by comparison with Countryside Surveys carried out in 1978, 1984 and 1990.

In Scotland, SNH recently reported the results of the National Countryside Monitoring Scheme¹¹, which provided a major assessment of habitat extent and land cover changes from the 1940s to the 1980s.

Review of UK Ramsar site series

Ramsar site designation in the UK has previously focused on designating internationally important localities for waterbirds. In November 2000, UK Ramsar Committee agreed that the JNCC should co-ordinate a review of the UK site series, with the aim of achieving a more balanced representation of wetland interest features. The changes in Ramsar site selection, and an improvement in the overall balance of the site series, are expected to benefit waterbird conservation. For more information on the review, please see the UK's report to the Ramsar Convention's eighth Conference of the Parties (CoP8), section 6.1.1. (available on the JNCC website <http://www.jncc.gov.uk>).

Special Protection Area (SPA) network review

SPAs have recently been reviewed (see section 3.2 for details)

Review of Sites

3.2 *Has your country undertaken a strategic review of sites to develop a national network of important sites or areas for species covered by the Agreement? Please append a list of identified sites of international importance.*

Special Protection Areas (SPAs)

In 2001, JNCC published¹² the results of a major review of the UK's network of SPAs. The 2001 Review identified 243 SPAs, which cover an area of over 1,454,500 hectares. The locations of the sites are shown in Figure 1. The UK SPA network has been identified to meet UK international obligations under the Directive on the conservation of wild birds (79/409/EEC, see section 3.3 below).

The UK is of major international importance for several groups of birds including breeding seabirds, wintering and passage wildfowl and waders. In summer, the network holds over 4,946,000 breeding seabirds (about 85% of the UK total), whilst in winter it supports an average of over 2,186,000 non-

¹⁰ See <http://www.cs2000.org.uk>

¹¹ Mackey, E.M., Shewry, M. & Tudor, G.J. 1998. *Land cover change: Scotland from the 1940s to the 1980.*, The Stationary Office, Edinburgh. 263 pp.

¹² Stroud, D.A., Chambers, D., Cook, S., Buxton, N., Fraser, B., Clement, P., McLean, I., Baker, H. & Whitehead, S. (eds) 2001. *The UK SPA network: its scope and content.* JNCC, Peterborough. Three volumes (90 pp; 438 pp; 391 pp). Available online at <http://www.jncc.gov.uk/UKSPA/default.htm>.

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breeding waterbirds (about 40% of the total in that season). The habitat protection provided for these birds, is a major contribution to their international conservation. Through the 2001 SPA Review, the UK has a clearer understanding of its most important bird conservation sites. This is an important achievement that recognises the significance of the UK bird populations in a European context.

The 2001 SPA network review updates the assessment of UK SPAs published in 1990 and 1992. The 2001 review drew upon an extensive range of ornithological surveys and existing knowledge of important UK bird sites.

Marine Special Protection Areas

In addition to the terrestrial SPAs referred to above, the UK is reviewing the potential for creating marine SPAs. For site selection purposes marine SPAs are defined as those with no dry land at any state of the tide. Three categories of marine SPAs may be envisaged:

- Extensions of existing SPAs at bird colonies to encompass near-shore resting, preening and courtship areas.
- Regularly occurring concentrations of waterbirds in near-shore areas during the non-breeding season.
- Offshore concentrations of birds.

Information to define the boundaries of all marine SPAs is relatively scarce compared with terrestrial sites. However, enough information exists covering the first two categories to enable proposals to be put forward relatively soon for a number of sites. Further survey work to define areas in category (b) is underway. Category (c) is more problematic, as predictable concentrations can only be found at a large scale. For instance a large part of the north-western North Sea is known to hold internationally important concentrations of birds in the early autumn, but the precise location of these birds within this area can vary widely between years.

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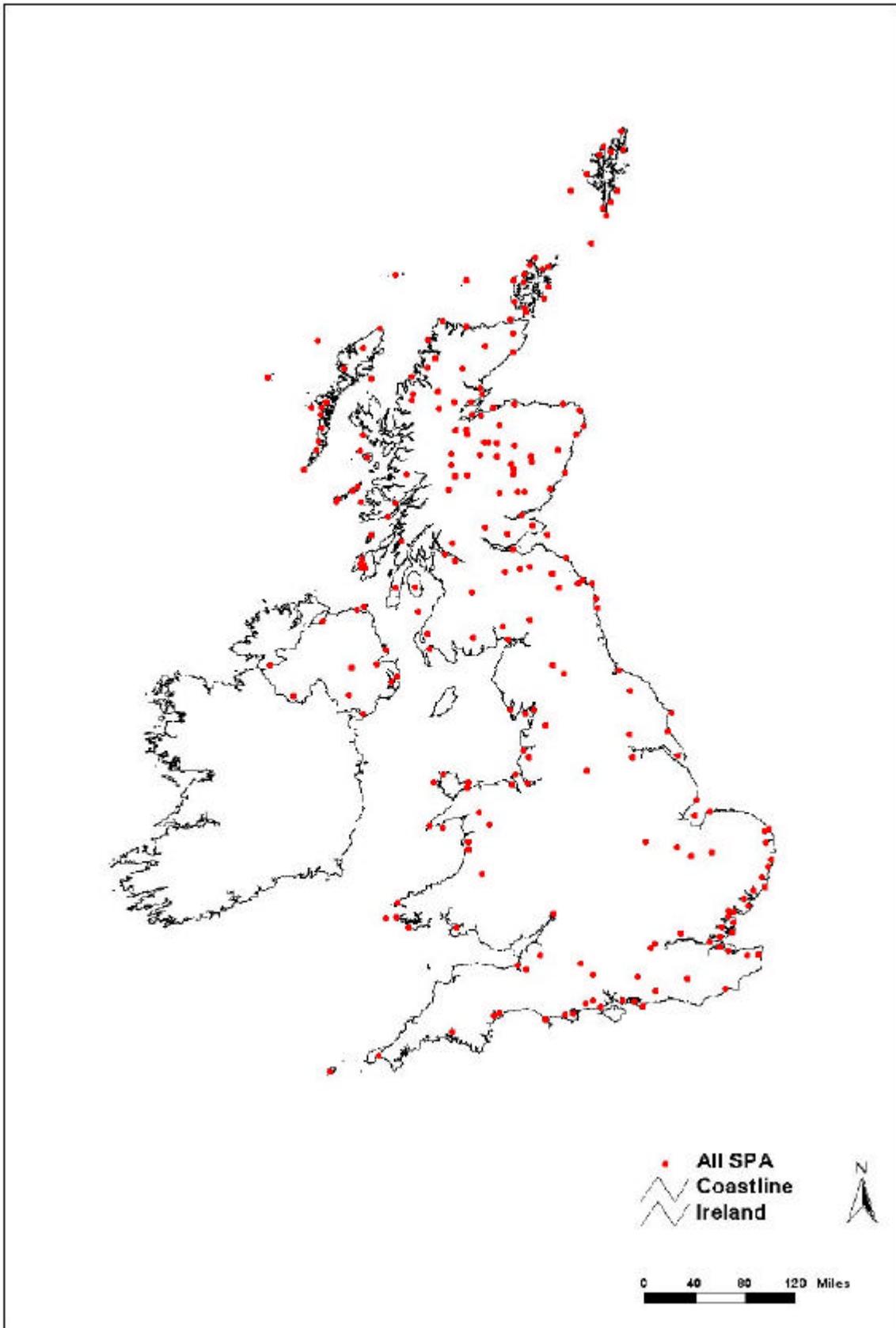


Figure 1. Locations of UK Special Protection Areas.

Conservation of areas

3.3 Describe the legal frameworks and other measures through which sites (including transfrontier sites) including of international importance gain practical protection. (Please append a list of internationally important protected sites.)

International Designations

An up to date list of internationally protected sites is available from the JNCC and this information is regularly updated on JNCC's web-site¹³.

Ramsar Convention on Wetlands of International Importance

- Other than one site in Northern Ireland, all UK Ramsar sites are protected by statute through the notification of an underpinning Site of Special Scientific Interest (SSSI) / Area of Special Scientific Interest (ASSI). The legislative mechanisms for SSSI/ASSI protection and a more detailed description of SSSI/ASSI protection is given below. In England and Wales, Ramsar designations are recognised in law through the 2000 CRoW Act.
- Development control is afforded throughout the UK through a comprehensive statutory town and country planning system. The operation of this legislation is guided by planning policy guidance issued by the UK government for England (see section 4.7) and by devolved administrations in Scotland, Wales and Northern Ireland. Under this guidance the Ramsar site designation is treated as a 'material planning consideration'¹⁴.

EC Directives

- Council Directive on the Conservation of Wild Birds (79/409/EEC) commonly known as the 'Birds Directive'. Article 4 requires Member States to establish Special Protection Areas where these are an appropriate means of conserving Annex I and/or migratory bird species. This is implemented in the UK through the Wildlife and Countryside Act 1981 (as amended 1985), the CRoW Act 2000 (England and Wales), and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1981. The legal position of these sites was strengthened in Great Britain by the Conservation (Natural Habitat, &c) Regulations 1994, and in Northern Ireland, the Conservation (Natural Habitat, etc.) Regulations (Northern Ireland) 1995.
- Council Directive on the Conservation of Natural habitats and of Wild Fauna and Flora (92/43/EEC) commonly known as the 'Habitats Directive'. This requires Member States to establish Special Areas of Conservation (SACs) for the conservation of habitats, plants and animals designated in Annex I and II of the Directive. It is implemented in Britain through the Conservation (Natural Habitat, &c.) Regulations 1994 and in Northern Ireland the Conservation (Natural Habitat, etc.) Regulations (Northern Ireland) 1995. A list of candidate SACs has been submitted to the European Commission.
- Together those UK sites classified as SPAs and candidate SACs form part of the European Natura 2000 network.

National designations

The following national designations are fundamental to waterbird conservation in that they afford opportunities for protection where necessary;

¹³ <http://www.jncc.gov.uk>

¹⁴ Where there is uncertainty in policy over the development of a site, individual development proposals are determined on the basis of material planning considerations, *i.e.*, any nature conservation site designation has to be considered along with the merits of the individual proposal.

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- Sites of Special Scientific Interest / Areas of Special Scientific Interest - are the primary site protection designation used in the UK, implemented in Great Britain by the Wildlife and Countryside Act 1981 and in Northern Ireland by the Wildlife Northern Ireland Order 1985.

The country agencies have the responsibility to designate and ensure effective management of SSSIs/ASSIs. Sites are selected against published criteria. Once notified, most new sites are protected through 'positive' management agreements¹⁵ between the relevant agency and landowner or occupier.

- National Nature Reserves (NNR) contain examples of some of the most important natural and semi-natural eco-systems in Great Britain. They are managed to conserve their habitats, providing special opportunities for scientific study of the habitats, communities and species represented within them. Many are owned and managed by the country agencies, although increasingly areas owned and managed by other bodies are being designated as NNRs. All NNRs are also underpinned with the SSSI/ASSI designation.

Agri-environment schemes

Agri-environment schemes are the main mechanism available to the Government to encourage the positive management of habitats and species of national and international importance in the wider countryside (*i.e.* outside designated sites). A number of schemes are significant for waterbird conservation. The following list includes the main schemes:

- Environmentally Sensitive Areas (ESAs) were introduced in 1987 in order to protect landscape and wildlife interests in areas of environmental significance, but where changes in farming methods pose a threat to the environment and where conservation depends on adopting, maintaining or extending particular farming practices. Under these schemes, farmers and land managers are able to 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 foregone. Payments may include incentives to encourage positive management. A detailed monitoring programme is in place to examine the environmental effects of the 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 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. Detailed objectives for each area are agreed through a process of consultation and targeting at county and regional level.
- Habitats Scheme (now closed) 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 Scheme in January 2000.
- 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.

¹⁵ Management agreements are payments to the landowner/occupier for managing a site used to be based on a system of 'profits forgone' by refraining from executing potentially damaging operations (PDOs). Positive management agreements base payments on measures undertaken that will provide conservation benefits.

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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 following the ecological and economic evaluation of the pilot, seven new arable options have now been incorporated into Countryside Stewardship Scheme.

- Countryside Premium Scheme was launched in 1997, throughout Scotland, to provide financial incentives for the management and creation of habitats of conservation interest on agricultural land outside the ten designated ESAs. As with ESA schemes, farmers could choose from a number of management options. Examples include the creation and management of wetlands, the creation of grass margins, extended hedges or beetle banks, the management of grassland flood plains and the retention of extensive cropping.
- Tir Gofal is the main agri-environment scheme in Wales. It is administered by CCW on behalf of the National Assembly for Wales (NAW). Ten-year whole-farm agreements are offered for any agricultural land in Wales, for the protection and management of specific habitats and features, the creation and support of new access routes into the countryside and training for farmers on the management of specific habitats and features. It replaces an earlier scheme called 'Tir Cymen'.
- Countryside Management Scheme introduced and administered by the Department of Agriculture and Rural Development (DARD), formerly the Department of Agriculture for Northern Ireland (DANI). This scheme was designed to encourage landowners to adopt, or continue with, environmentally sensitive farming practices. The scheme aims to protect and manage wildlife habitats and species diversity through positive management; maintain water quality of rivers and lakes by nutrient management planning and Codes of Good Practice and manage landscape and heritage features by their integration into agricultural 'good practice'.
- The Rural Stewardship Scheme (RSS) is administered by the Scottish Executive (SE) and is 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 RSS is expected to contribute to the achievement of a wide range of rural policy objectives.

In some wetland and upland areas, agri-environment schemes have so far not been able to deliver complete solutions to some deep-rooted conservation management problems. Typically, agri-environment schemes have helped to stop or reduce deterioration of some conservation interests, but have not yet managed to restore habitats that have often suffered degradation over a long period.

Management Planning

3.4 *Has your country developed a management planning process for protected sites? If yes, please outline the types of management plans and organisations responsible for development and implementation.*

Development of management plans and agreements

A wide range of organisations are responsible for the preparation and implementation of management plans for designated sites in the UK. These are principally:

- Statutory nature conservation agencies (CCW, EHS, EN and SNH).
- Other Government Departments and agencies, such as the Ministry of Defence (MoD), Forestry Commission, EA, and SEPA.
- NGOs: those with the most significant site holdings are the RSPB, National Trust, National Trust for Scotland, county/regional Wildlife Trusts and BASC through its affiliated club network.

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Where NGOs own or manage land, site management plans for their own holdings, are developed and implemented in close co-operation with the relevant nature conservation agency.

- For many marine sites, the local government authorities have been heavily involved, and they were the lead authority in drafting management plans for some sites. There has also been much local government involvement in the preparation and implementation of management plans for terrestrial sites.

The use of management agreements¹⁶ on land is an important mechanism to achieve the favourable condition of designated sites. The conservation agencies are responsible for preparing short management statements for all SSSIs/ASSIs and NNRs which they manage. Management statements are designed to set out objectives for each site for discussion and agreement with owners and occupiers. They provide a practical and effective means of influencing the actions of all owners and occupiers and others with a direct interest in the designated land. They are reviewed regularly and the review process considers effectiveness against the achievement of objectives and how to ensure the participation of all those involved in their implementation.

SNH has completed SSSI Management Statements (brief management plans) for all Scottish SSSIs. The process of developing site management statements within England is substantially complete. EN has an ongoing programme to review and update these documents with individual owners and/or occupiers, and about 2,000 are processed each year. Full management plans exist for all NNRs.

Legislation in England and Wales has recently been amended. The 2000 CRoW Act requires that public bodies maintain and enhance the special feature of interest on a designated site. For each site, a management statement must be produced, outlining what needs to be done to maintain/enhance the 'special interest' feature. Payments for management must be for positive action (*i.e.* not based on profits forgone). If an agreement is not reached, agencies can issue a management scheme that defines management to be carried out to make the SSSI satisfactory. If the scheme is not acted upon, they can issue a management notice that requires implementation.. Failure to do so risks prosecution, heavy fines (up to £20,000 and unlimited in a Crown Court) and an order to restore the site (which may cost more than a fine). Compulsory purchase is still a valid option for the country agencies to prevent degradation and has been enhanced to include land outside the SSSI. Owners must give notice of potentially damaging operations and changes of ownership or occupation. The country agencies can refuse consent for such operations outright or issue a consent with conditions.

3.5 How many protected sites have formal management plans (please append a list of sites and their management planning status):

The UK has not, to date, undertaken a full review of the management structures in place on all protected sites. Thus, it is not possible to answer this question numerically without disproportionate effort. However, a survey of UK Ramsar sites revealed the information listed below.

a. Proposed?

As of December 2001, 24 Ramsar sites did not have a management plan. It is expected that these will be prepared in due course as resources allow. Please see Appendix 4.1 of the UK Ramsar Convention report to the eighth Conference of the Parties (CoP8) for details of which sites these are.

b. In preparation?

As of December 2001, 42 Ramsar sites have management plans in preparation. Please see Appendix 4.2 of the UK Ramsar Convention report to the eighth Conference of the Parties (CoP8) for details of which sites these are.

¹⁶ Contractual agreements made between owners or occupiers of land and the statutory nature conservation agencies.

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c. Being implemented?

As of December 2001, 116 Ramsar sites had plans being fully implemented. Please see Appendix 4.3 of the UK Ramsar Convention report to the eighth Conference of the Parties (CoP8) for details of which sites these are.

Pollution Control and Management of Wetland Resources

3.6 What measures does your country have in place to ensure the wise use of wetlands habitats and to prevent habitat degradation e.g. pollution control and managing water resources? Please provide examples of best practice initiatives particularly involving cross-sectoral co-operation or public participation.

Managing water resources-Asset Management Plan schemes and Ramsar sites

Every five years, water companies in the UK, with assistance from the EA and SEPA, submit Asset Management Plans (AMPs) to the Office of Water Services for approval. AMPs include schemes for investigations into environmentally damaging abstractions; schemes for replacement of, or modifications to, sources of abstraction; as well as improvements to water quality (see also water abstraction licensing system section 4.7).

Though there are schemes running from AMP2, the most recent round - AMP3 - took effect in April 2000 for the period of 2000-2005. As a result of this round, and to meet the requirements of Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment, there will be strict standards for the treatment of sewage, which will significantly reduce eutrophication, modernise combined storm-water and sewage outfalls and rectify low-flow problems in rivers. Water authorities are also investing in environmental improvements in water quality and water resources in rivers and wetlands, throughout the UK.

The UK Report to the eighth Conference of the Parties of the Ramsar Convention gives further information on the number of Ramsar sites on which AMPs apply and how much money has been allocated to improve water quality (see Section 2.8.1).

Water Level Management Plans

Water Level Management Plans (WLMPs) provide a process for co-ordinating the hydrological management of particular areas. They focus on resolving conflicts between conservation needs (for example, for protected wetlands) and those of other users (for example local agriculture) In England and Wales, the EA, Internal Drainage Boards and local authorities have so far prepared WLMPs for over 350 designated wetland SSSIs. Approximately 200 further WLMPs are being prepared.

Plans will be completed for all SSSIs sensitive to water level change and agreed with the landowner, relevant government body and EN/CCW before any changes are proposed. Guidance on preparing WLMPs is available from DEFRA and the National Assembly for Wales (NAW). WLMPs provide good opportunities for contributing to targets within the UK's biodiversity action process.

Pollution control: review of existing permissions and consents

Within England and Wales, EA is undertaking a major project, known as the 'Review of Consents Process' to implement a one-off review of existing permissions and activities as required under the Conservation (Natural Habitats &c.) Regulations 1994. The review will cover SPAs, candidate SACs and coincident Ramsar sites and the potential effects upon them from discharges, abstractions, landfills, and air emissions. It will focus on those permissions and activities that may have an adverse effect on the features of interest, including waterbirds and their habitats. SEPA is also playing an important part in this process by advising on discharge consents affecting Natura 2000 sites, as and when these arise under the four-year minimum review period under the Control of Pollution Act 1974. Preliminary work to identify the potential problems associated with existing Water Act consents has

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been completed in Northern Ireland. The British Trust for Ornithology (BTO) has carried out a review of the known impact of organic inputs on waterbirds in England and Wales.¹⁷.

Monitoring pesticide pollution by livestock

Sheep are prone to infestation by a number of ectoparasites and there is a need for effective treatment systems for economic and reasons of animal welfare. The antiparasitic chemicals that are used in sheep dips are a major threat to the invertebrate life of many streams and rivers with severe implications for fish, waterbirds and other animals higher up the food chain. EA and CCW are examining ways to tackle this growing problem. *Pesticides 1998 - a summary of monitoring of the aquatic environment in England and Wales*, is the sixth in a series of reports on the monitoring of pesticides in the aquatic environment produced by EA. It presents summarised data for 1998 for pesticide monitoring of environmental waters and covers the following information; UK pesticide monitoring sites; pesticide levels in freshwater, groundwater, and marine water; pesticide-related pollution incidents; and details of activities being undertaken by the EA to reduce pesticide levels and impacts. More detailed information is available on the EA's website: <http://www.environment-agency.gov.uk>

Aquatic Eutrophication

Eutrophication of surface water may impact waterbird populations. A suite of eleven pilot Eutrophication Control Action Plans were introduced by the EA in 2000-2001 to test and refine methods of assessing and controlling eutrophication at a local level. The EA's *National Strategy on Aquatic Eutrophication*, was published in August 2000¹⁸.

Nitrate Vulnerable Zones

Pollution of aquatic ecosystems by nitrates can have implications for waterbirds. Thus, increases in aquatic productivity can result in adverse conditions for diving ducks in lakes since they rely on clear water to locate food. Council Directive 91/676/EC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (commonly known as the 'Nitrates Directive') requires Member States to designate, as Nitrate Vulnerable Zones (NVZs), surface or underground waters that are or could be high in nitrate from agricultural sources. Within these zones, farmers must observe an action programme of measures restricting the timing and application of fertilisers and manures and must keep accurate records. Government bodies are currently issuing proposals for implementation of the Directive. In some cases this will involve designation of additional NVZs so as to reduce the risk of eutrophication as well as for the protection of sources of drinking water. Detailed proposals for each country can be found on the DEFRA, (<http://www.defra.gov.uk>), SE (<http://www.scotland.gov.uk>), and NAW (<http://www.wales.gov.uk>) websites.

Water Framework Directive

On the 22 December 2000 the Water Framework Directive (2000/60/EC) was adopted. The purpose of the Directive is to prevent deterioration and protect, enhance and restore the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystem. The implementation on the Directive will prove beneficial for all wetlands and their associated migratory species. The requirements of the Directive will be transposed into UK legislation by December 2003.

¹⁷ Burton, N.H.K., Paipai, E., Armitage, M.J.S., Maskell, J.M., Jones, E.T., Hutchings, C.J. & Rehfish, M.M. 2001. *Effects of reductions in organic and nutrient loading on bird populations in estuaries and coastal waters of England and Wales. Phase 1 report*. BTO Research Report No. 267. BTO, Thetford, UK.

¹⁸ For further details please see the website: <http://www.environment-agency.gov.uk>

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Wise Use of Floodplains

Floodplains are of major importance for waterbirds both in summer (where wet grassland is an important habitat for breeding waders and ducks) and in winter (where these areas hold large numbers of waterfowl).

The Wise Use of Floodplains is a multi-partnership, European Union (EU) Environment LIFE project aimed at demonstrating how floodplain wetlands can contribute to the sustainable management of water resources within river basins. The project aims to help EU countries achieve the ecologically based objectives on the quality of water required by the EU Water Framework Directive. The project will also review restoration projects covering fifty river floodplains and deltas across Europe, and analyse opportunities and constraints caused by current practices in Europe. In the UK the RSPB, EA and EN seek to involve private landowners, leisure and tourism enterprises in the future management of the Somerset Wetlands and Anglian Fens. Engaging the private sector is considered to be crucial to the success of this project both to secure support from landowners to change land use, and also to provide alternative income through tourism and leisure. For more information on the Wise Use of Floodplains project please see the website <http://www.floodplains.org.uk>.

Rehabilitation and restoration

3.7 Does your country have a policy for the identification, rehabilitation and restoration of wetlands important for species covered by the Agreement? Please provide examples of rehabilitation and restoration projects and initiatives undertaken.

There is no overall policy regarding the identification, rehabilitation and restoration of wetlands important for species covered by AEWA. There is, however, much wetland restoration activity, driven by a range of other requirements. Nonetheless, this activity has the potential for significant benefits for waterbirds.

In particular a number of Habitat Action Plans within the UK Biodiversity Action Plan contain targets for the restoration and recreation for a number of wetland habitats *e.g.* the creation of 'floodplain forests as part of the wet woodland HAP which also includes targets for restoration and improvement of riparian woods which would benefit tree-nesting species such as Goosander *Mergus merganser* and Goldeneye *Bucephala clangula*. The UK AEWA Implementation Plan (Appendix 1) summarises relevant HAP targets and indicates which waterbird species listed by AEWA might benefit from these activities.

EA has worked closely with EN and water companies to restore wetland sites damaged by abstractions and discharges, with recent success in getting investigations and solutions funded by the companies in the third round of AMPs (see section 3.6). This process should make a considerable positive contribution to the ecological condition of those Ramsar sites involved.

Under the EA's 'Review of Consents' process (see section 3.6), work has involved the production of 'Site Issues Briefings' summarising the key issues and threats for each site. These will be useful in identifying priority wetlands for restoration.

In July 2001, EN produced a report on, *The success of creation and restoration schemes in producing intertidal habitat suitable for waterbirds (Research Report No 425)*.¹⁹ The report suggests guidelines as to how success of creation and restoration schemes may be measured and how monitoring programmes for invertebrates and waterbirds may be carried out. Though there are few examples of newly restored intertidal habitat in the UK there are a number of examples of historic natural breaches that are used for flood defence and unmanaged restoration on intertidal habitat from which lessons can be drawn. Some of these include:

¹⁹ Atkinson, P., Crooks, S., Grant, A., & Rehfish, M.M. 2001. *The success of creation and restoration schemes in producing intertidal habitat suitable for waterbirds*. English Nature Research Reports, 425. English Nature, Peterborough.

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- In the majority of studies reported, the design of monitoring schemes and the definition of success criteria have been inadequate to determine whether a created or restored wetland has reached its intended target.
- There are large gaps in the knowledge about intertidal habitat restoration in the UK. These include the efficacy of the methods used to create areas, how to measure functional equivalence in a manner that is rapid and cost-effective and also the human-use values that are put on intertidal habitats. An experimental approach and an adaptable management framework, with regular assessment of the monitoring data, is essential for any large-scale compensatory project.
- Reinstatement of freshwater-transitional and brackish-water habitats will improve the linkages between terrestrial and marine habitats and is likely to improve the likelihood of success of compensatory measures.

4. Management of human activities

Hunting

4.1 *Outline the main features of legislation or legal measures in your country to control hunting of the species covered by the Agreement (e.g. use of lead shot and poisoned baits, and to eliminate illegal taking).*

All wild birds in the UK are protected by statute. The Wildlife and Countryside Act 1981 and the Wildlife (Northern Ireland) Order 1985, and 1831 Game Act list those which can be legally hunted and give details of relevant close seasons and other restrictions.

Banning of leadshot from use in wetlands

The deposition of lead gunshot in wetlands can cause lead poisoning in waterbirds that ingest it as well as other ecologically damaging impacts. The UK has been supportive of moves to eliminate lead gunshot from wetlands both nationally and internationally. In the early 1990s the government created a Lead Shot Working Group, comprising representatives from all the sectoral interests, to co-ordinate the progressive phasing out of lead gunshot from UK wetlands. This group and successor fora have advised on the process of eliminating lead gunshot from wetlands so as to prevent unnecessary waterbird deaths from lead poisoning

A four-year voluntary phase-out of the use of lead shot in wetlands commenced in September 1995. However, in 1997 government decided that it would be more effective to adopt statutory measures instead.

In September 1999, the Government introduced legislation in England²⁰ to prohibit the use of lead shot over the foreshore, certain wetlands of importance for waterbirds and for shooting of certain waterfowl species. In Northern Ireland, Scotland and Wales this is a matter for the devolved administrations. In Wales the relevant legislation will come into force on 1 September 2002 to prohibit the use of lead gunshot over particular wetlands.

In 2001, the Scottish Executive conducted a public consultation on a proposition that the use of lead shot be restricted in Scotland. Scottish Ministers will shortly consider an analysis of the consultation and determine the way ahead. It is envisaged that any changes to the current arrangements could be in place for the start of the 2002-03 Scottish wildfowling season.

The Regulations in England prohibit the use of shotgun cartridges containing lead shot —

- i) on or over any area below high-water mark of ordinary spring tides;
- ii) on or over SSSI sites listed on Schedule 1 of the Regulations; or
- iii) for the purposes of shooting any wild bird included in Schedule 2 of the Regulations.
These are Coot *Fulica atra*, Moorhen *Gallinula chloropus*, all quarry ducks, geese and swans *Anatidae* spp., Common Snipe *Gallinago gallinago* and Golden Plover *Pluvialis apricaria*.

A recent review of the Regulations has been undertaken involving shooting and other organisations, with recommendations reported to Government. Some changes to the Regulations have been made to ensure they are appropriate in their scope and effectiveness. Details can be found on DEFRA's website: www.defra.gov.uk/wildlife-countryside/ewd/rrrpac/shot/index.htm. It is the Government's intention that a full review of the Regulations in England and their effectiveness will be carried out in 2004.

²⁰ Environmental Protection (Restriction on Use of Lead Shot) (England) Regulations 1999 (SI No 2170) underpinned by section 140 of the Environmental Protection Act 1990.

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The UK, through BASC, supported the AEWA/Federation of Associations for Hunting and Conservation of the EU east European workshop (October 2001) on lead shot replacement, through participation, advice and demonstration.

As the legal basis for control of species causing serious agricultural damage is different from that for normal hunting, DEFRA and the National Farmers Union have produced a Code of Practice on the licensed shooting of Dark-bellied Brent Geese *Branta bernicla bernicla* that refers to the Regulations.

4.2 Does your country monitor hunting levels? If so, how is this information collated and reported?

In the UK there is no statutory requirement for hunters to report information on the number of waterbirds shot. Annual monitoring of the shooting, by BASC members, of all huntable waterbirds is conducted throughout the UK by BASC's Waterbird Shooting Survey. Some information is collected by the Game Conservancy Trust's (GCT) National Game Bag Census. There are comprehensive monitoring arrangements for waterbird populations.

In 2000, the Scottish National Goose Forum recommended to government that '*Annual monitoring of hunting mortality of geese should be undertaken by means of surveying a sample of shotgun certificate holders in order to establish the numbers of quarry geese shot in Great Britain each winter, and a more comprehensive survey of shotgun certificate holders should be carried out every five years.*' Currently, BASC and the Scottish Executive are jointly working to quantify the total number of geese shot annually in Scotland.

The UK AEWA Implementation Plan (Appendix 1) anticipates reviewing the success of the Scottish project above and considering mechanisms to develop procedures to report annual estimates of harvest of all quarry waterbirds at wider scales. Methodologies will be developed to calculate the number of waterbirds hunted in the UK, with a further project undertaken by the end of 2004.

4.3 Describe action undertaken by hunting clubs and organisations to manage hunting activity e.g. co-operative action, issuing of licences and proficiency testing of individual members.

BASC is the main organisation concerned with the shooting of waterbirds in the UK, with 1,800 affiliated clubs and shooting syndicates throughout the country. Since the 1950s, the presence of BASC and affiliated wildfowling clubs with formal tenure of shooting rights has proved invaluable to delivering a partnership approach to the integrated management of key wetland sites. This has been achieved because clubs have a vested interest in the site and exert local regulation over shooting practices and levels. They also provide a conduit for communication with other interests. Such local organisation and action has been guided by joint statements of common interest between BASC and the statutory conservation agencies (EN, CCW, SNH and EHS).

The shooting club system is an inexpensive and long-lasting mechanism for regulating shooting and an important conduit for integrated management. For example, one of the wildfowling clubs affiliated to BASC has commissioned an independent assessment of the sustainability of its shooting and activities. Most clubs operate education and training programmes for their members, particularly young and new members. These include knowledge of their quarry, their habitats and responsible use of guns. Many have active habitat management programmes, bag monitoring schemes, local shooting regulations appropriate to their situations, social programmes and co-operation with other conservation interests.

Improving performance

Although BASC does not enforce proficiency tests directly, it provides opportunity through two programmes for shooters to establish and improve their own performance levels. These are the Proficiency Award Scheme (PAS) and Safe Shot.

- PAS is a training course teaching hunters about shotguns, cartridges, shooting safety, the law, behaviour in the field, quarry identification, different types of shotgun shooting and the role for

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gun dogs and game keepers. The main emphases for the training course are to promote better practice in clubs and a wider curriculum for colleges.

- Safe Shot enables members to assess their own performance and receive recognition of having achieved a minimum standard through the award of a certificate.

There is a wide range of education and training facilities covering all aspects of sporting shooting provided by voluntary shooting organisations, other concerned bodies, shooting schools and clubs. Alongside these efforts there is a considerable body of guidance and literature available in support.

The infrastructure and expertise for running training and education schemes exists through a quality assured network of BASC coaches and education officers. Neither PAS nor Safe Shot is mandatory scheme, however both provide an excellent framework for testing proficiency.

Habitat management by the shooting community

There are some 200 BASC-affiliated wildfowling clubs that manage over 30,000 ha of coastland around the UK, 98% of which is of designated conservation importance. Within that total, 57 clubs lease land from the Crown Estate on 74 different sites and exert local regulation of wildfowling and practice other management through agreed management plans.

In 1992, the UK government published a planning policy guideline note, 'Coastal Planning' (Department of the Environment 1992), which encouraged local planning authorities and other agencies and interested groups to co-operate to prepare integrated coastal management plans. As a result, some 25 estuary strategies have been instigated and are ongoing.

In December 1995, the Joint Group on Wildfowling and Conservation on Tidal Land was formed, comprising the Crown (the landowner of 55% of the UK foreshore), BASC, EN and CCW. The Joint Group published new application procedures for waterfowl shooting leases on Crown foreshore. These require a comprehensive management plan to be prepared containing all the salient information from which the Joint Group can make a qualified judgement as to the inter-relationship of shooting and conservation interests on the sites concerned. This is considered alongside positive management such as effective wardening, recording and, where appropriate, refuge establishment. These proposals are sent out for wide consultation to statutory and voluntary conservation bodies and local authorities. This system is proving to be a highly successful consensus-building process, enabling effective and accountable management to be introduced and maintained.

Goose Management Schemes

A number of goose management initiatives have been put in place to manage the potential conflict between farming and conservation interests caused by feeding geese. These schemes are currently funded by SNH and run by joint committees which are a partnership of farming and conservation interests. The focus of each scheme is different, and payments are for management of the areas involved, usually in order to avoid disturbance. In other areas scaring of the goose populations may occur. As at May 2002 four schemes are in operation in Scotland (Table F):

Two new schemes are being developed; in Grampian centred around Loch Strathbeg for the Icelandic population of the pink-footed goose *Anser brachyrhynchus*; and for the Uists population of the greylag goose *Anser anser*.

Table F. Goose Management Schemes in Scotland. Data as at 31 March 2001

Scheme	Area under Agreements	Number of Agreements	£ in 2000/01	Species covered
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	Agreements	Agreements	2000/01	
Islay	6,201 ha	111	200,443	Greenland barnacle goose <i>Branta leucopsis</i> , Greenland white-fronted goose <i>Anser albifrons flavirostris</i>
Kintyre	539 ha	23	18,047	Greenland white-fronted goose <i>Anser albifrons flavirostris</i>
Orkney	226 ha	3	4,810	Greenland barnacle goose <i>Branta leucopsis</i>
Solway	923 ha	18	39,241	Svalbard barnacle goose <i>Branta leucopsis</i>
	<hr/> 7,889 ha	155	262,541	

Eco-tourism

4.4 What is the status of eco-tourism programmes or initiatives in your country? Please provide examples of projects with an indication of the significant outcomes.

Bird watching holidays

Several organisations in the UK provide information on sustainable and ‘eco-tourism’. However only a few are directly related to waterbirds. For example, RSPB offers holidays and days out for those who are interested in bird-watching or wildlife, although some of the excursions offered are only available to members or those accompanied by a member. RSPB and the Wildfowl and Wetlands Trust (WWT) maintain reserves and visitor centres on several sites attract many UK and overseas visitors. Details of RSPB reserves and WWT’s Wildfowl and Wetland Centres are available www.rspb.org.uk and www.wwt.org.uk respectively.

There are many regional and local bird watching organisations in the UK. Many of these organisations offer trips for their members. There are also bird-watching holiday companies within the private sector. Some examples of these can be found on the British Bird Watching Fair 2001 website: <http://www.birdfair.org.uk/main.htm> (for a list of exhibitors in travel and tourism).

Conservation holidays

Other organisations promote ‘working holidays’ that may benefit waterbirds. The British Trust for Conservation Volunteers (BTCV) has over 40 years’ experience of running practical conservation projects and is one of the UK's leading providers of sustainable tourism. For more information, see the BTCV website: <http://www.btcv.org>.

4.5 What social and economic benefits accrue to the local communities from the conservation of important water-bird sites?

The socio-economic benefits of conservation activities to local communities have been the subject of recent research especially in Scotland. These include:

- Economic benefits of birdwatchers visiting the Hebridean island of Islay to see over-wintering geese and other birds.
- Economic benefits of over-wintering geese in Scotland – case studies were undertaken on the island of Islay and at Loch Leven which showed that the presence of geese contributes significantly to the local economy at both locations (see the website at <http://www.scotland.gov.uk/cru/kd01/purple/cbmwgs-02.asp>).
- A joint study between BASC and RSPB in 1998 reviewed the benefits that geese bring to the local economy through tourism and shooting. It concluded that bird watchers and goose shooters

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spend some £5,400,000 annually in the local economies around Scottish goose wintering sites. Of this expenditure, 58% was related to goose shooting and the rest to goose watching.

Other human activities

4.6 Does your country carry out Environmental Impact Assessment (EIA) of activities potentially affecting protected sites or areas important for species covered by the Agreement? If yes, briefly describe the main features of your EIA policy and procedures.

The requirement for EIA legislation in the UK comes from Council Directive 85/337/EEC, as amended by Council Directive 97/11/EEC. The amended Directive requires EIA for certain types of development, which are likely to have significant effects on the environment.

For projects listed in Annex I to the Directive EIA is required in every case. Those in Annex II only require EIA if the project in question is judged likely by the competent authority to give rise to significant environmental effects.

In the UK, criteria and thresholds are used for Annex II projects as a method to determine those projects that are more likely to have significant effects on the environment. Such projects are then evaluated on a case by case basis for the need for EIA. Where a project is within a "sensitive area", however, such as a European site within the meaning of Regulation 10 of the Conservation (Natural Habitats *etc.*) Regulations 1994 (SI 1994/2716), the criteria and thresholds do not apply and the need for EIA must be considered in every case.

Planning Policy

4.7 Please describe the main features of your planning policy and provide examples of practical implementation (e.g. activities to minimising disturbance of species populations or limit the impact of species populations on crops or fisheries). Please summarise any land-use conflicts emphasising successful solutions to problems encountered in promoting the wise-use of waterbeds and their habitats.

Planning Policy UK Town and Country Planning

The UK Government undertakes land-use planning through the town and country planning system. *Planning Policy Guidance 9 on Nature Conservation (PPG9)* is the relevant document setting out how the Government's policies for the conservation of our natural heritage are to be reflected in land use planning. Guidance in PPG9 must be taken into account by English local planning authorities in the preparation of their local development plans. Planning Policy Guidance in Wales, Scotland and Northern Ireland is issued by the respective devolved administrations.

All decisions on land use must be considered in the first instance against relevant policies in the local development plan unless material considerations indicate otherwise. Nature conservation issues can be a material consideration in any planning application or appeal.

At all levels, the statutory conservation agencies and the EA and SEPA, provide advice in land-use conflict issues. In Northern Ireland these duties are carried out by the Environment and Heritage Service of Northern Ireland (EHS) and Department of Agriculture and Rural Development (DARD).

Access to information

Successful development and implementation of policies for nature conservation depend on access to ecological information and expertise. Survey work (described in section 5.2) and local records centres are important resources of information. Accessing this information is a challenge and initiatives like the National Biodiversity Network (NBN) have been established to facilitate access to information in a timely manner.

The NBN is a union of like-minded organisations that are collaborating to create an information network of biodiversity data that is accessible through the Internet. By providing easy access to the

4. Management of Human Activities

information people need about wildlife, informed decisions can be made to ensure the natural environment is diverse, rich and sustainable now and for future generations. The UK government, statutory agencies and non-governmental organisations (NGOs) are working together to broaden access to biodiversity data, and, through NBN plans to make information available to all stakeholders in due course.²³

Wider initiatives

Other relevant work in the UK includes:

- Water Abstraction Licensing System: Government departments have carried out a review of the licensing system for water abstraction in England and Wales. Its decision document, *Taking Water Responsibly*, sets out the Government's plans to develop the abstraction licensing system in England and Wales. Some developments will require new legislation to change the regulatory system, but other developments can be carried out under the existing regime. Aspects of the review that will have particular relevance to the protection of waterbirds and wetlands are:
 - The standard authorisation threshold will be 20 cubic metres per day. The EA will be able to set different thresholds in order to meet the needs of different catchments.
 - All forms of irrigation will need to be authorised. Spray irrigation is currently the only form of irrigation for which a license is required.
 - All new licenses will be issued for defined periods of time.
 - The development of Catchment Abstraction Management Strategies (CAMS), by the EA, which identify environmental requirements of surface and ground waters. These strategies will describe the water resources position in each catchment and will set out a strategy for sustainable management. Interested parties will be fully involved in the production of CAMS at a local level.
- Indicative Forest Strategies - the type and location of new and existing forests and woodlands are considered taking into account of the implications, among other things, of wetland and water issues.
- Local Environment Agency Plans (LEAPs) are integrated local management plans with actions that address local environmental issues, including waterbirds. The LEAP process is a partnership that involves several stages from consultation about the management of the area, to the production of an action plan that contains a list of actions based on the issues identified. Action plans are annually reviewed to monitor progress and this is then normally reported through a published review document.
- Coastal Zone Management Plans are plans through which local authorities and others implement planning objectives and policies for an area of the coast which deal with a range of issues including landscape management, development, recreation and conservation.
- Shoreline Management Plans (SMPs) form large scale risk assessments in areas with coastal processes. They are then integrated into a policy framework for DEFRA and NAW for flood and coastal defence. Due to continuing loss of inter-tidal habitats, the effectiveness of SMPs has been reviewed, on Ramsar sites, European candidate Special Areas of Conservation (Habitats Directive) and Special Protection Areas (Birds Directive). The losses may be due to a number of factors, including: dynamic coastlines being constrained by existing flood and coastal defence policy; coastal squeeze as a result of sea level rise; and aggregate extraction.
- Coastal Habitat Management Plans were introduced by government to evaluate the future impacts of SMP policies and sea level rise on inter-tidal habitats, including Ramsar sites, and accordingly to provide a framework for managing sites on, or adjacent to, dynamic coastlines.
- Statutory refuges in the UK were first created in the late 1950s. Since then, due to the establishment of statutory protected areas and areas owned by NGOs, no new refuges have been

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created. However, BASC and EN are developing guidance for establishing management of non-hunting refuges. Lindisfarne is the site for a trial of these guidelines. This project involves identifying the requirements at the site of both wildfowl populations and hunters, the identification and establishment of suitable refuge areas, and monitoring for the experimental period followed by an assessment against success criteria which relate to both waterfowl populations and hunting success. The whole procedure is based upon the concept of a shared resource to be managed in partnership.

- Wildlife Habitat Trust (WHT) is the UK's sporting shooting conservation fund. It was formed by BASC in 1986. The WHT is an independent organisation dedicated to raising and distributing funds to help the acquisition and management of habitats for shooting and conservation. Through the WHT's UK Habitat Conservation Stamp Programme, money is raised through the sale of a £5 stamp featuring commissioned wildlife artwork. Many clubs require the purchase of this stamp as an annual 'conservation levy'.

The WHT has provided loans totalling over £326,000 to support land acquisition by shooting groups. In addition the Trust has provided grants totalling £76,000 towards habitat management projects in the UK and £56,000 towards conserving important flyway habitats, particularly in the Baltic countries. By way of example, WHT, working in partnership with Wetlands International, was awarded a further grant of £15,000 over three years to assist the maintenance and rehabilitation of the Ramsar site at Lake Engure in Latvia. This project was included in the list of important 'International Co-operative Programmes' at AEWa MoP1.

- A forthcoming review of marine nature conservation will look at inter-tidal and coastal habitat issues, extending to the 12 mile limit. This has implications for seaducks and some seabirds.

5. Research and monitoring

Research

5.1 *How are priorities for research identified in your country? Please briefly describe your country's research programmes, including any bilateral or multilateral co-operative action, for wetland habitats and for species covered by the Agreement (e.g. studies into species population, ecology and migratory patterns). Please append a list of research activities initiated, ongoing or completed in the last three years.*

Please see the UK AEWA Implementation Plan in Appendix 1.

Monitoring programmes

5.2 *What monitoring activities does your country undertake, including any bilateral or multilateral co-operative action, of wetland areas and species covered by the Agreement (e.g. national monitoring schemes, International Waterfowl Census)? Please append a list of monitoring activities or programmes initiated, ongoing or completed in the last three years*

Most waterbird species are well monitored in the UK. Appendix 2 summarises the current status of relevant species and gives a brief summary of most recent studies, conservation initiatives and published studies undertaken in the UK. The UK undertakes or contributes to a variety of monitoring schemes.

Foot and Mouth Disease and the impact on bird monitoring

The outbreak of Foot and Mouth Disease throughout the UK in February 2001 led to prolonged restriction on access to many parts of the countryside. As a result, WeBS core counts (see below) were suspended in March 2001 and the scheduled national Mute Swan census is now planned for spring 2002. WeBS counts were finally re-instated in September 2001 in areas where access restrictions were lifted.

Wetland Bird Survey

WeBS organisation

The Wetland Bird Survey (WeBS) is the UK's main scheme for monitoring the status of non-breeding waterbirds. WeBS is an equal partnership between the BTO, WWT, RSPB and JNCC. The four partner organisations contribute broadly equally to the funding of a small Secretariat at WWT that co-ordinates the activities of about 2,500 volunteer counters and the BTO who run the WeBS Low Tide Count scheme. The principal aims of the scheme are to identify population sizes, determine trends in numbers and distribution, and to identify important sites for waterfowl. WeBS Core Counts (population monitoring function) are made annually at around 2,000 wetland sites of all habitats; estuaries and large still waters predominate. Monthly co-ordinated counts are made mostly by volunteers, principally from September to March, with fewer observations during summer months. WeBS Low-tide Counts (distributional information on use of intertidal areas) have been made in 70 estuarine sites throughout the UK. Co-ordinated counts are made monthly from November to February. Low Tide Counts are not necessarily made annually, but are repeated typically every six years, however, more frequent coverage has been made on some sites. Additional WeBS Special Surveys are undertaken periodically, e.g. Non-Estuarine Waterbird Survey 1997/98.

An initiative is currently underway between the WeBS partners and country agencies to derive a priority list of sites for long-term monitoring by WeBS. Part of this process will address monitoring needs at those protected sites with no regular monitoring and to assess whether it is feasible or not for WeBS to extend its coverage.

The UK contributes to Wetlands International's International Waterbird Census (IWC) through its Wetland Bird Survey (above). WeBS submits its January data to IWC.

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WeBS dissemination

The scheme produces an annual report, *Wildfowl and wader counts*, which is widely disseminated²¹. This summarises data for the preceding count year. Data from other sources, e.g. roost counts of grey geese, are included in these reports where relevant.

WeBS Integrated Waterbird Database (IWD)

A fully integrated database system is under development by the WeBS partnership. This will have the ability to store and retrieve not only data collected under the core counts scheme, but also the multiplicity of other waterbird count data collected and reported (e.g. non-estuarine wader counts, grey goose censuses, etc.). Low-tide count data will be managed by BTO to an identical format to the IWD.

The IWD will have the capability to deliver desk-top access to relevant data for staff of the WeBS partnership as well as web-based access to certain elements of data (initially the level of data presented in *Wildfowl and wader counts*).

The development of a WeBS Alerts scheme

Work is currently underway to develop an alerting system for WeBS to provide guidance on the management of key wetland sites as well as provide information on population trends at regional and national scales. The project aims to use annually collected counts of non-breeding waterbirds to provide an objective means of indicating the significance of the changing numbers, against defined thresholds, of:

- UK populations of some non-breeding waterbirds;
- numbers of particular species on those sites which have been statutorily designated for them; and
- patterns of population changes at other scales (e.g. regional or country).

The alerting system depends on the analysis and interpretation of population trends over pre-defined periods to enable current changes in numbers to be placed in the context of the past.

The immediate work derived from research undertaken by BTO was presented at a workshop in autumn 1998. That workshop reviewed previous alerting work with a range of national and international specialists and organisations, and made recommendations for the future development of both national and site-based alerts systems for non-breeding waterbirds. Since then, a three-year pilot programme has been undertaken to develop the concept. Work is currently underway to develop the system for its implementation in the WeBS annual report for count season 2002/3 (anticipated publication March 2004).

The Low Tide Count Atlas: Estuarine Waterbirds at Low Tide

As well as monitoring roosting waterbirds, WeBS collects information on the distribution and numbers of birds present on estuarine sites at low-tide. Work is underway to prepare and publish an atlas of the low tide count data collected in the first seven years of the scheme during which most major UK estuaries have been surveyed at least once. The Atlas will give a detailed overview of the scheme, illustrate the distribution of selected species in each of the sites covered, provide a UK overview of each species at low tide and will provide practical advice on the use of low tide data for conservation work. Publication is planned for autumn 2002.

²¹ Musgrove, A., Pollitt, M., Hall, C., Hearn, R., Holloway, S., Marshall, P., Robinson, J. & Cranswick, P. 2001. *The Wetland Bird Survey 1999-2000: Wildfowl and Wader Counts*. Slimbridge: BTO, WWT, RSPB & JNCC. 201 pp. {Obtainable from the WeBS Secretariat, WWT, Slimbridge, Gloucester. GLS2 7BT, UK.} More information on WeBS is available at: <http://www.bto.org/survey/webs/webshome.htm>.

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Other relevant monitoring programmes

- Sea duck surveillance - a partnership project between WWT and JNCC, is core-funded in support of the AEWA agreement and organised as part of the Seabirds and Cetaceans project. The programme started in 2000 and in the winter of 2001/2, WWT undertook aerial surveys in key locations in Wales, northern England and Scotland to provide information on the numbers and distributions of seaduck populations in inshore waters around the UK.
- Seabirds and Cetacean Project - the JNCC's Seabirds at Sea Team are currently undertaking surveys of seabirds in the marine environment in most of the east coast Scottish Firths. The Seabirds at Sea report: *The distribution of seabirds and marine mammals in the Atlantic frontier, north and west of Scotland*, is based on the data collected during the period 1979-1999 and has information on the distribution of 48 seabird species.
- Seabird 2000 - is the third in a series of comprehensive surveys of the breeding seabirds of Britain and Ireland. The breeding season of 2000 was the second year of this project which will be concluded in 2002. Seabird 2000 will provide a major re-assessment of the population sizes and breeding distributions of seabirds in Britain and Ireland. It will provide a major data source for the re-assessment of international population sizes for many species.
- Seabird Monitoring Programme - the regular monitoring of selected seabird colonies (initiated eleven years ago) provides information on the trends of breeding seabirds in the UK between major population re-assessments such as *Seabird 2000*. A review of the Seabird Monitoring Programme achievements over its first decade has been recently published²².
- The Statutory Conservation Agency/RSPB Annual Breeding Bird Scheme (SCARABBS) is a partnership between RSPB, JNCC and the country agencies. It funds periodic national surveys of a number of breeding bird species that are inadequately monitored by other schemes within the UK. SCARABBS covers the timing and funding arrangements for national surveys of the following species listed by AEWA: Red-throated Diver *Gavia stellata*, Black-throated Diver *Gavia arctica*, Slavonian Grebe *Podiceps auritus*, Bittern *Botaurus stellaris*, Common Scoter *Melanitta nigra*, Goldeneye *Bucephala clangula*, Red-breasted Merganser *Mergus serrator*, Goosander *Mergus merganser*, Spotted Crake *Porzana porzana*, Avocet *Recurvirostra avosetta*, Stone Curlew *Burhinus oedipnemos*, Dotterel *Eudromias morinellus*, Golden Plover *Pluvialis apricaria*, Black-tailed Godwit *Limosa limosa*, Whimbrel *Numenius phaeopus*, Curlew *Numenius arquata*, Greenshank *Tringa nebularia*, Red-necked Phalarope *Phalaropus lobatus*, Sandwich Tern *Sterna sandvicensis*, Roseate Tern *Sterna dougallii*, Arctic Tern *Sterna paradisaea* and Little Tern *Sterna albifrons*.
- The Rare Breeding Birds Panel (RBBP) was formally established in 1972 as an autonomous body aiming to collate data and information on the rarest birds breeding in the UK. It was initially funded jointly by BTO, RSPB, *British Birds* and somewhat later by the former Nature Conservancy Council (NCC now JNCC). The Panel provides a secure national repository for data on some of the most sensitive and threatened birds breeding in the UK.

Whilst the initial focus of the Panel was on species with national populations of less than 300 pairs, since 1996 the Panel has also collated county totals for 'scarce' birds. These are those Schedule 1 listed species with populations typically between about 300-1,500 pairs. These latter birds are poorly covered by other annual monitoring schemes such as the BTO/RSPB/JNCC Breeding Bird Survey.

The Panel produces three regular outputs: an annual report on the status of rare and scarce breeding birds in the UK²³, and an annual report on the status of rare non-native breeding birds in

²² Reid, J.B. (ed) 2000. *Seabird monitoring in Britain 1989-98. 10 years of the Seabird Monitoring Programme. Atlantic Seabirds* 2(3/4): 97-244.

²³ Ogilvie, M.A. & the Rare Breeding Birds Panel 1999. Rare breeding birds in the United Kingdom in 1996. *British Birds* 92: 120-154.

5. Research and Monitoring

the UK²⁴. Both these annual reports are published in the journal *British Birds*. One of the unique roles of RBBP is that, for each species, it is able annually to assess data from all sources and thus derive a consolidated national total (without duplication or double-recording of particular sites). The Panel also produces an annual confidential report to JNCC and the country agencies, and to RSPB. This provides listings of all data supplied to the Panel (other than a very small amount of data supplied under conditions of strict confidentiality). The annual report to JNCC provides a unique level of overview and enables the identification and review of key sites for various conservation purposes including site designation.

- The Breeding Bird Survey (BBS) - is the main monitoring scheme for breeding birds in the UK²⁵. It is funded and managed on a partnership basis between BTO, RSPB and the JNCC. It is based on the annual resurvey of a stratified sample of randomly selected 1 km squares throughout the UK. BBS has been running since 1994, and by 2000 was monitoring breeding bird numbers at 2,248 1 km squares. It provides annual indices of population change²⁶ (at UK scale) of the following AEW-listed species: Shelduck *Tadorna tadorna*, Mallard *Anas platyrhynchos*, Tufted Duck *Aythya fuligula*, Coot *Fulica atra*, Golden Plover *Pluvialis apricaria*, Northern Lapwing *Vanellus vanellus*, Snipe *Gallinago gallinago*, Curlew *Numenius arquata*, Redshank *Tringa totanus*, and Common Sandpiper *Tringa hypoleucos*. For some of these species, indices of annual change are available at smaller, country or regional scales.
- The Waterways Bird Survey (WBS) is an annual census of the breeding birds along rivers and canals which commenced in 1974. Certain waterway species are poorly covered by the Breeding Bird Survey because birds that specialise in linear water features are under-represented in the square BBS sampling plots. More than 100 plots are monitored each year. For more information see: <http://www.bto.org/survey/wbbs.htm>.
- The Waterways Breeding Bird Survey (WBBS) started in 1998 as a pilot project. WBBS is quicker and simpler for volunteers than WBS. The survey method fits with the River Habitat Survey methodology developed by EA. As well as monitoring bird populations more effectively, WBBS will provide data that can be more easily integrated with the River Habitat Survey data for other kinds of wildlife and habitat parameters along waterways. WBS and WBBS will continue side by side until the results are correlated and the WBBS methodology finalised. WBBS is funded by the EA and a consortium of water utility and waterways companies. For more information see: <http://www.bto.org/survey/wbbs.htm>.
- BTO/JNCC National Ringing Scheme - ringing provides a key component of the Integrated Population Monitoring Programme of the BTO/JNCC Partnership. In addition, it has several high priority projects for further development such as demographic monitoring of farmland birds, ringing and re-trapping adults for survival rate estimation (using species-specific techniques for a range of species and habitats) and a seabird ringing programme (including both mass ringing for recoveries and the collection of mark-recapture data). BTO ringing data are also used to analyse demographic data for declining species on the Birds of Conservation Concern / Importance and Biodiversity Action Plan lists, demographics of estuarine wader populations and seabird demography. A major *Atlas of Bird Migration*²⁷ has recently been drafted based on analysis of all recoveries of ringed birds ringed in Britain and Ireland and recovered elsewhere or vice versa. It will be published late in 2002.

²⁴ Ogilvie, M.A. & the Rare Breeding Birds Panel 2001. Non-native birds breeding in the United Kingdom in 1999. *British Birds* 94: 518-522.

²⁵ Noble, D., Raven, M.J. & Baillie, S.R. 2001. *The Breeding Bird Survey 2000*. Thetford: BTO, JNCC, & RSPB. 16 pp.

²⁶ based on their occurrence in over 50 sample plots.

²⁷ Wernham, C.V., Toms, M.P., Marchant, J.H., Clark, J.A., Siriwardena, G.M. & Baillie, S.R. 2002. *The Migration Atlas: Movements of the Birds of Britain and Ireland*. London, T. & A.D. Poyser.

5. Research and Monitoring

Integrated Population Monitoring of waterbirds

A plan for the development of integrated population monitoring of UK waterbirds has been jointly developed by WWT and BASC. This will provide for the monitoring of populations as well as any harvest taken from them through the better integration of existing programmes and the strategic development of other projects to supply key information needs.

It is hoped to be able to implement this programme in the course of the next three years (see AEWA Implementation plan, Appendix 1).

6. Education and information

Training and development programmes

6.1 Describe the status of training and development programmes, which support waterbird conservation and implement the AEW Action Plan.

UK implementation of the AEW Action Plan is indirectly supported through the scientific and countryside management training offered by higher education establishments in the UK. The Gamekeeping National Vocational Qualification (NVQ) at level 2 is the primary programme catering for training and development through its elements devoted to maintenance and improvement of, *inter alia* wetland habitat. The award was developed in consultation with BASC and is delivered through colleges of further education that offer qualifications in the land-based industries.

Bird ringing

Bird ringing in the UK is supported by the BTO/JNCC Partnership. The licensing authorities in the UK, Ireland and the Isle of Man, empower BTO to issue permits to ringers using rings supplied by the Trust (please see section 2.2 for legislation about taking wild birds and special licenses). As it is important that the ringing techniques are as safe as possible, there are accordingly very strict training standards which have to be followed. All potential ringers have to undergo a detailed period of training before they are able to operate by themselves. Training can only be undertaken in the field and administered by a qualified ringer. For more information about the Bird Ringing scheme and training courses, please see the home page about ringing on the BTO website: <http://www.bto.org>.

The Channel Islands have a separate bird ringing scheme that is run by volunteer ringers under the auspices of the Société Jersiaise. The scheme works to very similar protocols to those used in Britain and Ireland. They ring about 10,000 birds per year and have about fifteen ringers.

6.2 What bilateral or multilateral co-operative action is your country undertaking to develop training programmes and share examples of good practice?

The Darwin Initiative

The Darwin Initiative is a small grants programme that helps to implement the 1992 Biodiversity Convention (CBD). It draws on British expertise to promote biodiversity conservation and sustainable use of resources in less developed countries. Projects funded by the Darwin Initiative must focus on a particular aspect on the implementation of the Convention and carry out work that provides good practice examples for others to follow, e.g.: access to genetic resources, 'clearing house mechanism' models, transfer of technology and intellectual property rights. Since the start of the programme over 200 projects have been funded in countries where natural habitats and rural livelihoods are under threat.

The Darwin Initiative assists countries rich in biodiversity but poor in resources (including the Overseas Territories of the UK) to implement the CBD. These countries will be those where work on conservation and the use of biodiversity might not be carried out without such funding. Funding helps raise awareness of the importance of natural resources and the need for sustainable use to help eliminate poverty in those countries. Projects funded under the Initiative are collaborative, involving either local institutions or communities in the host country. Projects usually include at least one of the following:

- preparation of biodiversity management plans or the implementation of practical initiatives arising from those plans. Funding may be provided for analytical work that will lead to the setting up of a structure for the conservation and/or sustainable use of natural resources within a given area (e.g. for a national park, a region, a specific habitat/species or a city);
- analysis of understanding why and how particular processes are having an influence on biodiversity and developing solutions for overcoming any resulting problems;

6. Education and information

- improvement of the information base on particular species/habitats; and
- development of tools to measure biodiversity change.

The Darwin Initiative is administered by DEFRA with an annual budget of £3 million. Grants are made to UK organisations, institutions and individuals for collaborative projects in developing countries. Around 20-30 projects are funded each year but competition for funding is high and the initiative is heavily oversubscribed. The Darwin Advisory Committee provides advice to ministers on the principles for the initiative, on the project areas it should target and on the selection of individual projects.

Projects generally run for one to three years and during this time their progress is monitored by the Secretariat. In June 2000, the Edinburgh Centre for Tropical Forests (ECTF) was appointed to monitor and evaluate the Darwin Initiative through desk and field reviews of current Darwin projects, and to establish a project monitoring website. Projects are categorised according to the main focus of their work. Although most are integrated, many of the projects fall within three categories; training, institutional capacity building, and research.

The fourth Darwin report is based on final and annual reports reviewed since the beginning of the ECTF contract. More information on the initiative and its projects can be found on:

<http://www.defra.gov.uk/environment/darwin/4threport/03.htm>

Raising public awareness

6.3 *Describe activities to raise public awareness of the objectives of the AEWA Action Plan. Please outline any particular successes generating public interest in, and securing support for, waterbird and wetland conservation (e.g. campaigns, information notes or other initiatives)?*

Information about AEWA and its action plan have been routinely disseminated to counters participating in the WeBS monitoring programme (via its annual report and biannual counter newsletter). This reaches most active waterbird researchers and conservationists in the UK. Accordingly, there is thought to be a fairly high awareness of AEWA.

In the wildfowling community, awareness of AEWA is growing through the publication of articles by BASC in magazines, as well as presentations at conferences and club meetings.

7. Final comments

7.1 General comments on the implementation of the AEWA Action Plan

See below.

7.2 Observations concerning the functions and services of the various AEWA bodies

a. The Agreement Secretariat

The Secretariat's active development of the Agreement over the first three years since its entry into force has been impressive. The establishment of a Bureau or Standing Committee in addition to the Technical Committee is being considered and the UK will participate in forthcoming discussions.

It will be important to maintain a high awareness of AEWA activities not only within government agencies but also much more widely within the region. To this end, three activities seem to be important:

- It will be important to secure funding for the regular production of newsletters.
- The development of the Agreement's web-site should be a priority. The experience of the Ramsar Convention has shown that web-site development can be a major asset in developing wider awareness of the aims and objectives of international treaties.
- The development of an AEWA electronic list-server(s) (akin to the Ramsar Exchange and Ramsar Forum lists) is likely to be a cost-effective way of facilitating the exchange of information and good practice within AEWA and at the same time developing greater awareness of activities being undertaken under the aegis of the Agreement.

The work being undertaken by the Technical Committee to develop a rather more technical content for their meetings (rather than dealing with largely procedural issues) will be important to drive the Agreement forward between MoPs. This is to be encouraged.

b. International organisations

See below with respect to the key role of Wetland International's International Waterbird Census.

c. AEWA NGO partners

The International NGO Partners currently contribute significantly to the work of implementing AEWA. Their close involvement in delivering elements of the Implementation Plan has been notable. There would be significant benefits from a more focussed collective delivery of waterbird and wetland monitoring in future. Here, the NGOs with their extensive networks in many countries, potentially have much to deliver that could give major conservation benefits.

7.3 How might the Action Plan be further developed as a practical aid for national and international conservation of migratory waterbirds?

During the Second International Conference on Wetlands and Development, held in 1998²⁸, one of the workshops held focussed on AEWA (at that time prior to its entry into force). It seems timely to review progress against the problems and opportunities as seen by that international forum. Boxes below in this section contain text taken from the conference proceedings.

²⁸ *Wetlands – a source of life*. Conclusions of the 2nd International Conference on Wetlands and Development, 10-14 November 1998, Dakar, Senegal. Wetlands International. 24 pp.

7. Final Comments

The implementation of the AEWA across the region will generally be constrained by:

- lack of finance (essential for the adequate implementation of the Agreement in many countries);
- lack of trained staff;
- lack of governmental and other capacity; and
- lack of communication between and within Contracting Parties.

These constraints will need to be addressed by AEWA Contracting Parties in order to assure the effective implementation of the Agreement.

Progress has been made in most of these areas since 1999 and, in particular, the degree to which very significant funding has been obtained for AEWA Implementation Priorities has been impressive. International projects such as the proposed Global Environment Facility (GEF) funded project²⁹ should have a major impact in the countries where activities are proposed.

Suggestions have been made (section 7.2a above) for means by which greater communication can occur between Contracting Parties and others. Regional workshops linked to a specific theme are another effective means of developing communication and developing shared experience. In funding AEWA Implementation Priorities, opportunities for regional workshops should particularly be explored.

The conference (footnote 31) concluded that the implementation of the AEWA will depend on:

- sound science (with the monitoring and inventory activities of Wetlands International and its Specialist Groups having a most important role);
- flexibility to accommodate a wide range of national conservation systems and capacity;
- the urgent need for enhanced co-ordination (both within government structures and between government agencies); and
- cross-border co-operation in monitoring and census activity, implementation of responses to emergency situations, and other aspects of Agreement implementation. (There is strong potential for the establishment of contact networks in groups of neighbouring countries and such contact networks have the potential to develop synergy at a regional and sub-regional levels).

Monitoring activities are of crucial importance for the Agreement – for it is only with a sound understanding of the changes in waterbird population status and trends that the ultimate success of conservation policies can be assessed. Whilst there are some good examples of successful international monitoring, at a regional scale the situation is extremely poor. Indeed, the conclusions of the recent review of migratory waders in Africa and Western Eurasia by the International Wader Study Group³⁰ are depressing.

The Wader Study Group found that there is not a single wader population for which international population trends can be determined with any degree of statistical confidence. Further, for a mere 16 of 115 migratory wader populations monitoring activity is adequate in quality or scope to track the direction of population changes. This is a key area that has historically been inadequately funded internationally.

²⁹ GEF PDF-B Project “Enhancing Conservation of the Critical network of wetlands required by migratory waterbirds on the African-Eurasian Flyways”

³⁰ Stroud, D.A., Davidson, N.C., West, R., Scott, D., Haanstra, L., Thorup, O., Ganter, B. & Delany, S. (compilers) on behalf of the International Wader Study Group 2002. Status of migratory wader populations in Africa and Western Eurasia in the 1990s. *In preparation.*

7. Final Comments

Over the next three years, the development of a more secure basis for population monitoring should be a very high priority for the Agreement – working with international partners such as Wetlands International.

Effective implementation of AEWA will also depend on the establishment of clear priorities by the first MoP (South Africa 1999). For many countries with limited conservation capacity, it will be most important to have guidance that ensures that the most important tasks are tackled first. Such priorities might include:

- inventory and monitoring;
- research and survey for species that are currently deficient in basic data;
- actions for globally threatened waterbird species, including the implementation of existing and proposed action plans; and
- close cross-border co-operation, since many wetlands such as estuaries, lakes and rivers, form political boundaries.

The comments above regarding monitoring are pertinent. There are a small number of very large wetland sites within Africa-Eurasia that hold very large numbers of waterbirds especially in non-breeding seasons and during migration periods. Assistance (financial and capacity development especially) to the relevant countries in putting in place monitoring of these sites should clearly be a priority for AEWA.

Whilst Implementation Priorities have been developed for the Agreement as a whole (especially in the context of fund-raising), it is less clear whether guidance has been given to Contracting Parties as to what are priority areas for development at *national* level. The development of such priorities is perhaps something that might best be tackled at a sub-regional level (*e.g.* for Eastern Europe or West Africa *etc.*).

There is scope in the implementation of AEWA to develop close linkages and synergies with aspects of other conventions, particularly, but not restricted to, the Ramsar Convention, the CBD, the Convention on Migratory Species, and the European Union Birds Directive. All opportunities to develop such linkages and synergies between treaties should be explored so as to ensure that scarce conservation resources throughout the region are devoted primarily to implementation and practical conservation activity, and not into unnecessary bureaucracy. It was noted, in particular, that the considerable guidance currently being developed by the Ramsar Convention, in relation to wide-use aspects and other wetland policies, is also widely applicable to the implementation of the AEWA in Africa.

Whilst the development of the GEF PDF-B project (see footnote 28) is a good example of collaboration (in that instance with Ramsar), there is generally scope for much closer co-operation between the treaties indicated. Thus, the Ornithological Committee of the Birds Directive has developed action plans for a number of quarry species of waterbirds with unfavourable conservation status in the EU. Although these have yet to be implemented, there is significant potential for collaboration in their development for the whole of the relevant biogeographical populations.

8. Progress to implement Resolutions and Recommendations of the Meeting of the Parties

8. Progress to implement Resolutions and Recommendations of the Meeting of the Parties.

Please summarise progress to implement decisions of previous Meetings of the Parties.

Resolutions with particular implications for the UK are listed below, together with a commentary on UK responses:

Resolution	UK response
Resolution 1.2. Financial and administrative matters	The UK has paid its subscription dues for 2000, 2001 and 2002.
Resolution 1.3. National reporting	The current report summarises major activities relevant to the UK's implementation of AEWA.
Resolution 1.4. Implementation priorities	<p>The UK has incorporated consideration of the Agreement's implementation priorities into its own national Implementation Plan (Appendix 1). Funding has been provided for the following implementation priorities since 1999:</p> <p>£50,000 for three projects:</p> <ul style="list-style-type: none"> • guidance on avoidance of introductions of non-native migratory waterbird species; • study of potential impacts of marine fisheries on migratory waterbirds; and • rehabilitation of important waterbird sites for migratory waterbirds. <p>Noting the call to identify key site networks, the UK has undertaken a full strategic review of its national network of EC SPAs and this was published in 2001. Details of this review are given in section 3.2.</p>
Resolution 1.8. Establishment of the Technical Committee	In 2001, the UK attended the second meeting of the Technical Committee as observers and contributed to the discussion and work undertaken.

Planned and Future Actions

OPTIONAL SECTION-Planned and future actions

Contracting Parties are invited to outline below any further information regarding the aims of the Agreement, for example, planned actions or other informative examples.

Please see Appendix 1 which presents the UK's Implementation Plan for AEWA.

Appendices

Appendix 1: UK implementation plan for African-Eurasian Waterbird Agreement

This implementation plan has been drafted to reflect two key documents agreed by the first Meeting of Parties (MoP1) in November 1999.

- The *Action Plan* of the Agreement was modified at MoP1 and lists the detailed obligations of signatory states. The legal requirements of the Action Plan are closely related to existing obligations under the Birds Directive and accordingly, are generally covered by the provisions of the 1981 Wildlife & Countryside Act (as amended) and other UK environmental statutes and biodiversity initiatives.
- *Implementation priorities 2000-2004* lists 33 costed projects that fit within the context of the Agreement and its Action Plan and are deemed to be priority for development. Some of these projects have already been funded, others have yet to commence. Some, however, relate to certain regions of the Agreement area (e.g. 13, 14, 27 & 28 are directed towards Africa) for which it is difficult to envisage major UK inputs, other than perhaps funding.

The plan summarises those actions that the UK may take domestically as well as internationally to implement these documents. The actions within the UK do not necessarily represent new work but serve to highlight significant existing activity being undertaken that contributes to the aims of AEWA. Actions outside the UK comprise a series of activities that the UK may take internationally to further the objectives of the Agreement abroad. Against each action the main organisational participants are listed (see Annex 1) – although it should be noted that these are not necessarily complete listings and are indicative of main players only.

The Plan is structured against the Agreement *Action Plan* with relevant actions from the *Implementation priorities* interleaved at relevant locations.

	Actions within the UK	Actions outside the UK
AEWA ACTION PLAN		
2. Species Conservation		
Implementation Priority 1. Guideline on <i>National Legislation for Migratory Waterbird Conservation</i>	<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [DEFRA/JNCC] 	
2.1. Legal measures	<p><i>Basic provisions already covered by 1981 Wildlife & Countryside Act (as modified), other than:</i></p> <ul style="list-style-type: none"> Consider provision of statutory protection from hunting for Greenland White-fronted Geese in England and Wales [NAW, CCW, DEFRA, EN] <p>See also 4.1 below</p>	
2.2. Single Species Action Plans	<ul style="list-style-type: none"> National plans (see Annex 3): <ul style="list-style-type: none"> Country agencies/JNCC to develop national conservation priorities for – Great Northern Diver, Slavonian Grebe, Whooper Swan, Greenland White-fronted Goose³¹, Svalbard Barnacle Goose³², Canadian Brent Goose, Svalbard Brent Goose, Smew, Golden Plover, Jack Snipe, Icelandic Black-tailed Godwit, temperate <i>schinzii</i> Dunlin, <i>arctica</i> Dunlin, Little Tern. 	

³¹ National plan will be UK implementation of international plan

³² National plan will be UK implementation of international plan

	Actions within the UK	Actions outside the UK
	<ul style="list-style-type: none"> ❖ Continue to implement UK Biodiversity Action Plans for the following species, reporting results also to AEWA — Bittern, Common Scoter & Roseate Tern. <p>[JNCC, EN, EHS, CCW, SNH, BASC and others]</p>	
<p>Implementation Priority 2. Implement existing international single species action plans</p>	<ul style="list-style-type: none"> ● Continue to implement international action plans for Bittern, White-headed Duck and Roseate Tern³³. [EN, EHS, CCW, SNH, DEFRA, NAW, SE, JNCC, WWT, RSPB and others] ● Enhance the reporting of relevant UK actions taken under these plans through a web-based update on activity. [JNCC to lead with inputs from other organisations as appropriate]. 	<ul style="list-style-type: none"> ● UK to continue to contribute to international development and review of action plans for Bittern, White-headed Duck, Corncrake and Roseate Tern. [JNCC, WWT, RSPB and others] ● Encourage participation and involvement of relevant UK expertise in implementing other action plans for threatened waterbird species. [WWT, JNCC, RSPB and others] ● Contribute to the review of action plans being undertaken in 2001 by a sub-group of the AEWA Technical Committee. [JNCC and others]
<p>Implementation Priority 3. Develop new international single species action plans</p>	<ul style="list-style-type: none"> ● Implement international action plan for Dark-bellied Brent Geese, at national level once agreed. [DEFRA, EN, CCW, JNCC, BASC and others] 	<ul style="list-style-type: none"> ● Aim to conclude agreement on Greenland White-fronted Goose international plan in 2002/3. [JNCC, SNH, CCW, EHS, DEFRA, SE, NAW] ● Aid finalisation of draft international action plan for Dark-bellied Brent Geese, including participation in international Working Group. [DEFRA, EN, JNCC]

³³ Bittern and Roseate Tern are BAP short-list species also with UK BAP Action Plans

	Actions within the UK	Actions outside the UK
		<ul style="list-style-type: none"> ● Finalise (with Norway) in 2002, publish and implement the draft international action plan for Svalbard Barnacle Geese. [SE, SNH, JNCC and others] ● As opportunities arise, assist in creating initiatives to develop international Action Plans for³⁴: Great Northern Diver, Slavonian Grebe, Bewick's Swan, Svalbard Brent Goose, Icelandic Black-tailed Godwit; with priority being given to Golden Plover and Jack Snipe.
2.3. Emergency measures	<ul style="list-style-type: none"> ● Develop replacement criteria to identify periods of severe winter weather during which shooting should be temporarily suspended, and other disturbing activities limited. To be in place for 2001/02 winter. [DEFRA, NAW, SE, JNCC, EN, CCW, SNH, BASC, GCT, RSPB, WWT and others]. ● Draft and publish review of implementation of GB/UK cold weather shooting suspension procedures since 1980, concentrating on lessons learnt that may assist other countries developing similar schemes. In 2002. [JNCC, BASC, GCT, RSPB] 	<ul style="list-style-type: none"> ● Develop (through AEWA Secretariat?) a 'contact network' of NW European administrative authorities and others involved in suspending shooting in periods of cold weather. ● To allow better and rapid exchange of information between countries during periods of severe cold weather. Possible paper on this to MoP3? [JNCC, DEFRA, BADC and others]
2.4. Re-establishments	<ul style="list-style-type: none"> ● Following consultation with NGOs in 2001, finalise JNCC Translocations Policy in 2002. Publish and widely disseminate this policy. [JNCC] 	

³⁴ Species listed in category 1 of Column A of Table 1 of AEWA Action Plan.

	Actions within the UK	Actions outside the UK
2.5. Introductions	<p>Release of non-natives prohibited by S.14 and Schedule 9 of 1981 Wildlife & Countryside Act</p> <ul style="list-style-type: none"> • UK to consider its policy related to the keeping of non-native waterbirds in the light of the outcomes of the UK government's review of non-native species (reporting in 2002). (see <i>Implementation Priorities 4 above</i>). [DEFRA, SE, NAW, EHS] • Maintain and further develop the capacity of the Rare Breeding Birds Panel's annual non-native breeding bird reports. [RBBP, JNCC, RSPB, BTO] • Maintain and further develop the capacity of the WeBS to monitor non-native waterbirds in the non-breeding season. [WeBS partnership] • In light of the control trial of the North American Ruddy Duck, consider whether to proceed to a Ruddy Duck eradication programme. [DEFRA, NAW, SE, NIA] 	<ul style="list-style-type: none"> • Continue to work within appropriate international conventions, including the Bern Convention, AEWA and the EC Birds Directive, to encourage AEWA Range States to control the spread of the Ruddy Duck. [DEFRA, WWT and others] • UK to widely and internationally disseminate the results of its practical experience in controlling Ruddy Ducks within the UK. [DEFRA, CSL, WWT and others]
Implementation Priority 4. <i>Guideline on Avoidance of Introductions of Non-native Migratory Waterbird Species</i>	<ul style="list-style-type: none"> • DETR funded review of non-native waterbird species in Agreement area was undertaken by BTO in 1999-2000. Publish results in scientific literature, and otherwise widely disseminate. {2002} [DEFRA, BTO] 	<ul style="list-style-type: none"> • Financially support Secretariat in developing guidance on <i>Avoidance of Introductions of Non-native Migratory Waterbird Species</i>. [DEFRA] • Encourage results of BTO review to be made available through AEWA web-site. [DEFRA, BTO, AEWA Secretariat]

	Actions within the UK	Actions outside the UK
		<ul style="list-style-type: none"> ● Seek to develop capacity of International Waterbird Census to monitor non-native waterbirds. <i>[JNCC working with Wetlands International]</i>
3. Habitat conservation		
3.1. Habitat inventories	<ul style="list-style-type: none"> ● Continue to develop capabilities of WeBS data and information systems to be able to contribute information to international site reviews. Develop functional WeBS information system by March 2002 and major web-based presence (listing all sites of national and international importance) in 2002/3. <i>[BTO, WWT, RSPB, JNCC]</i> ● Publish inventories of key sites for the following waterbird species (where possible with international input): <i>[WWT, JNCC, GWGS and others]</i> <ul style="list-style-type: none"> ❖ 2001/02: Icelandic Greylag Goose, Dark-bellied Brent Goose, Bean Goose, Bewick's Swan, Canada Light-bellied Brent Goose and Whooper Swan. ❖ 2002/03: Greenland Barnacle Goose, Mute Swan, European White-fronted Goose and Svalbard Light-bellied Brent Goose. ❖ 2003/04: Update published (1994) Greenland White-fronted Goose site inventory. ● Develop concept of inventories of key sites for non-breeding wader species. <i>[BTO, JNCC and others]</i> 	

	Actions within the UK	Actions outside the UK
Implementation Priority 5. Identify all sites of international importance for AEWA species		<ul style="list-style-type: none"> ● Contribute UK expertise to international review when undertaken. [JNCC, WeBS Partnership]
3.2. Conservation of areas	<ul style="list-style-type: none"> ● Ensure that summary management plans are prepared and, where possible, implemented for each biological SSSI by the year 2004³⁵. [SNH, CCW, EN, EHS] ● Aim for substantial completion of the UK network of SPAs (subject to the continuing activity of the SPA Scientific Working Group) by March 2002. [DEFRA, NAW, SE, EN, CCW, SNH, JNCC] ● Implement BAP Habitat Action Plans (see Annex 2) and regularly report on progress/ outcomes in triennial UK national reports to AEWA. [Various organisations] 	
Implementation Priority 7. Identify priority areas for better protection	<ul style="list-style-type: none"> ● Publish (on web and conventionally) review of UK SPA network in 2001 based on data from mid 1990s. Disseminate conclusions widely both within UK and internationally. [DEFRA, JNCC and others] ● Further develop the scope of UK SPA network through the work of SPA Scientific Working Group as specified in its work plan. [EN, EHS, CCW, SNH, DEFRA, NAW, SE, JNCC, WWT, RSPB and others] 	<ul style="list-style-type: none"> ● Summarise results of reviews of SPA and Ramsar site networks in UK national report to MoP2. Consider presentation to MoP2 focusing on 'lessons learnt' in undertaking these reviews. [DEFRA, JNCC] ● Contribute UK expertise to international review when undertaken. [JNCC, WeBS Partnership]

³⁵ BAP target

	Actions within the UK	Actions outside the UK
	<ul style="list-style-type: none"> Develop selection guidelines (2001/02) and derive UK network of marine SPAs by March 2004. [EN, EHS, CCW, SNH, DEFRA, NAW, SE, JNCC and others] Conclude current review of Ramsar site network in 2005, and present results to Ramsar CoP9 in 2002. Publish results both conventionally and on the web. [DEFRA, JNCC and others] 	
Implementation Priority 8. Habitat priorities for waterbirds, particularly in Africa and SW Asia	<ul style="list-style-type: none"> Assess role of BAP habitat action plans for waterbird conservation in UK and identify any significant gaps. {2003/4} [JNCC] 	<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [JNCC, WeBS Partnership]
3.3. Rehabilitation and restoration	<ul style="list-style-type: none"> Implement BAP wetland habitat restoration/recreation as envisaged by Habitat Action Plans. Report on progress also in context of AEWA. (Key BAP habitats where waterbirds likely to benefit from restoration/recreation activity listed in Annex 2). [BAP Targets Group, JNCC (BIS) to report on progress to AEWA] 	
Implementation Priority 9. Restoration/rehabilitation techniques for waterbird habitats, particularly in Africa		<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken.
4. Management of human activities		
4.1. Hunting (lead shot)	<ul style="list-style-type: none"> Review current legislation relating to the use of lead gunshot in wetlands in England. 2001/2. [DEFRA] Public consultation on proposed legislation relating to the use of lead gunshot in Scotland. 2001/2. [SE] 	

	Actions within the UK	Actions outside the UK
	<ul style="list-style-type: none"> Public consultation on proposed legislation relating to the use of lead gunshot in Wales. 2001/2. Aim to have introduced legislation by September 2002. [NAW] Public consultation on proposed legislation relating to the use of lead gunshot in Northern Ireland in 2001/2. [EHS] 	
Implementation Priority 11. Review of non-toxic shot for waterbird hunting		<ul style="list-style-type: none"> Wetlands International reviewing current international <i>status quo</i> under JNCC contract. Review due 2001. JNCC to publish and widely disseminate results on web-site and as <i>JNCC Report</i>. [JNCC] UK to encourage international workshop on lead gun-shot in wetlands in southern or eastern Europe, or some other region with limited progress in phasing out lead gun-shot (in 2003/4?). [DEFRA]
4.1. Hunting (harvest statistics)	<ul style="list-style-type: none"> Develop methodologies to calculate the number of waterbirds hunted in the United Kingdom. Carry out a pilot project by end 2004, in particular, learning from the implementation of the Scottish National Goose Forum's Recommendation that "<i>Annual monitoring of hunting mortality of geese should be undertaken by means of surveying a sample of shotgun certificate holders in order to establish the numbers of quarry geese shot in Great Britain each winter, and a more comprehensive survey of shotgun certificate holders should be carried out every five years.</i>"³⁶ [Various] 	

³⁶ Recommendations 29 and 30 of National Goose Forum (2000).

	Actions within the UK	Actions outside the UK
	<ul style="list-style-type: none"> Ministers to consider instituting a compulsory requirement on overseas shooters, and possibly their sponsors, to submit a return on the numbers and species shot while visiting Great Britain.³⁷ [SE] 	
Implementation Priority 10. Evaluation of waterbird harvests in the Agreement Area		<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [BASC]
4.2. Eco-tourism	<ul style="list-style-type: none"> Consider the findings of the SE Commissioned economic study measuring the benefits to society from the presence of geese.³⁸ and possible relevance to policy at a uK level. [SE] 	
Implementation Priority 12. Evaluation of socio-economic impacts of waterbird hunting	<ul style="list-style-type: none"> Review of socio-economic significance of goose hunting in Scotland undertaken and published in 2001. [SE] 	<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [BASC]
Implementation Priority 15. Guideline on minimising/mitigating the impacts of infrastructural (and disturbance-related) developments affecting waterbirds		<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [JNCC, EN, CCW, EN, EHS, WWT, RSPB]
4.3. Other human activities	<ul style="list-style-type: none"> Further develop strategic approach to reduction of conflicts between waterbirds and fishers/crops. Collate and disseminate principles of best practise in conflict avoidance nationally and internationally. [Various] 	

³⁷ Recommendation 32 of National Goose Forum (2000).

³⁸ <http://www.scotland.gov.uk/cru/kd01/purple/cbmwgs-01.asp> .

	Actions within the UK	Actions outside the UK
	<ul style="list-style-type: none"> Widely disseminate existing guidance on the reduction of conflicts in respect of Brent Geese and agriculture and of piscivorous birds. [DEFRA] 	
Implementation Priority 13. Evaluation of waterbirds as agricultural pests in Africa		
Implementation Priority 14. Review the use of agrochemicals in Africa, and their impacts on migratory waterbirds		
5. Research and monitoring		
	<ul style="list-style-type: none"> Maintain and enhance the capacity of the Wetland Bird Survey to monitor status of non-breeding waterbirds, both nationally and at key sites. Develop web-based modes of dissemination of WeBS data and information in line with NBN principles. [WeBS partnership] Develop UK inventory of sites of priority for monitoring (initially being proposed and designated Ramsar sites, SPAs and SSSIs). Seek to implement through WeBS and other mechanisms. [JNCC, EN, CCW, SNH, EHS, WWT, BTO, RSPB] Undertake review of monitoring needs for UK species in Action Plan Column A and for which existing UK monitoring provision is poor — viz. Great Northern Diver, Golden Plover, Jack Snipe, temperate <i>schinzii</i> Dunlin, <i>arctica</i> Dunlin. Seek to enhance monitoring capability for these populations in the light of outcomes of review. [JNCC, BTO, WWT, RSPB] 	

	Actions within the UK	Actions outside the UK
	<ul style="list-style-type: none"> ● Develop and implement scheme for integrated population monitoring of waterbirds in the UK (including ringing strategy, standard productivity assessment, harvest monitoring <i>etc.</i>). Hold discussions in 2002 to develop next steps. [WWT, BASC, BTO, JNCC, RSPB and others] ● Develop project proposal and seek funding for major publication on <i>Status of waterbirds in GB/UK/Britain and Ireland</i>³⁹. Aim to publish by 2006. [WeBS Partnership and others] ● Develop proposals for better monitoring of seaduck populations at both site and national scales. Aim to have significantly enhanced monitoring capacity in place by winter 2003/4. [JNCC, WWT, EN, CCW, SNH, EHS and others] 	
Implementation Priority 6. Identify priority areas for further survey work		<ul style="list-style-type: none"> ● Contribute UK expertise to international review when undertaken. [JNCC, WeBS Partnership]
Implementation Priority 16. Survey work in poorly-known areas	<ul style="list-style-type: none"> ● Actively encourage UK expeditionary surveys to poorly known areas in context of project 17 below. [WeBS Partnership, FCO] 	<ul style="list-style-type: none"> ● In countries with poorly known waterbird populations encourage project bids for UK funding. [FCO & DEFRA. JNCC to draw up short list] ● See also Action Plan implementation (section 7) below

³⁹ incorporating third edition of *Wildfowl in GB*/second edition of *Estuary birds of Britain and Ireland*. Geographical scope of volume to be determined.

Appendix 1: UK implementation plan for African-Eurasian Waterbird Agreement

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	Actions within the UK	Actions outside the UK
Implementation Priority 17. International Waterbird Census – special gap-filling survey	<ul style="list-style-type: none"> ● During gap-filling census (January 2004), aim for coverage of important UK waterbird habitats not routinely monitored by WeBS (e.g. key non-estuarine shores). [WeBS Partnership, EN, CCW, EHS, SNH] 	<ul style="list-style-type: none"> ● Aim to provide contribution to costs of gap-filling census in next JNCC contract to Wetlands International (commencing 2002/03). [JNCC]
Implementation Priority 18. Publication of an <i>Atlas of wader populations</i>	<ul style="list-style-type: none"> ● Assist drafting of wader atlas with relevant UK data. [WeBS Partnership] ● Assist in production of atlas and circulation of draft texts to consultees within Agreement area (including national AEWA focal points). [JNCC] 	
Implementation Priority 19. Pilot study/review of potential from waterbird ringing recovery analysis for the Agreement area		<ul style="list-style-type: none"> ● Contribute UK expertise to international review when undertaken.
Implementation Priority 20. Co-ordination of waterbird ringing schemes, particularly in Africa	<ul style="list-style-type: none"> ● Review potential actions through which UK can contribute to the development of AFRING including repatriation of appropriate historic data. [BTO, JNCC] 	<ul style="list-style-type: none"> ● Support development of AFRING and contribute UK expertise as applicable. [DEFRA, JNCC]
Implementation Priority 21. Guideline on the use of satellite tracking for migratory waterbirds		<ul style="list-style-type: none"> ● Contribute UK expertise to international review when undertaken. [WWT]
Implementation Priority 22. Report on the status and trends of populations for MoP2	<ul style="list-style-type: none"> ● Provide results of recent re-evaluations of GB/UK waterbird population estimates to Wetlands International upon publication. [BTO, WWT] 	<ul style="list-style-type: none"> ● UK financial support to Wetlands International for third edition of <i>Waterbird Population Estimates</i> and associated web-site (£50,000 contributed by DEFRA in 2001/02). [DEFRA]
Implementation Priority 23. Actions for the conservation of colonial waterbirds		<ul style="list-style-type: none"> ● Contribute UK expertise to international review when undertaken. [JNCC]

	Actions within the UK	Actions outside the UK
Implementation Priority 24. Study the potential impacts of marine fisheries on migratory waterbirds	<ul style="list-style-type: none"> Continue to develop JNCC and country agencies Common Fisheries Policy Influencing Project. [JNCC, EN, SNH, EHS, CCW]. 	<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [JNCC] Continue to develop JNCC and country agencies Common Fisheries Policy Influencing Project. [JNCC, EN, SNH, EHS, CCW].
Implementation Priority 25. Rehabilitation of important sites for migratory waterbirds, which have been degraded by invasive aquatic weeds	<ul style="list-style-type: none"> In UK, includes <i>Spartina</i> invasion of inter-tidal mudflats. Raise profile of issue of invasive aquatic plants. Contribute UK expertise to international review when undertaken. [EA, JNCC, country agencies, CEH etc.] 	<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [EA, JNCC, country agencies, CEH etc.]
6. Education and information		
	<ul style="list-style-type: none"> Further develop UK activities on World Wetlands Day (2 February), especially stressing importance of UK wetlands for waterbirds at that time. [All] Continue education and awareness campaign regarding the (illegal) use of lead-shot in wetlands. [All] Continue to develop work of Education and Public Awareness sub-group of National Ramsar Committee, remitting to it the role of any necessary EPA under the AEWA Action Plan. [WWT, National Ramsar Committee] 	
Implementation Priority 26. Analysis of training needs for migratory waterbird conservation		<ul style="list-style-type: none"> Contribute UK expertise to international review when undertaken. [RSPB, WWT, BASC and others]
Implementation Priority 27. Regional training programmes in Africa for implementation of the Agreement		

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	Actions within the UK	Actions outside the UK
Implementation Priority 28. Exchange of know-how on traditional approaches to wetland and waterbird management in Africa		
Implementation Priority 29. Publication of <i>Waterbird Monitoring Manuals</i>	<ul style="list-style-type: none"> ● Development of modular UK waterbird monitoring manual commencing 2001. [WeBS Partnership] 	<ul style="list-style-type: none"> ● Contribute UK expertise and materials to international initiative when undertaken. [WeBS Partnership]
Implementation Priority 30. Establish a Clearing House for training materials for the Agreement		<ul style="list-style-type: none"> ● Contribute UK expertise and materials to establishment of Clearing House mechanism. [JNCC, WeBS Partnership, BASC and others]
Implementation Priority 31. Develop and implement a Communications Strategy for the Agreement		
Implementation Priority 32. Development of the Agreement's Web site	<ul style="list-style-type: none"> ● Assist development of AEWA web-site through identification of relevant linkages within the UK. [WeBS Partnership, country agencies and others] 	
Implementation Priority 33. Regional workshops for the promotion of the Agreement		<ul style="list-style-type: none"> ● Consider opportunities to assist in funding regional workshop to promote AEWA in either Central Asian Republics or Arab states. [DEFRA, FCO]
7. Implementation		
	<ul style="list-style-type: none"> ● Consider best means of developing UK focus for work related to AEWA (including web-based dissemination of information). [DEFRA, JNCC and others] 	<ul style="list-style-type: none"> ● UK to attend annual AEWA Technical Committee meetings and otherwise assist in the development of the Agreement. [JNCC]

	Actions within the UK	Actions outside the UK
		<ul style="list-style-type: none"> ● UK to consider offering to host Technical Committee in 2004. [DEFRA] ● UK awaiting request for contribution towards delegate's participation costs for MoP2 in 2002. [DEFRA] ● Draft background note on AEWA, its objectives and means through which UK can assist in its implementation (e.g. Implementation Priority 16 above). [JNCC, DEFRA, FCO] ● Ensure relevant UK Overseas Territories and Crown Dependencies (Isle of Man, States of Jersey, Bailiwick of Guernsey, Gibraltar, Ascension, St. Helena) are periodically updated on AEWA activities. [DEFRA, FCO, UKOTCF] ● Encourage project bids to the Environmental Fund for the Overseas Territories for OT-based projects that fulfilled the aims of AEWA. [FCO, JNCC, UKOTCF]

		<ul style="list-style-type: none"> ● Ensure relevant information is regularly placed on UK Overseas Territories Conservation Forum web-site/database and incorporated with the Environmental Charters developed by each Territory. [FCO, JNCC, UKOTCF]
Article III of Agreement: General Conservation measures⁴⁰		
2(k) Exchange of information between Parties		<ul style="list-style-type: none"> ● Arrange for routine distribution of WeBS annual report to Administrative Authorities in AEWA Parties and other relevant bodies. [WeBS Partnership, JNCC]
2(l) International co-operation between Parties		<ul style="list-style-type: none"> ● National {=Scottish Goose} Policy Framework should be implemented in co-operation with other countries with common interests in Scottish goose populations.⁴¹ [SE, SNH]

⁴⁰ If not already covered above

⁴¹ Recommendation 12 of National Goose Forum (2000).

Annex 1. Acronyms used in the implementation plan

AEWA	African-Eurasian Waterbird Agreement
BASC	British Association for Shooting and Conservation
BAP	Biodiversity Action Plan
BIS	Biodiversity Information Service (of JNCC)
BTO	British Trust for Ornithology
CCW	Countryside Council for Wales
CSL	Central Science Laboratories
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EHS	Environment and Heritage Service (of Northern Ireland)
EN	English Nature
FCO	Foreign and Commonwealth Office
GCT	Game Conservancy Trust
GWGS	Greenland White-fronted Goose Study
HAP	Habitat Action Plan (under the UK BAP initiative)
JNCC	Joint Nature Conservation Committee
NAW	National Assembly of Wales
NBN	National Biodiversity Network
RBBP	Rare Breeding Bird Panel
RSPB	Royal Society for the Protection of Birds
SE	Scottish Executive
SNH	Scottish Natural Heritage
UKOTCF	United Kingdom Overseas Territories Conservation Forum
WeBS	Wetland Bird Survey
WeBS Partnership	BTO, WWT, RSPB and JNCC
WWT	Wildfowl & Wetlands Trust

Annex 2. Wetland habitats for which restoration/recreation targets have been set within costed Habitat Action Plans and which will benefit waterbirds

Habitat type	Restoration/recreation targets in Habitat Action Plan	Waterbirds that will benefit from habitat restoration activity
Reedbeds	<ul style="list-style-type: none"> ● Identify and rehabilitate by 2000 priority areas of existing reedbed (targeting those of 2 ha or more) and maintain this thereafter by active management. ● Create 1,200 ha of new reedbed on land of low nature conservation interest by 2010. 	Crane, Bittern. First target will provide habitat for c. 40 pairs of Bittern; second target will provide habitat for an additional c. 60 pairs
Fens	<ul style="list-style-type: none"> ● Identify priority fen sites in critical need of, and initiate, rehabilitation by 2005. All rich fen and other sites with rare communities should be considered. ● Ensure appropriate water quality and water quantity for the continued existence of all SSSI/ASSSI fens by 2005. 	Spotted Crake; breeding ducks (e.g. Pintail, Shoveler), Red-necked Phalarope
Coastal and floodplain grazing marsh	<ul style="list-style-type: none"> ● Maintain the existing habitat extent (300,000 ha) and quality. ● Rehabilitate 10,000 ha of grazing marsh habitat which has become too dry, or is intensively managed, by the year 2000. This would compromise 5,000 ha already targeted in ESAs, with an additional 5,000 ha. ● Begin creating 2,500 ha of grazing marsh from arable land in targeted areas, in addition to that which will be achieved by existing ESA schemes, with the aim of completing as much as possible by the year 2000. 	Many species of ducks, geese and swans, as well as waders, in both the breeding and non-breeding seasons. In particular: breeding Pintail, Shoveler, Curlew, Snipe, Redshank & Lapwing; wintering Bewick's and Whooper Swans.
Purple moor grass and rush pastures	<ul style="list-style-type: none"> ● Secure sympathetic management of at least 13,500 ha of purple moor grass and rush pasture by the year 2000, divided between the four countries as follows: Wales 4,000 ha, England, 5,000 ha, Northern Ireland 4,000 ha and Scotland 500 ha. ● Initiate experimental attempts to recreate 500 ha of purple moor grass and rush pasture on land adjacent to, or nearby, existing sites, by the year 2005. 	Breeding Curlew, Snipe, Redshank & Lapwing, wintering Golden Plover

Habitat type	Restoration/recreation targets in Habitat Action Plan	Waterbirds that will benefit from habitat restoration activity
Seagrass beds	<ul style="list-style-type: none"> ● Maintain extent, quality and distribution of seagrass beds in UK waters. ● Assess feasibility of restoration of damaged or degraded seagrass beds. ● Until surveys assess the extent of the seagrass resource, it will not be possible to assess whether restoration is necessary, or to specify a final target. An interim target of 1,000 ha has been costed. 	Non-breeding swans, Wigeon and Brent Geese
Aquifer fed naturally fluctuating water bodies	<ul style="list-style-type: none"> ● Conserve the characteristic hydrological regimes, plant and animal communities of all known aquifer fed naturally fluctuating water bodies in the UK. ● Implement remedial action to restore, by 2010 to favourable condition those aquifer fed naturally fluctuating water bodies damaged by human activities. 	Breeding Tufted Duck, Mallard, Shelduck, Pochard & Gadwall
Eutrophic standing waters	<ul style="list-style-type: none"> ● Ensure the protection and continuation of favourable condition of all 'Tier 1' eutrophic standing waters. ● By 2005 take action to restore to favourable condition (typical plant and animal communities present) 'Tier 2' eutrophic standing waters that have been damaged by human activity. ● Ensure that no further deterioration occurs in the water quality and wildlife of the remaining 'Tier 3' eutrophic standing water resource. 	Many species of ducks, geese and swans, including Bewick's Swan, Whooper Swan, Goldeneye, Pochard, Scaup, Tufted Duck, Wigeon, Gadwall & Great Crested Grebe
Lowland meadows	For these three action plans, the objectives and targets cover habitat conservation, restoration and expansion. Key components are the need to secure favourable conservation, and where necessary, restoration management at SSSIs and other significant localities, and also to develop carefully researched guidelines to restore and expand the habitat.	Breeding Curlew, Snipe, Redshank & Lapwing, wintering Golden Plover
Upland hay meadows		
Lowland dry acid grassland	<ul style="list-style-type: none"> ● Arrest the depletion of these grassland habitats throughout the UK. ● Within SSSIs and ASSIs, initiate rehabilitation management for all the significant stands of these grassland habitats in unfavourable condition by 2005, with the aim of achieving favourable status wherever feasible by 2010. ● For stands at other localities, secure favourable condition over 30% of the resource by 2005, and as near to 100% as is practicable by 2015. 	

Habitat type	Restoration/recreation targets in Habitat Action Plan	Waterbirds that will benefit from habitat restoration activity
	<ul style="list-style-type: none"> ● Attempt to re-establish 500 ha of these grasslands of wildlife value at carefully targeted sites by 2010. 	
Machair	<ul style="list-style-type: none"> ● Maintain existing extent of machair. ● Restore improved machair grassland to traditional mixed management with no over-grazing. Aim to reduce improved grassland extent by 30% by 2010, with concomitant reductions in stocking levels to avoid over-grazing of machair. ● Promote increased use of cattle as principle stock as part of new practices. ● Apply appropriate remedial methods to 50% of sites currently suffering severe over-grazing by 2005 and 100% by 2010. ● Restore machair habitat and management to large sites degraded by sand extraction in the Western Isles and Orkney by 2010 (for sites with exhausted sand reserves or no further planning permission). ● Restore areas previously cultivated by traditional methods to rotational cultivation in association with cattle production, increasing cultivated are by 20% by 2005. 	<p>Many species of ducks, geese and swans, including breeding Oystercatcher, Lapwing, Redshank, Snipe, Ringed Plover, <i>schinzii</i> Dunlin, Pintail, Mallard, Shoveler; and non-breeding Greylag Geese, Greenland Barnacle Geese, Greenland White-fronted Geese, Whooper Swans and several duck species</p>
Coastal saltmarsh	<p>The overall objectives of this plan are to offset the current losses due to coastal squeeze and erosion to maintain the existing extent of saltmarsh habitat of approximately 45,500 ha, and to restore the area of saltmarsh to 1992 levels (the year of the adoption of the Habitats Directive which included saltmarsh as a habitat type of community interest). There is a need to identify realistic targets for creation. The results of individual estuary evaluations during the first five years of this 15 year plan will allow the headline targets set out below to be reviewed and refined. Such studies will also identify potential locations for saltmarsh creation. There will be a presumption against any further land claim or other anthropogenic factors. The best available information has been used to establish the targets below.</p> <ul style="list-style-type: none"> ● There should be no further net loss (currently estimated at 100 ha/year). This will involve the creation of 100 ha/year during the period of the plan. However, local losses and gains are to be expected in this essentially dynamic system. ● Create a further 40 ha of saltmarsh in each year of the plan to replace the 600 ha lost between 1992 and 1998, based on current estimates. 	<p>Many species of ducks, geese, swans, waders and terns in both breeding and non-breeding seasons. In particular, including breeding Redshank, Oystercatcher; and non-breeding Wigeon and Brent Geese</p>

Habitat type	Restoration/recreation targets in Habitat Action Plan	Waterbirds that will benefit from habitat restoration activity
	<ul style="list-style-type: none"> Maintain the quality of the existing resource in terms of community and species diversity and, where necessary, restore the nature conservation interest through appropriate management. It will be desirable for some managed realignment sites to develop the full range of saltmarsh zonation. 	
Saline lagoons	<ul style="list-style-type: none"> The current number, area and distribution of coastal lagoons should be maintained and enhanced. There are at present only about 5,200 ha of known saline lagoonal habitats in the UK. Create, by the year 2010, sufficient lagoon habitat to offset losses over the last 50 years. <p>Recent evaluations estimated that 38 English lagoons were lost in the later half of the 1980s. Within the next 20 years, the creation of at least 120 ha of lagoon habitat is considered attainable and necessary within England just to keep pace with projected losses.</p>	Little Tern, Dark-bellied Brent Geese, non-breeding diving ducks
Mudflats	<ul style="list-style-type: none"> Maintain at least the present extent and regional distribution of the UK's mudflats. This target will require compensating predicted losses to development by the restoration of mudflats. Whilst this may not be possible in the same location, it should be within the same littoral sediment cell. Create and restore enough intertidal area over the next 50 years to offset predicted losses to rising sea level in the same period. Predicted losses in the next 15 years should be offset in the next 10 years. Restore estuarine water quality to ensure that existing mudflats fulfil their important ecological and conservation role. 	Many species of ducks, geese and waders
Sheltered muddy gravels		Need to assess degree to which plan is relevant to seaducks and divers
Sublittoral sands and gravels		Need to assess degree to which plan is relevant to seaducks and divers
Lowland raised bog	<p>The objectives and targets of this plan address both primary (uncut) lowland raised mire ecosystems, as well as a significant proportion of the secondary UK raised mire resource affected by peat extraction and agriculture. The first two objectives seek to secure favourable conditions for the long-term maintenance or re-establishment of regenerating and self-sustaining bog ecosystems across some 13,000 ha of the primary UK lowland raised mire resource. This area target has been chosen as the best estimate of the surviving primary</p>	Breeding Snipe, Golden Plover, Curlew, Greenshank, Teal, Mallard

Habitat type	Restoration/recreation targets in Habitat Action Plan	Waterbirds that will benefit from habitat restoration activity
	<p>resource which remains in either near natural or degraded state. The third and fourth objectives seek to identify the opportunities and timescales, and quantify a target, for the restoration of lowland raised bog significantly damaged by human activity, and initiate management schemes as a result. [...]</p> <ul style="list-style-type: none"> ● Maintain the current distribution and extent (c. 6,000 ha) of primary near-natural lowland raised peat bog in the UK, and ensure that the condition of this resource is maintained where favourable or enhanced through appropriate management. ● Establish by 2005 appropriate hydrological and management regimes at those areas which have been damaged but still maintain nature conservation interest (<i>i.e.</i> primary degraded and drained; c. 7,000 ha), and aim to achieve favourable condition of these areas by 2015. ● By 2002 identify areas, timescales and targets for restoration or improvement of significantly altered raised bog areas, including those used for agriculture, peat workings and woodlands. ● Initiate by 2005 improvement or restoration management on areas which have been identified (above) according to the agreed timescales. 	
<p>Blanket bog</p>	<p>Within the total blanket peat resource it is possible to recognise four broad classes of habitat condition: favourable; degraded but readily restored; degraded but less readily restored; and degraded but probably beyond restoration. These classes are based on current knowledge and experience of restoration techniques. [...] There are four specific provisional targets:</p> <ul style="list-style-type: none"> ● Maintain the current extent and overall distribution of blanket mire currently in favourable condition. ● Improve the condition of those areas of blanket mire which are degraded but readily restorable, so that the total area in, or approaching, favourable condition by 2005 is 340,000 ha (<i>i.e.</i> around 30% of the total extent of restorable blanket mire). ● Introduce management regimes to improve to, and subsequently maintain in, favourable condition a further 280,000 ha of degraded blanket mire by 2010. 	<p>Breeding Red-throated Diver, Black-throated Diver, Greylag Goose, Wigeon, Common Scoter, Mallard, Snipe, Golden Plover, Curlew, <i>schinzii</i> Dunlin, Greenshank, Wood Sandpiper, Red-necked Phalarope</p>

Habitat type	Restoration/recreation targets in Habitat Action Plan	Waterbirds that will benefit from habitat restoration activity
	<ul style="list-style-type: none"> ● Introduce management regimes to improve the condition of a further 225,000 ha of degraded blanket mire by 2015, resulting in a total of 845,000 ha (<i>i.e.</i> around 75% of the total extent of restorable blanket mire) in, or approaching, favourable condition. 	
Upland heathland	<p>In addition to maintaining the current distribution and extent of the majority of the upland heathland resource, targets have also been set for habitat enhancement and re-establishment in order to increase the total extent of the upland heathland resource by approximately 5%. Targets include the restoration of dwarf shrub heath on upland acid grasslands as well as on areas lost to agricultural improvement and afforestation. The emphasis is on reducing fragmentation, and creating and maintaining blocks of upland heathland greater than 10 km². [...]</p> <ul style="list-style-type: none"> ● Maintain the current extent and overall distribution of the upland heathland which is currently in favourable condition. ● Achieve favourable condition on all upland heathland SSSIs/ASSIs by 2010, and achieve demonstrable improvements in the condition of at least 50% of semi-natural upland heath outside SSSIs/ASSIs by 2010 (compared with their condition in 2000). ● Seek to increase dwarf shrubs to at least 25% cover where they have been reduced or eliminated due to inappropriate management. A target for such restoration of between 50,000 and 100,000 ha by 2010 is proposed. ● Initiate management to recreate 5,000 ha of upland heath by 2005 where heathland has been lost due to agricultural improvement or afforestation, with a particular emphasis on reducing fragmentation of existing heathland. 	Breeding Snipe, Golden Plover, Curlew

Annex 3. Status of AEWA-relevant Action Plans/action planning for migratory waterbirds in the UK.

Species	Population	AEWA Action Plan status	Relevant national plans	Relevant international plans
Bittern <i>Botaurus stellaris</i>	Europe	Column A: 3c	UK Biodiversity Action Plan published in 1998 (Biodiversity Steering Group 1998)	EU/Council of Europe Action Plan published in 1996 (Heredia <i>et al.</i> 1996)
Greenland White-fronted Goose <i>Anser albifrons flavirostris</i>	Greenland/Ireland & UK	Column A: 3a*		International action plan drafted 1992 (Stroud 1992) but not yet finalised/implemented
Barnacle Goose <i>Branta leucopsis</i>	Svalbard/SW Scotland	Column A: 2		International action plan drafted (Black 1998) but not yet finalised/implemented
Dark-bellied Brent Goose <i>Branta bernicla bernicla</i>	W Siberia/W Europe	Column B: 2b		International action plan drafted 1999 (Anon. 1999) but not yet finalised
Pintail <i>Anas acuta</i>	Northwestern Europe	Column B: 1		EU Management Plan drafted by Ornis Committee in 1998 but not yet finalised/implemented
Garganey <i>Anas querquedula</i>	W Siberia & Europe/ W Africa	Column B: 2c		EU Management Plan drafted by Ornis Committee in 1998 but not yet finalised/implemented
Common Scoter <i>Melanitta nigra</i>	W Siberia & N Europe/W Europe & NW Africa	Column B: 2a	UK Biodiversity Action Plan published in 1998 (Biodiversity Steering Group 1998)	
Jack Snipe <i>Lymnocyptes minimus</i>	Europe	Column A: (3c)*		EU Management Plan drafted by Ornis Committee in 1998 but not yet finalised/implemented
Black-tailed Godwit <i>Limosa limosa</i>	<i>L. l. limosa</i> : Western Europe/W Africa <i>L. l. islandica</i> : Iceland	Column B: 2c Column A: 3a*		EU Management Plan drafted by Ornis Committee in 1998 but not yet finalised/implemented
Curlew <i>Numenius arquata</i>	Europe	Column C: 1		EU Management Plan drafted by Ornis Committee in 1998 but not yet finalised/implemented

Species	Population	AEWA Action Plan status	Relevant national plans	Relevant international plans
Redshank <i>Tringa tetanus</i>	<i>T. t. totanus</i> : East Atlantic <i>T. t. robusta</i> : Iceland & Faeroes	Column B: 2c Column C: 1		EU Management Plan drafted by Ornis Committee in 1998 but not yet finalised/implemented
Red-necked Phalarope <i>Phalaropus lobatus</i>	Western Eurasia	Column C: 1	UK Biodiversity Action Plan published in 1998 (Biodiversity Steering Group 1998)	
Roseate Tern <i>Sterna dougallii</i>	Europe	Column A: 1c	UK Biodiversity Action Plan published in 1998 (Biodiversity Steering Group 1998)	

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Appendix 2: Information digest for African-Eurasian migratory waterbirds regularly occurring in the UK

Species/populations

Information is provided for those AEWA-listed species also listed in the most recent British Ornithologists Union checklist (BOU: www.bou.org.uk), excluding British Birds Rarities Committee species and scarce migrants. Goose populations that are biogeographically discrete are treated separately.

Current Conservation Status

Assessments of conservation status have been made for Great Britain alone using JNCC's '*Birds of Conservation Importance*', published in 1996.

Key to *Birds of Conservation Importance* tables

Table 1 - IUCN Globally threatened species

Table 2 – Uncommon and, rapidly or historically, declining British breeding birds.

Table 3 – Rapidly declining, but common, British breeding birds

Table 4 – Moderately declining, historically declining but common, internationally important, localised or 'threatened in Europe' British bird species.

Key to Qualifying Criteria

- 1 – Decline – extensive (>50%) decline in GB breeding population over previous 25 years and with population of <100,000 breeding adults
- 2 – Decline – extensive (>50%) decline in GB breeding range over previous 25 years and with population of <100,000 breeding adults
- 3 – Decline – historical population decline during and since the 19th Century and with a population of <100,000
- 4 – Rare breeder – 5-year running mean of 0.8-300 breeding pairs in GB
- 5 – International – significant proportion (>20%) of European breeding population found in GB
- 6 – International – significant proportion (>20%) of European non-breeding population found in GB
- 7 – Localised - >50% of GB breeding population in ten or fewer sites
- 8 – Localised - >50% of GB non-breeding population in ten or fewer sites
- 9 – Species of European Concern – Species of Global Conservation Concern or unfavourable European conservation status

Current national population size

Population estimates used are taken from Stone *et al.* (1997; *British Birds* 90: 1-22)⁴²; B = Breeding, W = Wintering, A = Autumn migration. Numbers of individuals are presented, unless otherwise stated.

⁴² Note that this is a compilation of estimates drawn from a variety of sources and periods.

National population trends

During the non-breeding season, waterbirds in the UK are monitored by the Wetland Bird Survey and various other international/national waterfowl surveys (see Musgrove *et al.* (2001) *The Wetland Bird Survey 1999-2000: Wildfowl & Wader Counts*. BTO/WWT/RSPB/JNCC, Slimbridge).

Indexing techniques have been developed which allow between-year comparisons of waterbird numbers (Pris-Jones *et al.* (1994) *Journal of Applied Ecology* 31: 481-492; Underhill & Pris-Jones (1994) *Journal of Applied Ecology*. 31: 463-480; Kirby *et al.* (1995) *Journal of Applied Ecology*. 32: 536-551). For those species/populations for which there are adequate data to produce annual indices, mean Index values were calculated for the winters 1992/93-1994/95 and 1998/99-1999/2000. The percentage change in these two means was then calculated to estimate a five-year trend between winter 1994/95 and 1999/2000.

Percentage of national population in SPA network

The proportions of each species/population represented in the UK SPA network (Stroud *et al.* 2001) are presented. For species/populations in Britain, the proportion of the British population (GB) represented in the British network of SPAs has been used. For Northern Ireland, values refer to the proportion of the all-Ireland population (AI) represented in the Northern Ireland network of SPAs.

Percentage of international population in SPA network

B – during the breeding season, W – during winter. Estimates taken from Stroud *et al.* (2001) who also provide information on sources.

Recent published literature on species/population

Peer-reviewed publications which contain information relating to the status or conservation of individual or groups of species or populations which have been produced within the most recent five-year period, 1997-2001 inclusive are listed below.

Appendix 2: Information digest for African-Eurasian Migratory Waterbirds regularly occurring in the UK

Species/population	Current conservation status (<i>Birds of conservation Importance</i>)	Current national population size	National population trend during the non-breeding season (1994/95-1999/2000)	% of national popn. within SPA network	% of international popn. within SPA network	Significant or national conservation initiatives directed at the species/population	UK participation in international conservation initiatives directed at the species/population	Recent published literature on species/population
Red-throated Diver <i>Gavia stellata</i>	Table 4, qualifying criterion 9	B - 935-1,500 pairs W – 4,850 (GB)	N/A	42.2 GB (B) 1.8 GB (W)	5.6 (W) 0.1 (B)			
Black-throated Diver <i>Gavia arctica</i>	Table 4, qualifying criteria 4, 9	B – 155-189 pairs W – 700 (GB)	N/A	61.0 GB (B)	0.5 (W)			Hancock (2000) Hulka & Stirling (2000)
Great Northern Diver <i>Gavia immer</i>	Table 4, qualifying criterion 6	W – 3,000 (GB)	N/A	No SPA suite				
Red-necked Grebe <i>Podiceps grisegena</i>	Table 4, qualifying criterion 4	B – 2 pairs W - 150	N/A	No SPA suite				
Slavonian Grebe <i>Podiceps auritus</i>	Table 4, qualifying criterion 4	B – 70-78 pairs W - 400	N/A	53 GB (B) 7.8 GB (W)	0.6 (B) 0.6 (W)			Summers & Mavor (1998) Evans (2000)
Bittern <i>Botaurus stellaris</i>	Table 2, qualifying criteria 1, 2, 3 (other criteria 4, 9)	B – 20 pairs W – 50-150	N/A	50 GB (W) 90 GB (B)	0.2 (W) 0.2 (B)	UK Biodiversity Species Action Plan (Biodiversity Steering Group 1998)	EU Management Plan (http://europa.eu.int/com m/environment/nature/directive/birdactionplan/action_1.pdf)	Tyler <i>et al.</i> (1998) Gilbert <i>et al.</i> (2002)
Mute Swan <i>Cygnus olor</i>	-	B – 28,000-30,000 W – 29,800	+20.9 (GB) +18.7 (NI)	No SPA suite				Brown & Brown (1999) Pennycott (1999) Coleman <i>et al.</i> (2001)
Whooper Swan <i>Cygnus cygnus</i>	Table 4, qualifying criteria 4, 6, 8	B – 2 pairs W – 8,680	+53.8 (GB) -10.0 (NI)	43.5 GB (W) 18.5 AI (W)	26.5 (W)			Cranswick <i>et al.</i> (1997) Rees <i>et al.</i> (1997) Colhoun <i>et al.</i> (2000) Frederikson <i>et al.</i> (2001)
Bewick's Swan <i>Cygnus columbianus</i>	Table 4, qualifying	W – 7,590	+8.4 (GB)	99.1 GB (W)	41.6 (W)			Rees <i>et al.</i> (1997)

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<i>columbianus</i>	qualifying criteria 8, 9		-80.0 (NI)	5.4 AI (W)				Colhoun <i>et al.</i> (2000)
Pink-footed Goose <i>Anser brachyrhynchus</i>	Table 4, qualifying criteria 6, 8	W – 192,000	-1.0 (GB)	81.9 GB (W)	69.1 (W)			Bell <i>et al.</i> (1997) Gill <i>et al.</i> (1997) Keller <i>et al.</i> (1997) Boyd (1998) Patterson & Fuchs (2001)
Bean Goose <i>Anser fabalis</i>	Table 4, qualifying criterion 8	W - 450	N/A	51.8 GB (W)	0.3 (W)			
White-fronted Goose <i>Anser a. albifrons</i>	Table 4, qualifying criterion 8	W – 6,100	+8.5 (GB)	76.4 GB (W)	0.8 (W)			
Greenland White-fronted Goose <i>A. a. flavirostris</i>	Table 4, qualifying criterion 8	W – 13,860	+22.9 (GB)	58.9 GB (W)	27.5 (W)		Draft Flyway Management Plan (Stroud 1992: yet to be implemented)	
Greylag Goose <i>Anser anser</i> (Icelandic population)	Table 4, qualifying criteria 6, 8	W - 100,000	-16.8 (GB)	57.0 GB (W)	57.5 (W)			Bell <i>et al.</i> (1997)
Barnacle Goose <i>Branta leucopsis</i> (Greenland population)	Table 4, qualifying criteria 6, 8	W – 26,950	N/A	63.2 GB (W)	49.8 (W)			
Barnacle Goose <i>Branta leucopsis</i> (Svalbard population)		W – 12,120	+66.4 (GB)	100 GB (W)	100 (W)		Draft Flyway Management Plan (yet to be implemented)	Pettifor <i>et al.</i> (1998) Black <i>et al.</i> (1999)

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Dark-bellied Brent Goose <i>Branta bernicla</i>	Table 4, qualifying criteria 6, 8, 9	W – 103,300	-14.4 (GB)	93.7 GB (W)	31.2 (W)		Flyway Management Plan (Dark-bellied) (van Nugteren 1997; Anon. 1999)	Riddington <i>et al.</i> (1997) Rowcliffe <i>et al.</i> (1998) Hassall <i>et al.</i> (2001) McKay <i>et al.</i> (2001) Pettifor <i>et al.</i> (2001) Rowcliffe <i>et al.</i> (2001)
Svalbard Light-bellied Brent Goose <i>Branta bernicla</i>		W – 2,430	N/A	100 GB (W)	54.2 (W)			Percival <i>et al.</i> (1996, 1998) Percival & Evans (1997) Clausen <i>et al.</i> (1998) Clausen <i>et al.</i> (2001)
Canadian Light-bellied Brent Goose <i>Branta bernicla</i>		W – 14,600	+28.8 (NI)	70.4 AI (W)	70.4 (W)			Mathers <i>et al.</i> (1998a, 1998b, 1998c, 2000) Mathers & Montgomery (1999)
Shelduck <i>Tadorna tadorna</i>	Table 4, qualifying criteria 5, 6, 8	B – 10,900 pairs W – 76,400	-11.0 (GB) +39.9 (NI)	83.7 GB (W) 38.0 AI (W)	21.8 (W)			
Widgeon <i>Anas penelope</i>	Table 4, qualifying criteria 6, 8	B – 300-500 pairs W – 291,000	+0.6 (GB) +18.8 (NI)	78.7 GB (W) 27.0 GB (B) 3.1 AI (W)	17.9 (W)			Mathers & Montgomery (1997) Percival <i>et al.</i> (1996, 1998) Mathers <i>et al.</i> (1998, 2000) Mayhew & Houston (1998, 1999)
Gadwall <i>Anas strepera</i>	Table 4, qualifying criteria 6, 8, 9	B – 790 pairs W – 8,400	+57.7 (GB) -34.2 (NI)	42.8 GB (W) 14.4 GB (B) 25.9 AI (W)	11.9 (W)			
Teal <i>Anas crecca</i>	Table 4, qualifying criterion 6	B – 1,600-2,800 pairs	+17.9 (GB) +39.6 (NI)	46.7 GB (W) 4.8 AI (W)	17.1 (W)			

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		W – 141,000						
Mallard <i>Anas platyrhynchos</i>	-	B – 100,000-130,000 pairs W – 527,000	-12.6 (GB) -2.4 (NI)	4.9 GB (W) 9.5 AI (W)	0.6 (W)			
Pintail <i>Anas acuta</i>	Table 4, qualifying criteria 4, 6, 8, 9	B – 8-42 pairs W – 28,100	+5.33 (GB) +14.77 (NI)	67.4 GB (W) 2.4 AI (W)	31.7 (W)		Draft EU Management Plan (yet to be implemented)	
Garganey <i>Anas querquedula</i>	Table 4, qualifying criteria 4, 9	B – 15-125 pairs	N/A	No SPA suite			Draft EU Management Plan (yet to be implemented)	
Shoveler <i>Anas clypeata</i>	Table 4, qualifying criterion 6	B – 1,000-1,500 pairs W – 10,300	+17.1 (GB) -13.2 (NI)	34.6 GB (W) 15.5 GB (B) 1.9 AI (W)	9.0 (W) 1.6 (B)			
Red-crested Pochard <i>Netta rufina</i>	-	B – 100	N/A	No SPA suite				
Pochard <i>Aythya ferina</i>	Table 4, qualifying criteria 6, 8	B – 251-406 pairs W – 81,200	-4.9 (GB) +0.5 (NI)	19.6 GB (W) 59.6 AI (W)	9.3 (W)			Stewart & Lauder (1997) Marsden (2000) Marsden & Bellamy (2000) Evans & Day (1998, 2001)
Tufted Duck <i>Aythya fuligula</i>	-	B – 8,000-9,000 pairs W – 90,100	+4.5 (GB) +13.6 (NI)	7.5 GB (W) 51.2 AI (W)	2.5 (W)			Stewart & Lauder (1997) Evans & Day (1998) Marsden (2000) Marsden & Bellamy (2000)
Scaup <i>Aythya marila</i>	Table 4, qualifying criteria 4, 9	B – 0-3 pairs W – 13,400	N/A	15.2 GB (W) 51.9 AI (W)	1.0 (W)			Evans & Day (1998)
Eider <i>Somateria mollissima</i>	Table 4, qualifying	B – 32,000-33,000 pairs	N/A	11.5 GB (W)	0.5 (W)			Coulson (1999)

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<i>mollissima</i>	qualifying criterion 8	33,000 pairs W – 78,000		18.3 AI (W)				Ross <i>et al.</i> (2001)
Long-tailed Duck <i>Clangula hyemalis</i>	-	W – 23,500	N/A	3.5 GB (W)	<0.1 (W)			
Common Scoter <i>Melanitta nigra</i>	Table 4, qualifying criteria 4, 8	B – 76-89 pairs W – 37,550	N/A	12.4 GB (W) 49 GB (B)	0.2 (W)	UK Biodiversity Species Action Plan (Biodiversity Steering Group 1998)		Underhill <i>et al.</i> (1998) Tierney <i>et al.</i> (2000)
Velvet Scoter <i>Melanitta fusca</i>	-	W – 3,000	N/A	21.3 GB (W)	<0.1 (W)			
Goldeneye <i>Bucephala clangula</i>	Table 4, qualifying criteria 4, 8	B – 83-19 pairs W – 32,000	-2.2 (GB) -24.0 (NI)	25.6 GB (W) 76.7 AI (W)	4.3 (W)			Stewart & Lauder (1997) Evans & Day (1998) Watson <i>et al.</i> (1998)
Smew <i>Mergellus albellus</i>	-	W – 250	N/A	No SPA suite				
Red-breasted Merganser <i>Mergus serrator</i>	-	B – 2,300 pairs W – 10,400	-4.5 (GB) -4.6 (NI)	19.3 GB (W) 12.2 AI (W)	1.7 (W)			Cosgrove (1997) Gregory <i>et al.</i> (1997) Watson <i>et al.</i> (1998) Robinson (1999)
Goosander <i>Mergus merganser</i>	-	B – 2,600 pairs W – 8,900	+25.6 (GB)	1.0 GB (W)	<0.1 (W)			Cosgrove (1997) Gregory <i>et al.</i> (1997) Newson & Hughes (1998) Watson <i>et al.</i> (1998)
Spotted Crake <i>Porzana porzana</i>	Table 4, qualifying criteria 2, 4	B – 1-20 pairs	N/A	84.0 GB (B)	<0.1 (B)			Francis & Thorpe (1999) Gilbert (2002)
Black-winged Stilt <i>Himantopus himantopus</i>	Table 4, qualifying criterion 4	B – 0-1 pairs	N/A	No SPA suite				
Avocet <i>Recurvirostra avosetta</i>	Table 4, qualifying	B – 450-492 pairs	+47.8	100 GB (W)	3.2 (W)			

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<i>avosetta</i>	criteria 7, 8, 9	pairs W – 1,270 A – 1,760		92.7 GB (B)	2.1 (B)			
Golden Plover <i>Pluvialis apricaria</i>	Table 4, qualifying criterion 6	B – 22,600 pairs W – 310,000	N/A	21.8 GB (W) 26.1 GB (B) 6.4 AI (W) 3.0 AI (B)	3.7 (W) 1.2 (B)			Kirby (1997) Yalden & Pearce-Higgins (1997) Hancock & Avery (1998) Mason & MacDonald (1999a, 1999b) Whittingham <i>et al.</i> (1999a, 1999b, 2000) Calbrade <i>et al.</i> (2001) Tharme <i>et al.</i> (2001)
Grey Plover <i>Pluvialis pluvialis</i>	Table 4, qualifying criteria 6, 8	W – 43,400 S – 70,000	-6.3	90.0 GB (W) 4.0 AI (W)	25.9 (W)			
Ringed Plover <i>Charadrius hiaticula</i>	Table 4, qualifying criterion 6	B – 8,600 pairs W – 31,000	-12.3	21.3 GB (W) 13.0 GB (B) 5.1 AI (W)	13.6 (W) 6.9 (B)			Fuller & Jackson (1999)
Little Ringed Plover <i>Charadrius dubius</i>	-	B – 825-1,070 pairs	N/A	No SPA suite				
Dotterel <i>Eudromias morinellus</i>	Table 4, qualifying criterion 7	B – 840-950 pairs	N/A	55.8 GB (B)	2.6 (B)			Strowger (1998) Holt <i>et al.</i> (2002)
Lapwing <i>Vanellus vanellus</i>	Table 4, qualifying	B – 200,000-250,000 pairs	N/A	9.8 GB (W)	3.0 (W)			Kirby (1997)

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<i>vanellus</i>	criterion 6	250,000 pairs W – 1,600,000-2,100,000		6.3 AI (W)				O'Brien & Murray (1998) Fuller & Jackson (1999) Mason & MacDonald (1999a, 1999b) Wilson & Browne (1999) Chamberlain & Fuller (2000, 2001) French <i>et al.</i> (2000) Milsom <i>et al.</i> (2000) Ausden <i>et al.</i> (2001) Calbrade <i>et al.</i> (2001) Tharme <i>et al.</i> (2001) Wilson <i>et al.</i> (2001) Henderson <i>et al.</i> (2002) Hart <i>et al.</i> (2002)
Snipe <i>Gallinago gallinago</i>	-	B – 61,000 pairs W - >100,000	N/A	2.1 GB (W)	0.1 (W)			Hancock & Avery (1998) O'Brien & Murray (1998) Ausden <i>et al.</i> (2001) Henderson <i>et al.</i> (2002)
Jack Snipe <i>Lymnocyptes minimus</i>	Table 4, qualifying criterion 9	W – 10,000-100,000	N/A	No SPA suite			Draft EU Species Management Plan (yet to be implemented)	
Black-tailed Godwit <i>Limosa limosa</i>	Table 2, qualifying criteria 3 (other criteria 4, 8)	B – 29-53 pairs W – 7,800 A – 12,400	+41.3	100 GB (W) 100 GB (B) 3.2 AI (W)	12.8 (W) <0.1 (B)		Draft EU Species Management Plan (yet to be implemented)	Ausden <i>et al.</i> (2001) Gill <i>et al.</i> (2001a, 2001b, 2001c)
Bar-tailed Godwit <i>Limosa lapponica</i>	Table 4, qualifying criteria 6, 8, 9	W – 56,100	+13.9	70.1 GB (W)	39.4 (W)			

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	criteria 6, 8, 9			12.7 GB (W)				
Whimbrel <i>Numenius phaeopus</i>	Table 4, qualifying criterion 7	B – 530 pairs S – 3,600	N/A	12.2 GB (W) 12.3 GB (B)	<0.1 (W)			
Curlew <i>Numenius arquata</i>	Table 4, qualifying criteria 5, 6, 9	B – 38,000-43,000 pairs W – 123,000	+3.7	38.3 GB (W) 11.9 GB (B) 11.9 GB (B)	14.3 (W)		Draft EU Species Management Plan (yet to be implemented)	Fitzpatrick & Bouchez (1998) Hancock & Avery (1998) O'Brien & Murray (1998) Grant <i>et al.</i> (1999, 2000) Wilson & Browne (1999) Tharme <i>et al.</i> (2001) Henderson <i>et al.</i> (2002)
Spotted Redshank <i>Tringa erythropus</i>	-	W – 140 A – 420	N/A	No SPA suite				
Redshank <i>Tringa totanus</i>	Table 4, qualifying criteria 6, 9	B – 32,000-35,000 W – 122,000	+4.6	48.4 GB (W) 14.1 AI (W) 5.4 AI (B)	37.8 (W) 2.8 (B)		Draft EU Management Plan (yet to be implemented)	Insley <i>et al.</i> (1997) Norris <i>et al.</i> (1997, 1998) Brindley <i>et al.</i> (1998) Fitzpatrick & Bouchez (1998) O'Brien & Murray (1998) Fuller & Jackson (1999) Burton (2000) Milsom <i>et al.</i> (2000) Mitchell <i>et al.</i> (2000) Ausden <i>et al.</i> (2001)
Greenshank <i>Tringa nebularia</i>	Table 4, qualifying criteria 7	B – 1,100-1,600 pairs W – 560	N/A	28.3 GB (B)	0.7 (B)			Hancock <i>et al.</i> (1997) Hancock & Avery (1998)

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		A – 1,530						
Green Sandpiper <i>Tringa ochropus</i>	-	W – 780	N/A	No SPA suite				Smith <i>et al.</i> (1999)
Wood Sandpiper <i>Tringa glareola</i>	Table 4, qualifying criteria 4, 9	B – 1-5 pairs	N/A	100 GB (B)	<0.1 (B)			
Common Sandpiper <i>Tringa hypoleucos</i>	-	B – 15,800 pairs W – 100	N/A	No SPA suite				Buckton & Ormerod (1997)
Turnstone <i>Arenaria interpres</i>	Table 4, qualifying criterion 6	W – 69,700	-17.1	13.4 GB (W) 7.1 AI (W)	14.6 (B)			Burton & Evans (1997) Dott (1997) Pearce-Higgins (2001)
Knot <i>Calidris canutus</i>	Table 4, qualifying criteria 6, 8, 9	W – 298,000	+22.2	83.5 GB (W) 10.3 AI (W)	70.3 (W)			Boyd & Piersma (2001a, 2001b)
Sanderling <i>Calidris alba</i>	-	W – 23,400 S – 40,200	-6.4	15.4 GB (W)	3.5 (W)			
Little Stint <i>Calidris minuta</i>	-	A – 770	N/A	No SPA suite				
Temminck's Stint <i>Calidris temminckii</i>	Table 4, qualifying criterion 4	B - 1-3 pairs	N/A	No SPA suite				
Purple Sandpiper <i>Calidris maritima</i>	Table 4, qualifying criteria 4, 6	B – 2 pairs W – 21,700	N/A	9.3 GB (W)	3.9 (W)			Burton & Evans (1997) Dott (1997) Summers <i>et al.</i> (1998, 2001) Corse & Summers (1999)
Dunlin <i>Calidris alpina</i>	Table 4, qualifying criteria 6, 8, 9	B – 9,150-9,900 W – 549,000	-11.9	77.8 GB (W) 74.0 GB (B) 6.6 AI (W)	30.1 (W) 61.9 (B)			Ferns & Anderson (1997) Lavers & Haines-Young (1997a, 1997b) Rae & Watson (1998)

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								Fuller & Jackson (1999)
Curlew Sandpiper <i>Calidris ferruginea</i>	-	A – 740	N/A	No SPA suite				
Ruff <i>Philomachus pugnax</i>	Table 4, qualifying criteria 4, 8	B – 2-24 pairs W – 700 A – 1,100	N/A	45.0 GB (W) 91.0 GB (B)	<0.1 (W) <0.1 (B)			
Red-necked Phalarope <i>Phalaropus lobatus</i>	Table 2, qualifying criterion 3 (other criterion 4)	B – 36 pairs	N/A	83.0 GB (B)	<0.1 (B)	UK Biodiversity Species Action Plan (Biodiversity Steering Group 1998)		
Mediterranean Gull <i>Larus melanocephalus</i>	Table 4, qualifying criterion 4	B – 13-22 pairs		74.0 GB (B)	<0.1 (B)			
Sandwich Tern <i>Sterna sandvicensis</i>	Table 4, qualifying criteria 7, 9	B – 17,000 pairs		72.2 GB (B) 30.3 AI (B)	8.7 (B)			Hannon <i>et al.</i> (1997) Adam & Booth (1999) Harris <i>et al.</i> (2000) Ward (2000) Ratcliffe <i>et al.</i> (2001)
Roseate Tern <i>Sterna dougallii</i>	Table 2, qualifying criterion 1 (other criteria 4, 9)	B – 72 pairs		88.0 GB (B) 1.0 AI (B)	3.2 (B)	UK Biodiversity Species Action Plan (Biodiversity Steering Group 1998)		Hannon <i>et al.</i> (1997) Harris <i>et al.</i> (2000)
Common Tern <i>Sterna hirundo</i>	-	B – 14,000 pairs		46.2 GB (B) 42.2 AI (B)	3.6 (B)			Craik (1997) Hannon <i>et al.</i> (1997) Robinson <i>et al.</i> (2000) Craik & Campbell (2000)

Appendix 2: Information digest for African-Eurasian Migratory Waterbirds regularly occurring in the UK

Species/population	Current conservation status (<i>Birds of conservation Importance</i>)	Current national population size	National population trend during the non-breeding season (1994/95-1999/2000)	% of national popn. within SPA network	% of international popn. within SPA network	Significant or national conservation initiatives directed at the species/population	UK participation in international conservation initiatives directed at the species/population	Recent published literature on species/population
								Harris <i>et al.</i> (2000) Ward (2000)
Arctic Tern <i>Sterna paradisaea</i>	-	B – 44,000 pairs		37.9 GB (B) 16.7 AI (B)	1.9 (B)			Hannon <i>et al.</i> (1997) Stewart <i>et al.</i> (1997) Robinson & Hamer (1998) Adam & Booth (1999) Brindley <i>et al.</i> (1999) Harris <i>et al.</i> (2000) Robinson <i>et al.</i> (2001)
Little Tern <i>Sterna albifrons</i>	Table 4, qualifying criterion 9	2,400 pairs		67.3 GB (B)	7.8 (B)			Hannon <i>et al.</i> (1997) Ratcliffe <i>et al.</i> (2001)

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Appendix 4: Abbreviations and Acronyms

AEWA	African-Eurasian Migratory Waterbird Agreement	JNCC	Joint Nature Conservation Committee
AMP	Asset Management Plan	LIFE	L'Instrument Financier pour l'Environnement (Financial Instrument for the Environment)
ASSI	Area of Special Scientific Interest		
BAP	Biodiversity Action Plan	LEAP	Local Environment Agency Plan
BASC	British Association for Shooting and Conservation	MoP	Meeting of the Parties
BTCV	British Trust for Conservation Volunteers	NAW	National Assembly for Wales
BTO	British Trust for Ornithology	NBN	National Biodiversity Network
CAMS	Catchment Abstraction Management Strategies	NCP	National Contingency Plan
CBD	Convention on Biological Diversity	NGO	Non -Governmental Organisation
CCW	Countryside Council for Wales	NNR	National Nature Reserve
CoP	Conference of the Parties	NVZ	Nitrate Vulnerable Zone
CRoW	Countryside and Rights of Way Act 2000	PDO	Potentially Damaging Operation
DANI	Department of Agriculture (Northern Ireland) [now DARD]	PPG	Planning Policy Guidance
DARD	Department of Agriculture and Rural Development (Northern Ireland)	RBBP	Rare Breeding Birds Panel
DEFRA	Department for Environment, Food and Rural Affairs	RSPB	Royal Society for the Protection of Birds
EA	Environment Agency	SAC	Special Area of Conservation
EEC	European Economic Community	SCARABBS	Statutory Conservation Agency/ RSPB Annual Breeding Bird Scheme
EC	European Community [now EU]	SEPA	Scottish Environment Protection Agency
ECTF	Edinburgh Centre for Tropical Forests	SE	Scottish Executive
EHS	Environment and Heritage Service	SMP	Shoreline Management Plan
EIA	Environmental Impact Assessment	SNH	Scottish Natural Heritage
EN	English Nature	SPA	Special Protection Area
ESA	Environmentally Sensitive Area	SSSI	Site of Special Scientific Interest
EU	European Union	UK	United Kingdom
FCO	Foreign and Commonwealth Office	WBS	Waterways Bird Survey
GCT	Game Conservancy Trust	WBBS	Waterways Breeding Bird Survey
HAP	Habitat Action Plan	WeBS	Wetland Bird Survey
IWC	International Waterbird Census	WHT	Wildlife Habitat Trust
IWD	Integrated Waterbird Database	WLMP	Water Level Management Plan
		WWT	Wildfowl and Wetland Trust

Appendix 5: Website addresses of national organisations

Government departments and devolved Administrations

Department for the Environment, Food and Rural Affairs (DEFRA)	http://www.defra.gov.uk
Scottish Executive Rural Affairs Department (SERAD)	http://www.scotland.gov.uk
National Assembly for Wales (NAW)	http://www.wales.gov.uk

Agencies of government and other statutory bodies

Countryside Council for Wales (CCW)	http://www.ccw.gov.uk
Defence Estates (DE)	http://www.defence-estates.mod.uk
English Nature (EN)	http://www.english-nature.org.uk
Environment Agency (EA)	http://www.environment-agency.gov.uk
Environment and Heritage Service (EHS)	http://www.ehsni.gov.uk
Forestry Commission (FC)	http://www.forestry.gov.uk
Scottish Environment Protection Agency (SEPA)	http://www.sepa.org.uk
Foreign and Commonwealth Office	http://www.fco.gov.uk
Countryside Agency (CA)	http://www.countryside.gov.uk
Joint Nature Conservation Committee (JNCC)	http://www.jncc.gov.uk
Scottish Natural Heritage (SNH)	http://www.snh.org.uk

Non-governmental organisations

British Association for Shooting and Conservation (BASC)	http://www.basc.org.uk
British Trust for Conservation Volunteers (BTCV)	http://www.btcv.org
British Trust for Ornithology (BTO)	http://www.bto.org
Crown Estate (CE)	http://www.crownestate.co.uk
Game Conservancy Trust (GCT)	http://www.game-conservancy.org.uk

Appendix 5: Website addresses

<i>Royal Society for the Protection of Birds (RSPB)</i>	http://www.rspb.org.uk
<i>Scottish Wildlife Trust (SWT)</i>	http://www.swt.org.uk
<i>The National Trust (NT)</i>	http://www.nationaltrust.org.uk
<i>UK Overseas Territories Conservation Forum (UKOTCF)</i>	http://www.ukotcf.org
<i>Wildfowl and Wetlands Trust (WWT)</i>	http://www.wwt.org.uk
<i>Wildlife and Countryside Link</i>	http://wcl.org.uk