



FORMAT FOR REPORTS

OF THE PARTIES

**AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY
WATERBIRDS (The Hague, 1995)**

Implementation during the period 2006 and 2008

Contracting Party: Republic of South Africa

**Designated AEWA Administrative Authority: Department of Environmental Affairs
and Tourism, Directorate Biodiversity Conservation**

Full name of the institution: Department of Environmental Affairs and Tourism

Name and title of the head of the institution: Ms Nosipho Ngcaba, Director-General

Mailing address: Private Bag X447, Pretoria, 0001, SOUTH AFRICA

Telephone: +27 12 310 3017

Fax: +27 12 322 4832

Email: Nngcaba@deat.gov.za

Name and title (if different) of the designated contact officer for AEWA matters: Ms

Wilma Lutsch, Director: Biodiversity Conservation

Mailing address (if different) for the designated contact officer: Same as above

Telephone: +27 12 310 3694

Fax: +27 12 320 2844

Email: wlutsch@deat.gov.za

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1. Overview of Action Plan implementation

Summary of progress to date

Species Conservation

South Africa has a wide range of legislation that is being implemented at the national and provincial level for the conservation of migratory waterbirds. The Sea Birds and Seal Protection Act (Act No. 46 of 1973) and Marine Living Resources Act (Act No. 18 of 1998) allow high levels of protection on seabirds. The National Environmental Management: Biodiversity Act (Act No.10 of 2004) offers a variety of protection measures for some species that are listed in the Annex of the Agreement.

The single species action plans are implemented in South Africa for the conservation of some waterbirds species listed in the Annex 2 of the Agreement. South Africa is participating in the development of a Species Action Plan for the Maccoa Duck *Oxyura maccoa*, which is listed as a Priority Species (Category A, column 1c).

Habitat Conservation

Four new Marine Protected Areas (MPAs) have recently been declared in terms of the National Environmental Management: Protected Areas Act (Act No. 57 of 2003) around the coast of continental South Africa, bringing the total to 23 MPAs and offering enhanced protection to 18% of the total coastline. A number of coastal seabirds are protected in the MPAs under Sea Birds and Seas Protection Act (Act No. 46 of 1973).

There is an Important Bird Areas (IBA) project aiming to protect a number of sites in South Africa that are important to globally threatened species, range restricted species, biome restricted species or which regularly hold massive concentrations of specific birds.

The wetland conservation policy for South Africa complements and strengthens a number of national policies and is a shared responsibility between DEAT, Department of Water Affairs and Department of Agriculture.

Research and Monitoring

The bird ringing project coordinated by South Africa (SAFRING) aims to establish a database of recoveries of southern African birds that can be used to establish information about movement and survival. Every bird ringed, has the potential to contribute to the SAFRING recovery database.

The Coordinated Waterbirds Counts (CWAC) aims to monitor South Africa's waterbird populations and the conditions of the wetlands, which are important for waterbirds. This was done by means of a programme of regular mid-summer and mid-winter censuses at a large number of South African wetlands and estuaries, at regular six-monthly intervals. CWAC monitors over 350 wetlands around the country.

Coordinated Avifaunal Roadcounts (CAR) monitors over 20 species of large terrestrial birds (cranes, bustards, korhaans, storks, Secretarybird and Bald Ibis) along 340 fixed routes

covering 19 000 km. The project revealed details of habitat use and the relationship of populations to the agricultural practices of an area.

Save the albatross seabird programme aims to reduce the deaths of albatrosses and petrels. About 300 000 birds are drowned every year after swallowing baited hooks and being dragged underwater as a result of longline fishing industry practices.

Life history of the White-fronted Plover project monitored the annual reproductive effort, nesting success, survival and dispersal characteristics of a population of about 100 colour-ringed pairs of White-fronted Plover (*Charadrius marginatus*) breeding on the beaches of the Cape Peninsula. The results are used for a comparison of breeding productivity and life-history traits between south-temperate (*C. marginatus*) and two related north-temperate species, Kentish Plover (*C. alexandrinus*) and Piping Plover (*C. melodus*).

The Wakkerstroom Project run by BLSA involved a 4 square kilometre wetland owned by BLSA, situated in the Grassland Biosphere Reserve in Mpumalanga Province and home to several globally threatened species. The area was the core of the global range of species such as Rudd's and Botha's Lark and as such holds the key to their survival. It is also of huge significance to species such as the Grey Crowned Crane, Bald Ibis and White-winged Flufftail. Aside from protecting habitat, the BLSA centre at Wakkerstroom is also the site of the hugely successful guide-training program. This program aims to identify local residents in rural areas that show potential for bird guiding.

Education and Information

South Africa continues to educate and increase public awareness in relation to conservation status of AEWA species through regular communications by government departments, academic and non-governmental organization via electronic, visual and print media with scientific, conservation and fishing communities, as well as the general public.

Coordinated Waterbird Ringing Schemes (AFRING), coordinated by Avian/Animal Demography Unit of the University of Cape Town is running ringing projects in Africa. The first ringing course took place from the 19-26 September 2004, in Mida Creek at the A Rocha Bird Observatory and Field Study Centre near Watamu on the central Kenyan coast. The area is one of the Important Bird Areas (IBAs) and eight delegates from four African countries (Kenya, Ghana, Tanzania and Uganda) participated in this ringing course.

In January 2005 a ringing training course was held in Wakkerstroom at the BirdLife South Africa centre. There were 29 attendees (ringers and trainees), ringing over 2200 birds in one week. Previous national ringing training workshops and outings include Lamberts Bay, tern ringing, 15-23 Nov 2003 and D'Nyala ringing weekend, 9-13 July 2003.

The fisheries observer-training programme has been developed and implemented by Birdlife South Africa. The course aims at informing fisheries observers of seabird conservation issues; how and why mitigation measures work, as well as seabird identification. Development of a training manual and video are underway and will be available in English, Afrikaans and Portuguese for distribution within South Africa, Namibia and Angola.

World Wetlands Day has been celebrated every year since its inception, with visible increases in interest, profile and participation every year. The national events were celebrated in the following years: in 2002 at Makuleke, Limpopo province; in 2003 at Verlorenvlei Nature Reserve, Mpumalanga Province; in 2004 at Ugie, Eastern Cape Province; in 2005 at St Lucia Wetlands Park, Kwazulu Natal; in 2006 at St Lucia, Kwazulu Natal; in 2007 at Knysna, Western Cape and; in 2008 at Klip River, Gauteng province. Approximately 500 people attended from all levels of the surrounding rural communities, including local schools in the areas.

Outline of planned actions for national implementation over the next three years

Implementation of the National Environmental Management: Biodiversity Act (Act No. 10 of 2004).

The Act provides for the consolidation of biodiversity legislation through establishing national norms and standards for the management of biodiversity across all sectors and by different management authorities. The provisions of the Act further seek to allow regulatory oversight at appropriate levels whilst avoiding unnecessary duplication of functions. An important aspect of the biodiversity legislation is to facilitate both conservation and sustainable use of species through management interventions at species and ecosystems level. This Act makes provision for listing of threatened or protected ecosystems and species.

South African National Plan of Action for Reducing the incidental Catch of Seabirds in Longline Fisheries (NPOA-SEABIRDS) – See Appendix 1.1

The immediate aim of the NPOA-Seabirds is to reduce seabird mortality in all South African fisheries to an interim target level of less than 0.05 birds/thousand hooks.

A total of 19 species of seabirds has been recorded as being killed by longline fisheries within South Africa's territorial and EEZ waters around the sub-Antarctic Prince Edward Islands and the African Continent. Of these, nine are albatrosses (Diomedidae) and seven are petrels (Procellariidae). Others species known to have been killed are the Macaroni Penguin- Spheniscidae (*Eudyptes chrysolophus*), Cape Gannet-Sulidae (*Morus capensis*) and Subantarctic Skua-Stercoraridae (*Catharacta antarctica*). Unlike in the northern hemisphere, no gulls (Laridae) have been reported killed on longlines in South African waters

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

South Africa is participating in the development of the Maccoa Duck *Oxyura maccoa* Species Action Plan, which is an international activity funded by AEW. The initial species action plan workshop was held in Wakkerstroom, Mpumalanga, South Africa from the 29 - 31 March 2005. Seven Countries are participating in the development of this action plan. These include South Africa Botswana, Ethiopia, Namibia, Tanzania, Uganda, and Zimbabwe.

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?

South Africa has a wide range of legislation that is being implemented at the national and provincial levels for the conservation of migratory waterbirds. Legislation listed below are the main ones that South Africa makes use of for the conservation of waterbirds listed in the Annex of the Agreement.

The Sea-Shore Act (Act No. 21 of 1935)
The Water Act (Act No. 54 of 1956)
The Territorial Waters Act (Act No. 87 of 1963)
The Forest Act (Act No. 72 of 1968)
The National Monuments Act (Act No. 28 of 1969)
The Mountain Catchments Areas Act (Act No. 63 of 1970)
The Sea Birds and Seals Protection Act (Act No. 46 of 1973)
The Lake Areas Development Act (Act No. 39 of 1975)
The Conservation of Agricultural Resources Act (Act No. 43 of 1983)
The Environment Conservation Act (Act No. 73 of 1989)
The Physical Planning Act (Act No. 125 of 1991)
Sea Shore Amendment Act (Act No. 190 of 1993)
Antarctic Treaties Act (Act No. 60 of 1996)
Marine Living Resources Act (Act No. 18 of 1998)
Maritimes Zones Act (Act No. 15, 1994)
National Water Act (Act No. 36 of 1998)
National Forest Act (Act No. 84 of 1998)
National Veld and Forest Act (Act No. 101 of 1998)
National Environmental Management Act (Act No. 107 of 1998)
World Heritage Convention Act (Act No. 49 of 1999)
National Environmental Management: Protected Areas Act (Act No. 57 of 2003)
National Environmental Management: Biodiversity Act (Act No. 10 of 2004)

Sea Birds and Seals Protection Act (Act No. 46 of 1973):

Albatrosses and petrels (Diamedeidae and Procellariidae) occurring in South African territory and fishing Zone (equivalent to exclusive economic zone EEZ) waters are fully protected by the Sea Birds and Seals Protection Act (No. 46 of 1973). No commercial trade in or traditional use by indigenous people of albatrosses and petrels or their eggs (or any other products) are known to have occurred in South Africa. The Act is specifically extended to include the Prince Edward Islands and its territorial and EEZ waters, as defined by the Maritimes Zone Act of 1994.

The Act prohibits the killing, capture or willful disturbance of seabirds unless sanctioned in terms of a permit issued by the Minister of Environmental Affairs and Tourism. Thus in terms of this Act, killing seabirds during longline fishing is illegal within South African waters.

Marine Living Resources Act (Act No. 18 of 1998)

The Marine Living Resources Act, 1998 (Act No. 18 of 1998) provides for the conservation of the marine ecosystem and the long-term sustainable utilization of marine living resources, including the management of South African marine fisheries. In terms of this Act, the Minister of Environmental Affairs & Tourism may proclaim regulations pertaining to the management and control of fisheries (including conservation measures) and the establishment of measures for the protection of specified species. The Act, *inter alia*, also provides for matters such as determination of fishery catches, issuing of foreign and high-seas licenses, and the appointment of observers and fisheries control officers, the latter with powers of arrest.

The Marine Pollution (Control and Civil Liability) Act (Act No. 6 of 1981):

The Act prohibits the discharge of oil from ships, tankers and offshore installations, but provides exemptions in the case of, for example, the oil being released as a result of damage and steps being taken as soon as practicable to stop or reduce the escape of oil. The Act provides reporting procedures for discharges of any harmful substance.

The Act establishes the powers of the South African Maritime Safety Authority to take steps to prevent pollution of the sea where a harmful substance is being or is likely to be discharged. The Authority may, for example, require the master of a ship to unload a harmful substance from a ship or tanker, or to transfer the substance to another ship or tanker.

In terms of the Act, the owner of a ship, tanker or offshore installation is liable for any loss or damage caused by pollution resulting from the discharge of oil. The owner is also liable for the cost of any measures taken by the Authority to reduce damage resulting from such discharge. Tankers carrying more than 2 000 tons of oil is subject to compulsory insurance. The Authority may detain a ship if its owner fails to pay costs payable in terms of this Act.

The National Water Act (Act no 36 of 1998) (replaced Water Act 54 (1956) :

The purpose of the Act includes, *inter alia*, "protecting aquatic and associated ecosystems and their biological diversity", and "reducing and preventing pollution and degradation of water resources"

National Environmental Management: Biodiversity Act (Act No. 10 of 2004).

A key provision in the Act allows for the listing of threatened and protected species and ecosystems. The provision gives the country a powerful mechanism to address biodiversity conservation effectively and efficiently. The Act also provides for the development of biodiversity management plans for threatened species and ecosystems.

✓ **Threatened and protected species in the Act**

The Act makes provision for the listing of species that are threatened or in need of protection to ensure their survival in the wild, while regulating the activities, including trade, which may involve such listed species. Activities such as keeping, moving, having in possession, importing and exporting and selling listed species will be regulated by means of permits, i.e. the activities will be regulated rather than the species themselves. This means that when a person wants to sell a listed species a permit will be required. Carrying out any “restricted activity” with a listed threatened or protected species, whether nationally or internationally is equally regulated by means of a permit.

Grus carunculatus (Wattled Crane), *Anthropoides paradiseus* (Blue Crane), *Balearica regulorum* (Grey Crowned Crane), and *Ciconia nigra* (Black Stork) *Geronticus calvus* (Bald Ibis) are listed as threatened in terms of this NEM: Biodiversity Act. This means that a permit is required to carry out any restricted activity with that species or any part/derivative thereof.

✓ **Biodiversity Management Plans**

The Act also allows for the development of biodiversity management plans (considered equivalent to species action or recovery plans) for any indigenous species and ecosystems, whether it has been proclaimed as threatened, protected or not.

✓ **Threatened and protected ecosystems in the Act**

In addition to the listing of threatened and protected species and the provision for the development of biodiversity management plans, the Act also provides for the listing of ecosystems that are threatened or in need of protection to ensure the maintenance of ecological integrity.

National Environmental Management: Protected Area Act (Act No. 57 of 2003)

The Act establishes a streamlined set of categories for protected areas. A range of different protected area options is available, for both strict protection as well as more flexible biodiversity management. The Act provides for any land, including private or communal land to be declared a formal protected area and allows for co-management of such a protected area by the landowner(s) or any suitable person or organization. This means that formal protected area status, with associated rates exclusion in terms of the Rates Act, is not limited to state-owned land, and the government agencies are not the only organizations that can manage protected areas.

b. Which organisations are responsible for implementation?

South African National Departments are responsible for the implementation of most of the legislation responsible for the conservation of waterbirds listed in the Annex 2 of the Agreement, with Non-Governmental Organisations, listed below conducting activities/research that contribute to the conservation of AEWAs species in South Africa:

Department of Environmental Affairs and Tourism (DEAT)
Department of Water Affairs and Forestry (DWAF)

South African provincial departments:

- Gauteng Province: Department of Agriculture, Conservation and Environment
- Mpumalanga Province: Department of Economic Development and Planning
- Limpopo Province: Department of Economic Development, Environment and Tourism
- Free State Province: Department of Tourism, Environment and Economic Affairs
- Kwa-Zulu Natal Province: Department of Agriculture and Environmental Affairs
- Northern Cape Province: Department of Economic Affairs and Tourism
- Western Cape Province: Department of Environmental and Development Planning
- Eastern Cape Province: Department of Economic Affairs, Environment and Tourism
- North-West Province: Department of Agriculture, Conservation and Environment

The following organizations are conducting work that contributes to the conservation of waterbirds in South Africa:

- Avian/Animal Demography Unit (ADU) of the University of Cape Town;
- Birdlife South Africa (BLSA)
- Endangered Wildlife Trust (EWT)
- The African Gamebird Research and Education Trust (AGRED)
- Percy FitzPatrick Institute of African Ornithology

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

This relates to integrating terrestrial and aquatic management as outlined in the National Biodiversity Strategy and Action Plan, Strategic Objective SO3.

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 utilization or trade contravenes the provisions set out in paragraphs 2.1.1 (a) and 2.1.2 of the Action Plan)?

Regulations on Threatened or Protected Species in terms of the National Environmental Management Act (Act No. 10 of 2004)

South Africa developed regulations in terms of the NEM: Biodiversity Act in relation to listed threatened or protected species. The Act offers a variety of protection measures for some species that are listed in the Annex of the Agreement. The permit may regulate the taking of and trade in these species.

Seabird mortality mitigation regulations developed in terms of Marine Living Resources Act (Act No. 18 of 1998)

The conservation status of seabirds including albatrosses and petrels in South Africa is affected by the “...use and abandonment of non-selective fishing gear, and specifically by incidental mortality as a result of commercial fishing activities”. These led to the

development and implementation of measures to reduce or eliminate the mortality of albatrosses and petrels resulting incidentally from fishing activities. Also the seabird by-catch developed under seabird mitigation regulations and practices was initiated in South African waters (Appendix 1.1). Outlined below are the mitigation regulations to reduce seabird mortality.

Mitigation measures for the hake longline fishery were gazetted on 2 September 1998 in terms of the Marine Living Resources Act, 1998 (No. 18 of 1998), and an observer scheme was initiated in 2000 (although no observers were deployed in the first half of 2001). During 2002 and 2003 it is intended that between 15 and 20% of voyages will have scientific observers aboard.

Mitigation regulations to reduce seabird mortality as gazetted consist of:

- All birds caught while fishing by means of a longline shall be released if alive, or if dead be handed over to a fisheries control officer at the end of a voyage.
- Longlines may only be shot during the hours of darkness and gear deployment shall cease at least one hour before nautical dawn.
- Both the main line and the branch lines (snood) must be properly weighted and setting speed must be such that sinking rates are maximized.
- Offal dumping or discharging must be minimized; shall take place on the opposite side of the vessel from that on which lines are hauled; and may not take place during setting of the lines.
- Fishing hooks, fishing line or plastic may not be discarded, except where the removal of the hooks from live discards (e.g. sharks) may endanger the safety of the crew or be detrimental to the survival of the animal.
- Deck lighting shall be kept to a minimum without compromising safety and must be shaded in such a way that the beam is directed towards the deck.
- An approved streamer line (tori line) must be flown during setting of each longline and the said streamer must be deployed directly above the main line, unless two streamers are used, in which case they must be deployed on either side of the main line.
- No person shall discard or abandon any longlining gear at sea.

In 2000 bird-scaring lines were deployed on only 13% of 537 sets monitored by observers, who reported that the seabird mortality mitigation measures were largely disregarded. Observer reports revealed that many fishers remained unconvinced of the necessity for and practicality of bird mitigation measures, as well as being concerned with the costs involved. The permit conditions make no attempt to quantify “proper” line weighting or setting speeds.

b. Methods of taking?

Methods of taking include:

In relations to waterbird species listed in the Biodiversity Act, “hunting, catching, capturing, or killing any living specimen of a listed threatened or protected species by any means, method device whatsoever, including searching, purchasing, driving, lying in wait, luring, alluring, discarding a missile or injuring with intent to hunt, catch, capturing or kill any such specimen” is regulated by means of a permit system in South Africa.

c. Setting of taking limits and monitoring these limits? None

- d. Sustainable hunting of species listed in Categories 2 and 3 (and marked by an asterisk) in Column A only? None
- e. Exemptions to the provisions set out in paragraphs 2.1.1, 2.1.2 and 2.1.3? None

Single Species Action Plans

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? None
- b. In preparation?

South Africa is participating in the development of the Maccoa Duck *Oxyura maccoa* Species Action Plan, which is an international activity funded by AEWA. The initial species action plan workshop was held in Wakkerstroom, Mpumalanga, South Africa from 29 - 31 March 2005. Seven Countries are participating in the development of this action plan. These include South Africa, Botswana, Ethiopia, Namibia, Tanzania, Uganda, and Zimbabwe. The Species Action Plan is in its fourth draft and will be submitted to the Technical Committee of AEWA for comment before being submitted for approval.

c. Being implemented?

- African Penguin – Population & Habitat Viability Assessment published in 1999 (Penguin Conservation Assessment and Management Plan (Penguin Camp)).
- South African National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries published in 2002.
- Conservation Assessment and Management Plan for Southern Africa Coastal Seabirds published 2003.
- Oystercatcher Conservation Programme (OCP) coordinated by Percy Fitzpatrick Institute of African Ornithology.
- South African White-winged Flufftail (*Sarothrura ayresi*) Action Plan.

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

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.

An Oil Spill contingency plan developed

Oil spills have major impact on African Penguins, especially when the oil washes ashore at breeding localities. Oil kills penguins by impairing the insulative capacity of their feathers, so that they die of hypothermia in water or of starvation on land because hypothermia makes it impossible for them to feed at sea. Ingested oil may produce a range of physiological abnormalities and is associated with a greater diversity of potentially pathogenic bacteria.

Standard practice during oil spills is to catch and treat oiled birds as soon as possible. In the *Treasure* spill, this ideal was tempered by the realisation that, if measures were not taken to prevent uncontaminated penguins from becoming oiled, the quantity of oiled birds might rapidly increase to an unmanageable number. Accordingly, for penguins, strategies were adopted that aimed to attain the twin objectives of minimizing the numbers of birds becoming oiled and providing those that became oiled with rapid care.

A total of about 19000 oiled African Penguins was collected, of which 14825 were caught at Robben Island, 3516 at Dassen Island and about 500 at other localities, including Vondeling Island (23) and West Coast National Park (194 - Jutten Island 65, Malgas Island 49, Marcus Island 4, 16-mile Beach 76). Oiled birds were caught as far north as St Helena Bay. Most of the oiled penguins were in adult plumage although some immature birds were also affected. At Dassen Island, 2744 of those oiled were adults and 772 were immature birds. Additionally, 7161 unoiled birds were removed from Robben Island and 12345 from Dassen Island. Therefore, excluding chicks, 21986 birds were taken from Robben Island and 15861 from Dassen Island. By 18 August 2000, about 1900 penguins (other than chicks) had died after being caught.

Other oiled birds caught included 22 Cape Cormorants, of which 16 died in captivity; five Crowned Cormorants, all of which died; two Great Cormorants, both of which were released; 30 Cape Gannets from West Coast National Park; and one Hartlaub's Gull that died. Additionally, two Cape Cormorants and one Crowned Cormorant died after capture at Dassen Island. For both Hartlaub's and Kelp Gulls, small numbers were observed to be lightly oiled on Dassen and Robben islands, in Cape Town Harbour and at several places along the shoreline of the Cape Peninsula. Hartlaub's Gulls with oil on their plumage were also observed at an inland gathering area on the Liesbeek River in Observatory.

In spite of oiling of the intertidal feeding areas of African Black Oystercatchers, only one dead oystercatcher was found at Dassen Island and none at Robben Island. The single mortality observed was probably as a result of ingesting oil. The absorbent peat used to clean oil off the shores was non-toxic to intertidal invertebrates, and probably did little additional damage to potential food for oystercatchers. The impact of the spill on African Black Oystercatchers was probably minimal. No other species that feed in the intertidal zone were recorded to be harmed by the spill.

Other Chemicals

Residues of polychlorinated biphenyls (PCBs) and the organochlorine pesticides DDE and Dieldrin have been found in penguin eggs. In all cases the residue levels were low and unlikely to cause reproductive impairment.

Fire management plans developed for some sites

At Robben Island and Boulders, the two new colonies where African Penguins breed under wooded vegetation, fire could cause extensive loss of breeding habitat and mortality of birds, eggs and chicks. Clearing old wood should minimize the risk of fire.

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.

No

Introductions

2.6 Has your country developed and implemented legal measures to prohibit the introduction of nonnative 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 Biodiversity Act (Act No. 10 of 2004) provides for the management of alien and invasive species through the control of their introduction and spread, as well as the control or eradication of those already established. The Act also provides for a compulsory risk assessment for import of alien and invasive species. Alien species can have an exempted list, where no permit is required and prohibited lists which are species not allowed to be imported, translocated or any other restricted activity relating to alien and invasive species mentioned in the Act. Duty of care on persons who carry out restricted activities with alien and listed invasive species, or who own land on which listed invasive species occur has been established. Restricted activities involving alien species or listed invasive species are regulated by means of a permitting system. Before a person can carry out a restricted activity with an alien species or a listed invasive species, that person will have to apply for the necessary permits. The Act further establishes obligations for the control and eradication of invasive species and provides for invasive species control plans and regular reporting on invasive species status and efficacy of control measures.

3. Habitat conservation

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.

South Africa Wetlands of International Importance

South Africa has designated 19 wetlands to the Ramsar List (see appendix 2 for the list of Ramsar Sites in South Africa with a brief description) Of these 19 wetlands, three are protected within National Parks, 12 are within proclaimed Provincial Nature Reserves or State Forests and two are on state land under the jurisdiction of a provincial nature conservation agency and one is an Island. The remaining wetland is partially in a proclaimed Provincial Nature Reserve and partially on privately owned land.

Marine Protected Areas (MPAs)

Several Marine Protected Areas are located along South Africa's extensive coastline, representing most marine bio-geographic regions, and including two of the largest "no-take" reserves in the world. However, as is the case for terrestrial protected areas, there has been no overall planned development of marine reserves, a large number being either poorly positioned or inadequately policed. Furthermore, existing marine protected areas do not protect the full range of coastal and marine habitats, such as sandy beaches, estuaries, dunes, and different types of rocky shore.

The government has proclaimed four new Marine Protected Areas (MPAs) in terms of the Protected Areas Act (Act No. 57 of 2003) bringing the total to 23 MPAs and offering enhanced protection to 18% of the total coastline, but these do not extend far enough out to sea to have any significant effect on the conservation of albatrosses and petrels. Robben and Dassen islands have a map available depicting habitat types but none exist for other islands.

There are several types of areas in the marine and coastal environment where special regulations apply for conservation, fishery management and the promotion of tourism. These include:

Marine Protected Areas, which are declared under Section 43 of the Marine Living Resources Act. In general no fishing, construction work, pollution, or any form of disturbance is allowed here unless written permission has been granted by the Minister.

Closed Areas, which are declared under Section 77 of the Marine Living Resources Act. Fishing is restricted or prohibited entirely in these areas as indicated below.

National Parks, which are declared under the NEM: Protected Areas Act. Regulations that apply in these areas are not listed in this Act, except in those cases where the National Park has also been declared as a Marine Protected Area.

List of Marine Protected Areas

Langebaan Lagoon Marine Protected Area is divided into three zones. Recreational fishing is allowed in the northern-most zone (Zone A), north of a line joining Beacons LB4, in Kraal Bay, and LB3, at Oesterwal.

Sixteen Mile Beach Marine Protected Area: No fishing from the shore is allowed in the area between Plankies and Rooipan se Klippe (near Yzerfontein).

Malgas Island, Jutten Island and Marcus Island Marine Protected Areas: No fishing is allowed along the shores of these islands.

Table Mountain National Park Marine Protected Area: No fishing is allowed in this area.

St James Restricted Zone: between the tidal pool at St James and the tidal pool at Kalk Bay.

Boulders Restricted Zone: in the area between the eastern end of Simonstown harbour and Oatlands.

Castle Rock Restricted Zone: between the beacon VB1 at Millers Point and VB2 at Partridge Point, extending approximately one nautical mile seawards.

Paulsberg Restricted Zone: between Smitswinkel Point and Venus Pool, and extending approximately one nautical mile seawards.

Cape of Good Hope Restricted Zone: between Hoek van die Bobbejaan and the fence at Scarborough, and extending approximately one nautical mile seawards.

Karbonkelberg Restricted Zone: between the Sentinel and Hout Bay and Oudekraal, and extending 3.3 nautical miles offshore at the widest point.

Helderberg Marine Protected Area, No fishing is allowed between the mouth of the Eerste River and the mouth of the Lourens River in False Bay, extending 500m seawards from the high-water mark.

Betty's Bay Marine Protected Area, Only shore angling is allowed between beacon B1 at Stoney Point and beacon B4, to the east of Jock-se-baai, extending two nautical miles seawards from the high-water mark.

De Hoop Marine Protected Area, No fishing is allowed between beacon DH1 at Still Bay Point and beacon DH2 between Rys Point and Skipskop, extending three nautical miles seawards from the high-water mark.

Goukamma Marine Protected Area, Only shore angling is allowed between Portion 1 of the farm Walker's Point at Buffels Bay and the western boundary of the Goukamma Nature Reserve, extending two nautical miles seawards from the high-water mark.

Robberg Marine Protected Area, No fishing is allowed in a rectangular area surrounding the Robberg Peninsula between the latitudes 34°04'.916S and 34°07'.633S and the longitudes 023°22'.300E and 023°25'.967E, although shore angling is allowed.

Tsitsikamma National Park (includes the Tsitsikamma Marine Protected Area), No fishing is allowed between Groot River at Oubos to Groot River at Nature's Valley, extending three nautical miles sea-wards from the high-water mark.

Sardinia Bay Marine Protected Area, No fishing is allowed between beacon PECR1 near Schoenmakerskop and beacon PECR2 near Bushy Park, extending one nautical mile seawards from the high-water mark.

Bird Island MPA, No fishing is allowed around Bird Island in Algoa Bay within a rectangle.

Dwesa-Cwebe Marine Protected Area, No fishing is allowed between the western bank of the mouth of the Suku River (in the District of Elliotdale) and Human's Rock (in the district of Willowvale), including the tidal portion of the Mbashe River, extending six nautical miles seawards of the high-water mark.

Hluleka Marine Protected Area, No fishing is allowed adjacent to the Hluleka Nature Reserve (in the Ngqeleni District), extending six nautical miles seawards from the high-water mark.

Pondoland MPA, No offshore fishing is allowed in the area bounded by a line running 128° from the southern head of the Sikombe River, a line running 128° from the northern head of the Mboyti River and the 1000-m isobath. No shore-based fishing is allowed along the following four sections of coast: No fishing is allowed in the Mtentu and Sikaba estuaries.

Trafalgar Marine Protected Area, Only shore angling and fishing for certain pelagic fish is allowed between beacon N1 south of Centre Rocks and beacon N2 opposite the southern boundary of the Mpenjati Resort, extending 500 m seawards from the high-water mark.

Aliwal Shoal MPA, No fishing is allowed on Aliwal Shoal, near Umkomaas, nor around the wreck of the Produce.

The Greater St Lucia Wetland Park (includes St Lucia and Maputaland Marine Protected Areas)

St Lucia Marine Protected Area extends from beacon N3 north of Ngoboseleni Stream to beacon N4 south of Cape Vidal, and extends three nautical miles seawards from the high-water mark. No fishing is allowed in the **Sanctuary Zone** between beacon N5 at Red Cliffs and beacon N6 at Leven Point, extending three nautical miles due east from the high-water mark. In the **Restricted Zones** which lies to the north of beacon N5 at Red Cliffs and to the south of beacon N6 at Leven Point, respectively, shore anglers may catch fish, and skiboat anglers and spearfishers may catch certain species of pelagic fish.

Maputaland Marine Protected Area extends from beacon N7 at the Mozambique border to beacon N3 north of Ngoboseleni Stream, extending three nautical miles seawards from the high-water mark.

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.

No

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.)

Protected areas categories are assigned in accordance with the 1994 IUCN Protected Area Management Categories. These sites are proclaimed in the Government Gazette as protected areas in terms of the National Environmental Management: Protected Areas Act No. 57 of 2003.

The Management of Protected Areas in South Africa

TYPE OF PROTECTED AREA	LEGISLATION	ADMINISTRATION
National Park	National Environmental Management: Protected Areas Act (Act No. 57 of 2003)	DEAT: South African National Parks
Lake Area	Lake Areas Development Act No. 139 of 1975	National Parks Board
Mountain Catchment Area	Mountain Catchment Areas Act No. 63 of 1970	DWAF: delegated to provinces
Protected Natural Environment	Environment Conservation Act No.73 of 1989	DEAT: delegated to provinces
Limited Development Area	Environment Conservation Act 73 of 1989	DEAT: delegated to local authority / government institution
National Botanical Garden	National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	DEAT: South African National Biodiversity Institute
State Forest	Forest Act No. 122 of 1984	DWAF: assigned to provinces
Forest Nature Reserve and Wilderness Area	Forest Act No. 122 of 1984	DWAF assigned to provinces
Ramsar Sites	Ramsar Convention	DEAT
National Monument	National Monuments Act No. 28 of 1969	National Monuments Council and provinces

Conservation Area	National Monuments Act No. 28 of 1969	National Monuments Council and provinces
Defence Area	Defence Act No. 44 of 1957	South African Defence Force
Marine Reserve	Sea Fishery Act No. 12 of 1988	DEAT : Directorate of Sea Fisheries, and provinces in respect of coastal zone and specified resources
Sea-Shore	Sea-Shore Act No.21 of 1935	DEAT: assigned to provinces
Most South African islands	Sea Birds and Seals Protection Act No. 46 of 1973	DEAT: assigned to provinces in respect of sea birds
Provincial, Local and Private Nature Reserves	Various provincial ordinances	9 provincial administrations, numerous local authorities, private landowners
Private Conservancies	No legal status	Farmers
Biosphere Reserves	No legal status	Conservation authority / neighbours
Natural Heritage Sites	Not legally enforceable	Private landowners

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.

No

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

a. Proposed? None

b. In preparation? None

c. Being implemented?

Important Bird Areas Conservation Programme in South Africa

The Important Bird Areas (IBA) project is a key project that has identified and aims to protect a number of sites in South Africa that are significant to globally threatened species, range restricted species, biome restricted species or which regularly hold massive concentrations of specific birds. The concept is part of the broader Birdlife International Global IBA Conservation Program and has revolutionised the focus for conserving areas important to bird (and other organism) conservation. BLSA and Birdlife International have published guides to IBAs in South Africa and Africa respectively. The Global Seabird Project is another Birdlife International Initiative that has been implemented in South Africa by BLSA

and aims to reduce, through public and corporate awareness, the plight of more than 300 000 albatrosses that drown as a result of long-line fishing every year.

Protection of the important bird areas

The unprotected and partially protected IBAs indicate where the gaps are in the current protected areas network in South Africa. These IBAs therefore represent the priority areas in which to initiate conservation. The vast majority of these areas are privately owned and located within the agricultural areas of South Africa. In order to work towards integrating agricultural development of the land and conservation aims, the involvement and participation of the private land-owners is essential. BirdLife South Africa (BLSA), in conjunction with its members, Branch and Affiliate Clubs, is in the process of initiating conservation action, advocacy (support) and monitoring within each of the 122 IBAs. Informing the private landowners within the IBAs of the international importance of their land and obtaining their support is vital to the conservation of the IBAs. One measurable outcome of this is private landowners registering their farms or a portion of their farms as a Natural Heritage Site. The private land-owner gains the satisfaction of voluntary participation in a national and international conservation programme. A further gain is the strengthening of the partnership between BLSA, a non-governmental, membership based conservation organisation, and government (National Department of Environmental Affairs and Tourism, other national and provincial government departments and the Provincial Conservation Authorities).

Important Bird Areas include proposed Grassland Biosphere Reserve (SA020), Blue Swallow Natural Heritage Site – SA014, Soutpansberg – SA003 and Steenkampsberg – SA016. Grassland Biosphere and Steenkampsberg are the ones discussed in the report as they give high levels of protection to a large number of migratory waterbirds.

3.6 What measures does your country have in place to ensure the wise use of wetland 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.

South Africa does not have a stand-alone wetland policy, but wetland issues are explicitly addressed in a range of water, biodiversity and environment policy instruments. Wetlands management is a shared responsibility between DEAT, Department of Water Affairs and Forestry and National Department of Agriculture. Since Ramsar COP8 wetlands have been further entrenched in policy through the enactment of the National Environmental Management: Biodiversity Act (2004), National Environmental Management: Protected Areas Act (2003) and the National Biodiversity Strategy and Action Plan, which is given legal recognition through the Biodiversity Act. The National Biodiversity Strategy and Action Plan has clear targets, timeframes and role players with regards to biodiversity.

A White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity has been in place since 1997. It addresses wetlands specifically, with 11 policy and strategy measures in place to protect wetlands.

The wetland conservation policy for South Africa complements and strengthens a number of other national policies and draft policies or White Papers, including the following:

- The national policy on the conservation and sustainable use of South Africa's biological diversity;
- Environmental management policy for South Africa;
- National water policy;
- Integrated pollution and waste management policy;
- Coastal zone management policy;
- Marine fisheries policy for South Africa.

○ **Environment Conservation Act (Act No. 73 of 1989)**

The primary purpose of this Act is to provide for the protection of the environment against disturbance, deterioration, defacement, poisoning, pollution, or destruction as a result of man-made structures, installations, processes or products of human activities. The Act calls for the Minister of Environmental Affairs and Tourism to identify activities that in his opinion may have detrimental effects on the environment, whether in general or in respect of certain areas, and to draft regulations with regards to these activities. Activities identified, that will have detrimental effects on wetlands, include the construction or upgrading of:

- transportation routes and structure, and manufacturing, storage, handling or processing facilities for any substance which is dangerous or hazardous and is controlled by national legislation;
- canals and channels, including diversions of normal flow of water in a riverbed and water transfer schemes between water catchments and impoundments;
- dams, levees or weirs affecting the flow of a river
- schemes for the abstraction utilisation of ground or surface water for bulk supply purposes
- sewage treatment plants and associated infrastructure
- reclamation of land below the high-water mark of the sea and in inland water including wetlands

○ **National Environmental Management Act (Act No. 107 of 1998)**

The Act provides for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state. Principles relevant to wetlands conservation include that:

- Sustainable development requires the consideration of all relevant factors including the following:
 - (i) that the disturbance of ecosystems and loss of biodiversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
 - (ii) that the development, use and exploitation of renewable resource and the ecosystems of which they are part of do not exceed the level beyond which their integrity is jeopardised.
- The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.

- Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, specifically where they are subject to significant human resource usage and development pressure.

- **National Water Act (Act No. 36 of 1998)**

The purpose of this Act is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways that take into account other factors:

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- (a) meeting the basic human needs of present and future generations;
- (b) promoting equitable access to water;
- (c) redressing the results of past racial and gender discrimination;
- (d) promoting the efficient, sustainable and beneficial use of water in the public interest;
- (e) facilitating social and economic development;
- (f) providing for growing demand for water use;
- (g) protecting aquatic and associated ecosystems and their biological diversity;
- (h) reducing and preventing pollution and degradation of water resources;
- (i) meeting international obligations;
- (j) promoting dam safety;
- (k) managing floods and droughts,

and for achieving this purpose, to establish suitable institutions and to ensure that they have appropriate community, racial and gender representation. Furthermore, for the purpose of the Act, a wetland is defined as land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soils. A licence is required where the water flow in a watercourse is diverted or impeded, or where the bed, banks, course or characteristic of a watercourse are altered (in terms of the National Water Act, No. 36 of 1998).

- **National Environmental Management: Biodiversity Act (Act No. 10 of 2004)**

The objectives of the Act are:

- (i) within the framework of the National Environmental Management Act, to provide for the:
 - management and conservation of biological diversity and its components in South Africa
 - use of indigenous biological resources in a sustainable manner; and
 - fair and equitable sharing among stakeholders of benefits arising from bioprospecting involving indigenous biological resources
- (ii) to give effect to ratified international agreements relating to biodiversity which are binding to South Africa
- (iii) to provide for co-operative governance in biodiversity management and conservation in South Africa

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.

The theme of restoration runs strongly through existing policy instruments in the environment, biodiversity, water and agriculture sectors. The content of Resolution VIII.16 is being used in the implementation of these policy instruments, and contributed to the development of a strategic framework for wetland restoration, developed by Working for Wetlands.

Since Ramsar COP8, a national initiative for wetland rehabilitation, Working for Wetlands, has been established as a concrete programme, housed within the South African National Biodiversity Institute. Currently the programme rehabilitates 80-100 wetlands per year. The programme simultaneously contributes to the objectives of the Expanded Public Works Programme, through a labour intensive focus that resulted in over 4000 people being employed and equipped with vocational and life skills over the preceding triennium.

Wetlands have been identified as priority for restoration through the development of criteria that include ecological, hydrological and social elements. In December 2004 a GIS-based tool for systematic prioritisation of tertiary catchments within which to concentrate restoration interventions was completed. This model utilises 13 criteria, which can be switched on or off and weighted according to their relative importance, in order to arrive at a spatial prioritisation of catchments. The criteria are based on the following spatial datasets:

1. areas identified through the National Biodiversity Spatial Assessment as being priorities for biodiversity conservation
2. protected areas
3. peatland ecoregions
4. Ramsar sites
5. water stressed catchments, in terms of supply relative to demand
6. catchment scale water quality indicators
7. Spatial Development Initiatives
8. catchments with Catchment Management Agencies in place
9. index of conservation status
10. soil erodibility index
11. priority areas for the invasive alien plant control activities of the Working for Water programme
12. poverty gap index
13. nodes identified under the Integrated Sustainable Rural Development and Urban Renewal programmes

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). None

4.2 Does your country monitor hunting levels? If so, how is this information collated and reported? No

4.3 Describe action undertaken by hunting clubs and organisations to manage hunting activity e.g. cooperative action, issuing of licences and proficiency testing of individual members. None

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.

Avitourism Development

BirdLife South Africa is developing avitourism through the implementation of community-based BirdLife Birding Routes. The birding routes will combine existing resources into exciting avitourism destinations that will conform to standards agreed with the Department of Environmental Affairs and Tourism. The Richards Bay Rio Tinto initiative forms part of the foundation of this programme.

More tourism activities taking place in South Africa:

- Regular at Bird Island, Lambert's Bay
- Limited at Malgas, Dassen, Dyer and Bird Island, Algoa Bay. Robben Island is a major tourist attraction
- Boulders (Stony Point to a much lesser extent) major tourist attractions

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

They benefit from ecosystem services and livelihoods provided by these important waterbird sites

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.

Legislation relating to EIAs in South Africa is structured in such a way that it regulates activities that may have a substantial detrimental effect on the environment, rather than regulating impacts of any activity on particular areas such as wetlands. The majority of activities that have the potential to significantly impact upon wetlands are covered by the NEMA EIA Regulations.

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 summarize any land-use conflicts especially emphasising successful solutions to problems encountered in promoting the wise-use of waterbirds and their habitats.

None

5. Research and monitoring

Status of research and monitoring programmes for species

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.

Coordinated Waterbird Ringing Schemes (AFRING) coordinated by Avian/Animal Demography Unit of the University of Cape Town is running ringing projects in Africa (See Appendix 4 for more information regarding the project). The first ringing course took place from the 19-26 September 2004, in Mida Creek at the A Rocha Bird Observatory and Field Study Centre near Watamu on the central Kenyan coast. The area is one of the Important Bird Areas (IBAs) and eight delegates from four African countries (Kenya, Ghana, Tanzania and Uganda) participated in this ringing course.

Funded by the African-Eurasian Migratory Waterbird Agreement (AEWA), with partial funding from the Highlands Ringing Group in Scotland, the course formed part of phase one of the workplan for the project "Coordination of waterbird ringing schemes in Africa" which is listed as priority No. 20 under AEWA's International Implementation Priorities 2000-2004. The objective is to develop an African waterbird ringing scheme (AFRING), with the focus placed on migratory species of waterbirds. To achieve this, the project aimed to kick-start waterbird ringing in Africa and through holding waterbird ringing training courses plans to build up local expertise to sustain waterbird ringing into the future. The course focussed on East Africa, as the ringing scheme in the region is relatively well established providing a useful platform from which to launch waterbird ringing initiatives in Africa. An AFRING ringers network has been established to ensure constant communication between trainees and AFRING.

5.2 What monitoring activities does your country undertake, including any bilateral or multilateral cooperative 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

The African-Eurasian Migratory Waterbird Agreement (AEWA) funded the project, African Waterbird Ringing Scheme, a bird-ringing project coordinated by South Africa. With a lack of information on migration and ecology of waterbirds in Africa, AEWA identified the need to improve coordination between ringing schemes within Africa and provided funding to establish AFRING (African Waterbird Ringing Scheme). Spearheaded by the Avian/Animal Demography Unit, at the University of Cape Town, the initial focus of the five-year project will be to kick-start waterbird ringing in Africa with the goal to sustain and coordinate

waterbird ringing programmes in the long-term. A large component of this includes training waterbird ringers throughout Africa, including South and southern Africa.

The project completed Phase 1 during 2004 and second phase, run from 2005 - 2007. Phase 1 dealt with setting up AFRING in terms of human resources, developing an integrated ringing information system covering all African waterbird species, arranging stakeholder and role player meetings to discuss the AFRING concept and initiating the first African waterbird ringing training course. Tasks identified for phase 2 include further stakeholder meetings to discuss progress of the project, identifying and implementing species-specific projects (e.g. look at movements of Great White Pelicans and African Sacred Ibis) and arranging additional waterbird ringing training courses. The AEWA secretariat has committed itself to financing the project for the phases 1 & 2. Following this, it is the eventual goal of AFRING to make it financially self-sustainable in the long-term.

South African Bird Ringing Unit (SAFRING) administers bird ringing in southern Africa, supplying rings, ringing equipment and services to volunteer and professional ringers in South Africa and neighbouring countries. All ringing records are curated by SAFRING, which is an essential arm of the Avian Demography Unit. Contact is maintained by the SAFRING Project Coordinator with all ringers (banders in North American or Australian terminology).

The Bird Ringing Scheme in South Africa was initiated in 1948. During the period between 1948 and 1998, over 1.7 million birds of 852 species were ringed. There have been a total of 16 800 ring recoveries since the inception of the scheme. This gives an overall recovery rate for rings in southern Africa of marginally less than 1%, averaged across all species. This probability varies enormously across species.

The traditional objective of SAFRING is to establish a database of recoveries of southern African birds that can be used to establish information about movement and survival. Every bird ringed, no matter what species or where it was ringed has the potential to contribute to the SAFRING recovery database. Since 1982, this database has been supplemented by a retrap database, supplied by ringers on a voluntary basis. This contains ringing and latest retrap details of birds recaptured at least 12 months after being ringed.

The database as a whole is a resource which may be used by researchers, conservation biologists and managers, and primarily provides answers to questions related to movement and survival. Research into bird populations of importance to fisheries, agriculture, conservation and water management authorities involves bird ringing. Ringing provides a cost-effective tool for monitoring our environment and commonly draws attention to pollution, poisoning, powerline incidents, longline fishing fatalities and other hazards.

There are currently 130 active ringers operating in South Africa and neighbouring countries such as Namibia, Botswana, Zimbabwe, Zambia and Malawi. About 70 000 birds are ringed annually. Ringers, both amateur and professional, have to pay for all rings used. Exceptions are those rings used on Redbilled Quelea, which are paid for by the Department of Agriculture. Recoveries of ringed quelea provide data on movements and mortality and contribute to a better understanding of the population dynamics of this explosive species.

Next steps and possible projects

SAFRING's journal and SAFRING News, has been changed to AFRING News, to facilitate communication about bird ringing through Africa.

Some of the greatest gaps in knowledge of African birds, that can be answered by ringing, include the following issues:

1. Intra-African migration, e.g. Diederik Cuckoo, Whitethroated Swallow
2. Annual survival
3. Timing and duration of primary moult

Table of potential ringing projects in Africa by species

Species	Latin	Purpose	Project
White Pelican	<i>Pelecanus onocrotalus</i>	Movements, survival	Engraved; satellite
Cattle Egret	<i>Bubulcus ibis</i>	Dispersal movements	Engraved rings
White Stork	<i>Ciconia ciconia</i>	Movements	Satellite, new German rings
Abdim's Stork	<i>Ciconia abdimii</i>	Movements	Engraved rings
Sacred Ibis	<i>Threskiornis aethiopicus</i>	Movements, survival	Engraved rings
African Spoonbill	<i>Platalea alba</i>	Movements	Engraved rings
Greater Flamingo	<i>Phoenicopterus ruber</i>	Movements	Engraved rings
Egyptian Goose	<i>Alopochen aegyptiacus</i>	Movements, survival	Ringing
Southern Pochard	<i>Netta erythrophthalma</i>	Movements	Ringing
Knob-billed Duck	<i>Sarkidiornis melanotos</i>	Movements	Ringing
White-fronted Plover	<i>Charadrius marginatus</i>	Movements, ecology	Colour rings
Kittlitz's Plover	<i>Charadrius pecuarius</i>	Movements	Colour rings
Crowned Plover	<i>Vanellus coronatus</i>	Movements, survival	Colour rings
Blacksmith Plover	<i>Vanellus armatus</i>	Movements, survival	Colour rings
Turnstone	<i>Arenaria interpres</i>	Migration	Colour rings
Black-winged stilt	<i>Himantopus himantopus</i>	Movements, survival	Colour rings
Grey-headed Gull	<i>Larus cirrocephalus</i>	Local movements, survival	Engraved rings
Hartlaub's Gull	<i>Larus hartlaubii</i>	Local movements, survival	Engraved rings
Caspian Tern	<i>Hydroprogne caspia</i>	Local movements	Engraved rings
Swift Tern	<i>Sterna bergii</i>	Movements, ecology	Engraved rings

Common Tern	<i>Sterna hirundo</i>	Migration	Counts; search for recoveries
European Swallow	<i>Hirundo rustica</i>	Migration, wintering	EURING Swallow project
Red-billed Quelea	<i>Quelea quelea</i>	Movements	Ringling

Bird Monitoring Projects

BirdLife South Africa members participate in the following bird monitoring projects that are run by The Avian/Animal Demography Unit (ADU) at the University of Cape Town.

Coordinated Waterbird Counts

The Coordinated Waterbird Counts (CWAC) was launched in 1992. The objective of CWAC is to monitor South Africa's waterbird populations and the conditions of the wetlands which are important for waterbirds. This is being done by means of a programme of regular mid-summer and mid-winter censuses at a large number of South African wetlands and estuaries, at regular six-monthly intervals. CWAC currently monitors over 350 wetlands around the country.

This project was initiated in part-fulfillment of South Africa's commitment to the Ramsar Convention. CWAC also contributes its data to the African Waterbird Census, a programme coordinated by Wetlands International and based at the African headquarters of Wetlands International in Senegal.

In February 1995 a CWAC workshop was held in Wakkerstroom in the province of Mpumalanga. On this occasion professional conservators from the conservation agencies and dedicated amateurs from the ranks of BirdLife South Africa came together to plan the future direction and expansion of the CWAC programme. One of the concrete products to emerge from this valuable collaboration is a list of priority wetlands which CWAC will aim to survey.

In 1999, the *TOTAL CWAC Report* was published. It provides a useful summary of all counts made between the start of the project and 1997. A summary of the main findings of this report was published in Bird Numbers. The report can be ordered from Horizon Book Services, via this website.

Comparisons of counts from different wetlands give indications of seasonal movements and the relative importance of sites for the conservation of different species. Once the project expands to include all of South Africa's major wetlands, the information for all sites together will enable us to produce annual population indices to trace the fluctuations, increases and declines of populations

The following 25 sites recorded more than 2000 birds:

Name	Province	Total count
Bloemhof Dam	Free State	12042

Erfenis Dam	Free State	11627
Lower Berg River	Western Cape	10942
Orange River Estuary	Northern Cape	9240
Barberspan	North West	8647
Lake St Lucia	KwaZulu-Natal	8538
Krugersdrift Dam	Free State	8478
Spitskop Dam	Northern Cape	7790
Wilderness Lakes - Swartvlei System	Western Cape	7364
Langebaan Lagoon	Western Cape	7316
Strandfontein Sewage Works	Western Cape	6622
Kamfers Dam	Northern Cape	6426
Wilderness Lakes - Touw System	Western Cape	5963
Allemanskraal Dam	Free State	5716
Botrivierlei (Bot River Estuary)	Western Cape	5310
Chelmsford Dam	KwaZulu-Natal	4042
Kalkfontein Dam	Free State	3627
Marievale Bird Sanctuary	Gauteng	3566
Knellpoort Dam	Free State	3374
Kabeljous River Estuary	Eastern Cape	3032
Rusfontein Dam	Free State	2979
Pongolapoort Dam	KwaZulu-Natal	2576
Bonaero Park Pan	Gauteng	2518
Knysna Lagoon	Western Cape	2470

Leeuwpán	Mpumalanga	2150
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CAR - Coordinated Avifaunal Roadcounts

Large and conspicuous birds offer the opportunity to monitor their populations by means of relatively simple techniques. One of these techniques is the "road count", in which observations are made from vehicles covering fixed routes.

CAR has since spread rapidly to other provinces and now monitors over 20 species of large terrestrial birds (cranes, bustards, korhaans, storks, Secretarybird and Bald Ibis) along 340 fixed routes covering 19 000 km. Fourteen of these species appear in the Red Data Book. Twice a year, in midsummer (the last Saturday in January) and midwinter (the last Saturday in July), roadcounts are carried out using this standardised method. A standardised method allows one to make comparisons between counts. Even though the project does not attempt to count the entire population of a species, the area covered is so large that CAR is statistically capable of demonstrating trends in population size. The project also reveals details of habitat use and the relationship of populations to the agricultural practices of an area.

Save the Albatross Seabird Programme

The Global Seabird programme, founded in 1997, is managed by BirdLife South Africa on behalf of BirdLife International. The programme is involved by many countries, focusing on international action. Funded initially by the RSPB, then the British Birdwatching Fair, the primary objective is to reduce the deaths of albatrosses and petrels. About 300 000 birds are drowned every year after swallowing baited hooks and being dragged underwater as a result of longline fishing industry practices. This is viewed as a long-term programme that will evolve to tackle other conservation issues in the course of time.

Life-history characteristics of the White-fronted Plover

Since 1998, this project has monitored the annual reproductive effort, nesting success, survival and dispersal characteristics of a population of about 100 colour-ringed pairs of White-fronted Plover *Charadrius marginatus* breeding on the beaches of the Cape Peninsula. The results are being used for a comparison of breeding productivity and life-history traits between south-temperate *C. marginatus* and two related north-temperate species, Kentish Plover *C. alexandrinus* and Piping Plover *C. melodus*. The project also addresses conservation issues related to the impact of coastal development and tourism disturbance on the breeding success and population dynamics of this common coastal bird.

The Wakkerstroom project

This project is run by BLSA and involves a 4 square kilometre wetland owned by BLSA, situated in the Grassland Biosphere Reserve in Mpumalanga Province and home to several globally threatened species. The area is the core of the global range of species such as

Rudd's and Botha's Lark and as such holds the key to their survival. It is also of huge significance to species such as the Grey Crowned Crane, Bald Ibis and White-winged Flufftail. Aside from protecting habitat, the BLSA centre at Wakkerstroom is also the site of the hugely successful guide-training program. This program aims to identify local residents in rural areas that show potential for bird guiding. These individuals are then trained and evaluated at Wakkerstroom before returning to their homes to set up small businesses that enable visitors to see highly sought after species such as Pel's Fishing Owl, Rosy-throated Longclaw, Blue Swallow, Taita Falcon and Black-fronted Bushshrike. This guide-training program has enabled the development of community-run, nature-based tourism in areas without local economies and has given birds and natural habitats a value that they did not have before. This latter tenet is central to the development of Avi-Tourism in South Africa and BLSA is in the process of developing several community-based birding routes in the country.

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 AEWA Action Plan.

South Africa continues to educate and increase public awareness in relation to the conservation status of AEWA species through regular communications by government departments, academic and non-governmental organization via electronic, visual and print media with scientific, conservation and fishing communities, as well as the general public.

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

Marine & Coastal Management (MCM), or its contractee(s), run annual workshops at which captains and fishing crew of longline vessels, as well as representatives of fishing companies, associations and unions, are given the opportunity to attend and contribute to lectures and presentations (in more than one official language) that will, *inter alia*, cover the following subjects:

- (i) Aspects of the biology and conservation requirements of affected species of birds,
- (ii) Correct use and the efficacy of prescribed and non-prescribed mitigation measures,
- (iii) Identification of seabirds both at-sea and in the hand,
- (iv) Procedures for recording, labelling and returning to port any seabirds that come aboard dead during hauling operations,
- (v) Correct and safe procedures for handling live birds, removal of ingested and imbedded hooks and entangled lines, and the release of birds caught alive during hauling, and
- (vi) How correct use of mitigation measures may improve fishing efficiency and/or catch size, and therefore profits, by way of reducing bait loss and increasing soak time (by faster line sink-rates) as well as creating opportunities for "green- labelling" of seabird-friendly products through such mechanisms as assessment and certification by the Marine Stewardship Council.

Training of observers by MCM

The fisheries observer-training programme has been developed and implemented by Birdlife South Africa. The course's aim is to inform fisheries observers of seabird conservation issues, how and why mitigation measures work, as well as seabird identification. Development of a training manual and video are underway and will be available in English, Afrikaans and Portuguese for distribution within South Africa, Namibia and Angola.

Contracted observer companies should run regular training courses for both existing staff and recruits that, *inter alia*, cover the following subjects:

- (i) standardised procedures for the collection of reliable data on numbers and rates of birds killed and brought aboard alive during setting and hauling operations, respectively,
- (ii) aspects of the biology and conservation requirements of affected species of birds,
- (iii) correct use and the efficacy of prescribed and non-prescribed mitigation measures,
- (iv) identification of seabirds both at-sea and in the hand,
- (v) procedures for recording, labelling and returning to port any seabirds that come aboard dead during hauling operations, and
- (vi) correct and safe procedures for handling live birds, removal of ingested and imbedded hooks and entangled line, and the release of birds caught alive during hauling.

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)?

Many different activities have taken place each year for World Wetlands Day. Schools, government departments, the public and NGO's involved in wetland issues have participated. Examples include visits to wetland rehabilitation sites for high profile politicians and industry leaders, organised by Working for Wetlands and the provincial governments; radio and television interviews, newspaper articles, school visits to a wetland, etc. by all those involved in wetland conservation in South Africa. World Wetlands Day has been celebrated every year since its inception, with visible increases in interest, profile and participation every year.

7. Final comments

7.1 General comments on the implementation of the AEWA Action Plan

None

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

- a. The Agreement Secretariat (Fair)*
- b. International organizations (No Contact)*
- c. AEWA NGO partners (No Contact)*

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

The Action Plan should clearly express practical actions and guideline of implementation.

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

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

None

9. OPTIONAL SECTION – Planned and future actions N/A

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

1. Species conservation
2. Habitat conservation
3. Management of human activities
4. Research and monitoring
5. Education and information

List of abbreviations and acronyms used in the report

African-Eurasian Waterbirds Agreement	AEWA
African Gamebird Research and Education Trust	AGRED
Avian/ Animal Demography Unit	ADU
Birdlife South Africa	BLSA
Convention on Migratory Species	CMS
Coordinated Waterbird Counts	CWAC
Coordinated Avifaunal Roadcounts	CAR
Department of Water Affairs and Forestry	DWAF
Dichloro Diphenyl Dichloro Ethylene	DDE
Environmental Impact Assessment	EIA
Endangered Wildlife Trust	EWT
Exclusive Economic Zone	EEZ
Food and Agriculture Organization of the United Nations	FAO
Important Bird Area	IBA
International Union for Conservation of Nature	IUCN
Marine Protected Area	MPA
Marine and Coastal Management branch of DEAT	DEAT MCM
National Department of Environmental Affairs and Tourism	DEAT
Non -Governmental Organisation	NGO
Oystercatcher Conservation Programme	OCP
Polychlorinated byphenyls	PCBs
Prince Edward Islands	PEIs
Ramsar 8 th meeting of Conference of the Contracting Parties	COP8
South African Bird Ringing Unit	SAFRING
South African National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries	NPOA-Seabirds
Vessel Monitoring System	VMS
Waterbird Ringing Schemes in Africa	AFRING

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- Ellis, S. 1999. The penguin conservation assessment and management plan (CAMP): a description of the process. Apple Valley: IUCN/SSC Conservation Breeding Specialist Group
- Evans, S. The important bird areas conservation programme. Birdlife South Africa website, www.birdlife.org.za
- Harebottle, D. Coordination of waterbird ringing schemes in Africa. Avian Demography Unit website
- Underhill, L.G & Harebottle, D. 2001. Coordinated waterbird counts (CWAC): Tenth Annual Report: April 2000- March 2001
- Ramsar Report National planning tool for the implementation of the Ramsar conservation on wetlands

Appendices

Appendix 1: Status of Single Species Action Plans

Appendix 1.1

South African National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries.

Appendix 1.2

African Penguin – Population & Habitat Viability Assessment (Penguin Conservation Assessment And Management Plan (Penguin Camp).

Appendix 1.3

White-winged flufftail management strategy.

Other Single species Action Plan implemented in South Africa:

- Conservation Assessment and Management Plan for Southern Africa Coastal Seabirds published 2003.
- Oystercatcher Conservation Programme (OCP) coordinated by **Percy Fitzpatrick Institute of African Ornithology**.

Appendix 2: List of sites of international importance

Appendix 2

List if Ramsar sites in South Africa.

Appendix 3: Status of management plans for sites of international importance

None

Appendix 4: List of research and monitoring programmes and projects

None

Appendix 5: List of national institutions involved in migratory waterbird conservation

National Departments:

- Department of environmental Affairs and Tourism
- Department of Water Affairs and Forestry

South African provincial departments:

- Gauteng Province: Department of Agriculture, Conservation and Environment
- Mpumalanga Province: Department of Economic Development and Planning
- Limpopo Province: Department of Economic Development, Environment and Tourism
- Free State Province: Department of Tourism, Environment and Economic Affairs
- Kwa-Zulu Natal Province: Department of Agriculture and Environ Affairs
- Northern Cape Province: Department of Economic Affairs and Tourism
- Western Cape Province: Department of Environmental and Development Planning
- Eastern Cape Province: Department of Economic Affairs, Environment and Tourism

- North-West Province: Department of Agriculture, Conservation, Environment and Tourism

The following organizations are doing work that helps in the conservation of waterbirds in South Africa:

- Avian/Animal Demography Unit (ADU) of the University of Cape town;
- Birdlife South Africa (BLSA)
- Endangered Wildlife Trust (EWT)
- The African Gamebird Research and Education Trust (AGRED)
- Percy FitzPatrick Institute of African Ornithology

Appendix 6: List of relevant World Wide Web addresses for national institutions involved in migratory waterbird conservation

<http://www.deat.gov.za>

http://web.uct.ac.za/depts/stats/adu/p_cwac.htm

<http://www.birdlife.org.za>

www.savethealbatross.net

www.zbr.co.za

www.limpobirding.com

www.ramsar.org

Appendix 7: List of relevant migratory waterbird and habitat conservation projects initiated, ongoing or completed in the last three years

None