

AEWA Conservation Guidelines No. 6

Guidelines on regulating trade in migratory waterbirds



Introduction

In Article II of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds, Parties agree, as a fundamental principle, to take co-ordinated measures to maintain migratory waterbird species in a favourable conservation status or to restore them to such a status. To this end, the Parties agree to apply within the limits of their national jurisdiction a number of general conservation measures prescribed in Article III of the Agreement, as well as a number of more specific actions determined in the Action Plan appended to the Agreement. In paragraph 7.3 of the Action Plan, the Agreement Secretariat is required to co-ordinate the development of a series of Conservation Guidelines to assist the Parties in the implementation of their obligations under the Agreement. These Conservation Guidelines, which should be prepared in co-ordination with the Technical Committee and with the assistance of experts from Range States, were submitted to the First and Second Meetings of the Parties, which recommended publication after minor amendment, and further recommended regular review (Article IV, paragraph 4 of the Agreement). The Technical Committee keeps the guidelines under review, and formulates draft recommendations and resolutions relating to their development, content and implementation for consideration at sessions of the Meeting of the Parties (paragraph 7.6 of the Action Plan).

Paragraph 7.3 of the Action Plan gives a list of some of the topics that should be covered by the Conservation Guidelines. These are as follows:

- (a) single species action plans;
- (b) emergency measures;
- (c) preparation of site inventories and habitat management methods;
- (d) hunting practices;
- (e) trade in waterbirds;
- (f) tourism;
- (g) reducing crop damage;
- (h) a waterbird monitoring protocol.

Preparation of the Conservation Guidelines was identified as a major activity in the *International Implementation Plan for the Agreement of the Conservation of African-Eurasian Migratory Waterbirds 1997-1999*, prepared by Wetlands International in April 1997 with financial support from the Ministry of Agriculture, Nature Management and Fisheries in The Netherlands. Activity 3 of the *Implementation Plan* involved the preparation of nine sets of conservation guidelines, following the list in paragraph 7.3 of the Action Plan, but treating site inventories and habitat management methods as two separate topics. These Guidelines were accepted by the first Meeting of the Parties in Cape Town, South Africa, in November 1999, subject to minor amendment. The necessary amendments were made after discussion by the Technical Committee, and the amended version of the Conservation Guidelines was accepted by the second Meeting of the Parties to the Agreement in Bonn, Germany, in September 2002.

The nine sets of guidelines, as set out in the *Implementation Plan* and presented here, are as follows:

1. Guidelines on the preparation of Single Species Action Plans for migratory waterbirds

In paragraph 2.2.1 of the Action Plan, Parties are required to co-operate with a view to developing and implementing international single species action plans for populations listed in Category 1 in Column A of Table 1 as a priority and also for those populations listed with an asterisk in Column A of Table 1. Furthermore, in paragraph 2.2.2, Parties are required to prepare and implement national single species action plans for all those populations listed in Column A of Table 1 with a view to improving their overall conservation status. The Agreement Secretariat is required to co-ordinate the development, harmonisation and implementation of these plans. The present guidelines focus on national single species action plans. They outline a standard procedure for the preparation of such action plans, and identify the priority species and populations occurring in the Agreement Area.

2. Guidelines on identifying and tackling emergency situations for migratory waterbirds

In some situations, populations of waterbirds can suddenly be subjected to much higher levels of mortality than normal. These emergency situations can arise as a result of natural phenomena, such as periods of exceptionally cold weather or prolonged droughts, or as a result of man-made disasters, such as major pollution incidents. International co-operation is required to address these situations without delay. In Article III, paragraph 2 (f) of the Agreement, Parties agree to co-operate in emergency situations requiring international concerted action and in identifying the species of migratory waterbirds, which are the most vulnerable to these situations. Furthermore, Parties agree to co-operate in developing appropriate emergency procedures to provide increased protection to these species in such situations. In paragraph 2.3 of the Action Plan, Parties are required, in close co-operation with each other whenever possible and relevant, to develop and implement emergency measures for populations listed in Table 1, when exceptionally unfavourable or endangering conditions occur anywhere in the Agreement Area. At its third session, the AEWA Technical Committee adopted criteria to define emergency situations, which require urgent conservation measures, and determined the modalities for assigning responsibility for action to be taken (Article VI, paragraph 7 (e) of the Agreement). The present guidelines identify many of the possible emergency situations that may arise, and outline procedures for establishing early warning systems and tackling these situations at national level.

3. Guidelines on the preparation of site inventories for migratory waterbirds

In Article III, paragraph 2 (c) of the Agreement, Parties are required to identify sites and habitats for migratory waterbirds occurring within their territory. More specifically, in Paragraph 3.1.1 of the Action Plan, Parties are required, in liaison where appropriate with competent international organisations, to undertake and publish national inventories of the habitats within their territory, which are important to populations listed in Table 1. Parties should endeavour, as a matter of priority, to identify all sites of international or national importance for populations listed in Table 1 (Paragraph 3.1.2). These guidelines develop a step-wise approach to the inventory process, which takes full advantage of existing regional and national wetland inventories and lists of sites important for migratory waterbirds.

4. Guidelines on the management of key sites for migratory waterbirds

In Article III, paragraph 2 (c) of the Agreement, Parties are required to encourage the protection, management, rehabilitation and restoration of sites and habitats for migratory waterbirds occurring within their territory. More specifically, in Paragraph 3.2.1 of the Action Plan, Parties are required to endeavour to continue establishing protected areas to conserve habitats important for the populations listed in Table 1 of the Action Plan, and to develop and implement management plans for these areas. These guidelines set forth the basic procedures for the design and implementation of management plans, with special reference to sites of importance for migratory waterbirds.

5. Guidelines on sustainable harvest of migratory waterbirds

If populations of migratory waterbirds are to be maintained in a favourable conservation status, it is essential that any exploitation of these populations be carried out on a sustainable basis. Article III, paragraph 2 (b) of the Agreement requires that Parties ensure that any use of migratory waterbirds is based on an assessment of the best available knowledge of their ecology, and is sustainable for the species as well as for the ecological systems that support them. In paragraph 4.1.1 of the Action Plan, Parties are required to co-operate to ensure that their hunting legislation implements the principle of sustainable use as envisaged in the Action Plan, taking into account the full geographical range of the waterbird populations concerned and their life history characteristics. The present guidelines promote the establishment of 'harvest frameworks' at both international and national levels, and identify a series of steps to assist Range States in adopting a sustainable approach to the harvesting of waterbirds.

6. Guidelines on regulating trade in migratory waterbirds

Paragraph 7.3 of the Action Plan requires that guidelines be provided on the regulation of trade in waterbirds. Although it seems that there is relatively little international trade in migratory waterbirds in the Agreement Area, national (or domestic) trade can be very high, involving annual harvests of many thousands of birds for sale as food in local markets. In some areas, such trade may be of considerable importance to the local economies. These guidelines concern both international and domestic trade, and offer practical advice on how trade in waterbirds can be regulated within the framework of sustainable harvests.

7. Guidelines on the development of ecotourism at wetlands

The development of ecotourism based on spectacular concentrations of migratory waterbirds can not only increase support amongst the general public for waterbird conservation, but can also, if properly managed, provide a valuable source of income for local people with negligible harm to the environment. In Paragraph 4.2.1 of the Action Plan, Parties are required to encourage, where appropriate, the elaboration of co-operative programmes to develop sensitive and appropriate ecotourism at wetlands. Furthermore, in Paragraph 4.2.2, Parties are required, in co-operation with competent international organisations, to endeavour to evaluate the costs, benefits and other consequences that can result from ecotourism at wetlands with concentrations of waterbirds. The present guidelines examine a wide range of issues relating to nature-oriented tourism in general, and offer practical advice for the sensitive development of ecotourism at wetlands important for migratory birds.

8. Guidelines on reducing crop damage, damage to fisheries and other forms of conflict between waterbirds and human activities

Changes in population levels and distribution of waterbirds, combined with an intensification of agriculture and aquaculture, have led to increased conflicts between some waterbird species and human activities, notably agriculture, aquaculture, and commercial and recreational fisheries. With the great increase in air traffic in recent decades, many large waterbirds now pose a serious hazard to aircraft. In Paragraph 4.3.2 of the Action Plan, Parties are required to endeavour to gather information on the damage, in particular to crops, caused by populations listed in Table 1, and report the results to the Agreement Secretariat. In paragraph 4.3.3, Parties are required to co-operate with a view to identifying appropriate techniques to minimise the damage, or to mitigate the effects of damage, in particular to crops, caused by populations of waterbirds listed in Table 1. The present guidelines examine the major causes of conflict between migratory waterbirds and agriculture, fisheries and aviation, outline procedures for investigating the problems, and suggest a number of measures that can be taken to reduce the damage.

9. Guidelines for a waterbird monitoring protocol

Populations of all migratory waterbirds in the Agreement Area should be monitored on a continuous basis to determine population trends and to provide an early-warning system for species in difficulty. This will enable appropriate measures to be implemented before the populations fall to dangerously low levels. Paragraph 5.2 of the Action Plan requires that Parties endeavour to monitor the populations of waterbirds listed in Table 1, and make the results of such monitoring available to appropriate international organisations, to enable reviews of population status and trends. Paragraph 5.3 requires that they co-operate to improve the measurement of bird population trends as a criterion for describing the status of such populations. In Paragraph 5.8, Parties agree to co-operate with relevant international organisations to support research and monitoring projects. The present guidelines examine the value of monitoring in the conservation of migratory waterbirds, review existing monitoring practices, and provide guidance on the development of national waterbird monitoring schemes that are most appropriate for international conservation efforts.

Acknowledgements

These conservation guidelines were produced with financial support from the Ministry of Agriculture, Nature Management and Fisheries/ Department of Nature Conservation, the Swiss Agency for the Environment, Forests and Landscape/Division of Nature, and the DLO-Institute for Forestry and Nature Research (IBN-DLO, now Alterra, Wageningen) of the Netherlands.

Guidelines 1 to 9 were drafted by Albert Beintema, the late Dineke Beintema, Allix Brenninkmeijer, Simon Delany and Jeff Kirby and edited by Simon Delany and Derek Scott.

Drafts of five guidelines were discussed in Workshop 2 during the 2nd International Conference on Wetlands and Development in Dakar, November 1998. Many workshop participants gave useful comments.

The following people, in alphabetical order, provided information used for these guidelines, or commented on various drafts: Rachel Adams, Mindy Baha El Din, Sherif Baha El Din, Carlos Bento, Olivier Biber, Gerard Boere, Joost Brouwer, Luit Buurma, John Caldwell, John Clorley, Luis Costa, Earle Cummings, Elijah Danso, Nick Davidson, Bernard Deceuninck, Tim Dodman, Bob Douthwaite, Paul Eagles, Bart Ebbinge, Augustine Ezealor, Lincoln Fishpool, Vincent Fleming, Scott Frazier, Umberto Gallo-Orsi, Mariano Gimenez-Dixon, Andy Green, Patrick Green, Ward Hagemeyer, Elizabeth Halpenny, Jens Haugaard, René Henkens, John Harradine, David Hill, Baz Hughes, Alan Johnson, Tim Jones, Heribert Kalchreuter, Elena Kreuzberg-Mukhina, Namory Keita, Alexander Kozulin, Tony Laws, Yves Lecocq, Vicky Lee, Aivar Leito, Bert Lenten, Peter Leonard, Alison Littlewood, Heidi Luquer, Sonja Macys, Jesper Madsen, Gernant Magnin, Jamshid Mansoori, David Melville, Charles Mlingwa, Jérôme Mokoko Ikonga, Jean-Yves Mondain-Monval, Johan Mooij, Mike Moser, Wim Mullié, Dan Munteanu, Paul Murphy, Stephen Nash, Kike Olsder, John O'Sullivan, Michael Oneka, Dwight Peck, Stephan Pihl, Jim Porter, Crawford Prentice, David Pritchard, Rivo Rabarisoa, Marc van Roomen, Paul Rose, Rui Rufino, Luc Schifferli, Valentin Serebryakov, Marcel Silvius, Jan Willem Sneep, David Stroud, Barry Taylor, Wolf Teunissen, Graham Tucker, Janine van Vessem, Zoltan Waliczky, George Wallace, Rob van Westrienen, Johanna Winkelman, Marja Wren, Henk Zingstra.

AEWA Conservation Guidelines No.6

Guidelines on regulating trade in migratory waterbirds

Prepared by Wetlands International

and

Adopted by the Meeting of the Parties to AEWA at its second session
(September 2002, Germany)

Last update 19-4-2005

Step Chart

To ensure that any trade in migratory waterbirds is adequately regulated, each country should take the following steps:

Step 1: Conduct baseline assessment of the scale and significance of trade in waterbirds.

Step 2: Join CITES to monitor and regulate trade in endangered and vulnerable species.

Step 3: Ensure effective implementation of CITES regulations.

Step 4: Introduce measures to monitor and regulate other international and domestic trade.

Step 5: Ensure any trade is sustainable for waterbird populations.

Step 6: Educate and raise awareness of trade issues.

Introduction

Trade can be defined as the exchange of goods for money or other goods. Such exchanges can take place between people in different countries (international trade) or amongst people within a nation (domestic trade). Food, pets, hunting trophies, zoo specimens or traditional medicines can be traded, and trade can involve a low level of commercialisation (e.g. rural market trade) or be very commercial (e.g. international trade in rare species). Trade can involve live or dead intact birds, or parts of birds, such as skins and feathers, or eggs or young. Both wild and captive-bred birds may be traded.

Trade is sometimes criticised by animal welfare groups, and leads to concerns about adverse impacts on ecosystems from trapping activities and the spread of exotic species and diseases. Conversely, domestic trade seems important to some local economies, there being examples where markets are trading many thousands of birds each year. This trade may provide important incentives for maintaining and protecting existing wildlife habitats.

Accurate figures for the volume of trade in waterbirds are lacking, owing to the absence of comprehensive reporting requirements. The best available information is collected under CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Recent CITES data provide some insights into the waterbird species subject to international trade (see Box 1), and also the types of trade taking place (see Box 2). When compared with the trade in cage birds (e.g. parrots and songbirds), only small numbers of migratory waterbirds are subject to international trade in the AEWA area. Much more significant, both from a species conservation and a socio-economic viewpoint, is trade in domestic markets. Some studies have reported that hundreds of thousands of waterbirds are traded in this way.

In Article III, paragraph 2 of the Agreement, Parties agree to accord the same strict protection for endangered migratory waterbird species as is provided under Article III, paragraphs 4 and 5, of the Bonn Convention. In general terms, Parties should prohibit trade in birds or eggs, or any recognisable parts or derivatives of such birds and their eggs (see Appendix II to these guidelines for a list of globally threatened waterbirds in the AEWA area). Appendix I of the Bonn Convention lists species in danger of extinction and for which taking, for any purpose, is prohibited.

These guidelines concern both international and domestic trade in migratory waterbirds in the AEWA area. They offer practical advice on regulating trade through a series of steps identified to assist AEWA Range States in this task. Inevitably, there is some overlap between the regulation of trade in waterbirds and management of hunting harvest (see Guidelines No.5: *Guidelines on sustainable harvest of migratory waterbirds*).

Box 1. CITES trade figures for the AEWA region for species listed in the AEWA Action Plan.

	1996	1997
<i>Alopochen aegyptiacus</i>	36	357
<i>Anas acuta</i>	70	221
<i>Anas capensis</i>	20	8
<i>Anas clypeata</i>	50	547
<i>Anas crecca</i>	227	771
<i>Anas penelope</i>	80	305
<i>Anas querquedula</i>	83	26
<i>Aythya nyroca</i>	43	17
<i>Branta ruficollis</i>	148	50
<i>Bubulcus ibis</i>	10	32
<i>Casmerodius albus</i>	0	4
<i>Ciconia ciconia</i>	6	6
<i>Ciconia nigra</i>	4	8
<i>Dendrocygna bicolor</i>	13	26
<i>Geronticus eremita</i>	16	26
<i>Grus carunculatus</i>	1	1
<i>Grus grus</i>	1	0
<i>Grus leucogeranus</i>	5	10
<i>Grus paradisea</i>	4	2
<i>Grus virgo</i>	2	52
<i>Nettapus auritus</i>	110	177
<i>Oxyura leucocephala</i>	2	12
<i>Pelecanus crispus</i>	4	3
<i>Phoenicopterus minor</i>	1190	626
<i>Phoenicopterus ruber roseus</i>	105	116
<i>Platalea leucorodia</i>	5	16
<i>Plectropterus gambensis</i>	24	46
<i>Sarkidiornis melanotos</i>	30	15
<i>Threskiornis aethiopicus</i>	34	33
Grand totals	2323	2469

(Data supplied by The World Conservation Monitoring Centre)

Box 2. CITES information on the type of trade for species currently listed in the AEWA Action Plan based on trade figures for the AEWA region. Data supplied by The World Conservation Monitoring Centre.

		1996 (%)	1997 (%)
Source of birds	Captive bred	33	13
	Wild taken	67	87
Type of specimen	Live bird	93	16
	Dead whole bird	3	13
	Eggs	0.5	0.2
	Parts	3.5	70.8
Reason for trade	Zoo trade/captive breeding	13	6
	Science/Medicine	0.5	1.5
	Commercial	82	85
	Hunting trophy/Personal use	4.5	7.5

Step 1: Conduct baseline assessment of the scale and significance of trade in waterbirds

Within the AEWA area, the total number of migratory waterbirds involved in trade is currently unknown. Data on international trade are based only on CITES-listed species and only on the number of live exports. They do not take into account any mortality that occurs before export, although this may be considerable. CITES-listed species include few of the migratory waterbirds currently listed in the AEWA Action Plan (see Appendix V to these guidelines). Interestingly, three species listed in Appendix I of the Bonn Convention and 12 species currently afforded the highest conservation status in the AEWA Action Plan (Category 1 in Column A of Table 1) are not currently listed by CITES. These should be afforded a similar degree of protection from trade.

At the domestic level, only incomplete records are available for the number of migratory waterbirds harvested for trade. This information is necessary to:

- determine accurately whether such trade is sustainable or not, this being a key requirement for the protection of threatened and vulnerable populations;
- assess the scale and significance of trade in waterbirds;
- evaluate the impact of trade and its socio-economic importance;
- provide information for the setting of quotas or other control measures (see below).

The information on harvesting for trade must be coupled with monitoring the status of waterbirds (see Guidelines No.9: *Guidelines for a waterbird monitoring protocol*). There is little point in setting trade quotas if it is not known how many birds there are in the population that can be harvested in a sustainable way. In fact, the regulation of trade should move from being a reactive to being a proactive planning process. Currently trade continues until there is some evidence of severe depletion. Instead, trade should be regulated on the basis of recent population performance, with the precautionary principle being invoked where there is doubt about whether particular levels of harvests can be sustained.

Both the monitoring of populations and the monitoring of harvests are likely to be expensive, and each AEWA Range State must adopt procedures according to its capabilities. International guidance and a framework would clearly be important in the adoption of common standards to allow international syntheses and comparisons (see Guidelines No.9: *Guidelines for a waterbird monitoring protocol*). Revenues may be generated from the operation of both international and national trade regulations (*e.g.* export taxes, permit fees and dealers' authorisation certificates). It would seem beneficial for a portion of these revenues to be allocated to assessment and monitoring studies, including work at the local level.

Step 2: Join CITES to monitor and regulate trade in endangered and vulnerable species

CITES is the largest of all international wildlife conventions, with over 140 member countries. The aim of the Convention is to regulate international trade in endangered species and species that may become so unless their exploitation is controlled. CITES controls are mainly enforced at external frontiers. The species afforded some protection by CITES are listed in three different appendices.

- **Appendix I** lists species threatened with extinction and subject to international trade. International trade in wild specimens of these species is banned, save in exceptional circumstances. Trade in artificially propagated or captive-bred specimens is allowed, subject to licence.
- **Appendix II** lists species that may become threatened if trade is not regulated. International trade is monitored through a licensing system to ensure it stays below a level at which the species may become endangered. Trade in wild, captive-bred and artificially propagated specimens is allowed, subject to licence.
- **Appendix III** lists species not necessarily threatened worldwide but protected within individual Party States. These states need the help of other Parties to control trade in these species.

CITES regulations set out the rules for the import and export of CITES-listed species. Parties must ensure that all living specimens, during any period of transit, holding or shipment, are properly cared for so as to minimise the risk of injury, damage to health or cruel treatment. Parties must maintain adequate records of trade in CITES regulated specimens, including:

- names and addresses of exporters and importers;
- number and types of permits and certificates granted;
- country with which the trade occurred;
- numbers or quantities and types of specimens;
- names of species of the specimens traded.

In most Party States, the provisions of CITES are given the force of law by national legislation.

In the EU, CITES is implemented through Council Regulation (EC) No. 338/97 and Commission Regulation (EC) No. 1808/2001 (with amendments). Certain CITES Appendix II and Appendix III species are afforded stricter protection than under the Convention. Here, species are listed in four annexes.

- **Annex A** includes all CITES Appendix I species plus a number on Appendix II and Appendix III, and several species not listed by CITES.
- **Annex B** includes all Appendix II species plus a number on Appendix III and several species not listed by CITES.
- **Annex C** includes Appendix III species on which Member States do not have a reservation.
- **Annex D** includes four Appendix III species on which Member States have reservations, and species not listed by CITES which are imported into the EU in sufficient quantities to warrant monitoring.

The EU regulations set out the rules for importing species into or exporting them from the EU. A principal requirement is the undertaking of checks on imports at the first point of entry into the EU, irrespective of final destination. There is also an obligation on Member States to introduce comprehensive national legislation to enforce the regulations. This must address both import and export controls and controls on internal sales and movement (including a

power to obtain samples for DNA analysis). For some specimens, there are controls on movement and restrictions on purchase, sale and display. Member States also prohibit the holding of certain specimens; particularly live animals of the species listed in Annex A. The regulations also extend the controls to certain species not listed by CITES which need extra protection or monitoring.

There are a number of very comprehensive handbooks to CITES aimed at encouraging effective implementation, both globally and within the EU. These address definitions and the issue of documents, permits and certificates; enforcement measures, powers and penalties; the marking of specimens; health and welfare provisions; record keeping and reporting *etc.* Guidance is available from the Management Authorities of individual countries or from the CITES Secretariat.

AEWA Range States currently not party to CITES can make an important contribution to the regulation of international trade by adopting and implementing CITES. Some states may believe that trade should be stopped altogether, citing conservation or welfare reasons. Adherence to CITES does not in any way restrict the freedom of individual countries to adopt stricter measures for the regulation of trade, should they so wish.

Step 3: Ensure effective implementation of CITES regulations

For CITES to be effective, all parties to it must strive for comprehensive and responsible implementation and compliance. There were major problems during the implementation of CITES, since regulations are easily circumvented, corruption can be rife, quotas can have no scientific basis, conditions for specimens can be poor, and protected species sometimes continue to be traded through legal channels. Some countries, although signatories, lack sufficient personnel and other resources necessary for effective implementation of CITES. It is widely accepted that all countries can improve their implementation and compliance of CITES regulations.

On committing to CITES, national governments should review their overall policy towards wildlife conservation and utilisation, to ensure that CITES procedures can be incorporated and that sufficient resources can be made available. An overall management policy for trade in birds is likely to be needed, including context, objectives and components. Context is provided by the overall wildlife management framework, whilst objectives might include the provision of incentives for species or habitat conservation, to ensure long-term sustainability of populations harvested. Components might include biological monitoring (see Step 1), harvest and export controls (quota, permit and monitoring), maintaining animal welfare standards and ensuring that local communities benefit (see below).

Each party should ensure that it is legally equipped to enforce the provisions of CITES. This step should include adopting national legislation that incorporates a number of basic elements, such as:

- designation of enforcement agencies and officers;
- introduction of permit systems and quotas;
- setting of meaningful penalties;
- application of the law to all species listed in the CITES Appendices.

The national legislation should include immediate restrictions on the species that can be taken to those that are sufficiently abundant and have a favourable conservation status. Note that CITES requires that domestic legislation allows the use of penalties and confiscation to deter trade.

CITES also requires that each Party designates a Management Authority which issues import and export permits on the basis of advice from one or more Scientific Authorities. The involvement of customs teams, the police and wildlife rangers is also required for enforcement at national borders and within countries.

Good enforcement is the key to the effective regulation of trade in waterbirds. Fines, penalties and, for sustained illegal activities, convictions must be imposed to deter persistent offenders. Inspection of animal holding facilities and shipments should be used in conjunction with other trade control mechanisms to encourage compliance. It is important that such inspections are unannounced and of such a frequency that they serve as an adequate deterrent to illegal trapping and trade. Trappers, traders and exporters may be required, either for pragmatic reasons or legally, to affiliate and form associations. Associations should always adopt high standards and expel any members who violate these standards. The use of the law together with a tough stance towards those who contravene it will help to raise awareness amongst the public, wildlife traders and law enforcers.

Throughout every part of the trade regulation process, training, exchange of information and co-operation between agencies are paramount. Even existing enforcement personnel may lack the training and resources necessary to identify species in trade, and to verify the legitimacy of accompanying export documents. Illustrated manuals in local languages, best-fit identification systems, software tools and workshops can all help with increasing trade regulation and animal welfare standards. Many such materials are already available, but international agencies could take the lead in developing further training and information programmes.

CITES listings are dynamic, and it is important that Parties keep up to date. This is a role for the Management Authorities of individual countries and for the CITES Secretariat, but effective communication routes are required for information transfer to the local level. TRAFFIC International can help with a variety of guidance documents on the effective implementation of CITES. The CITES Secretariat can provide training seminars, legal advice and assistance with scientific studies.

Step 4: Introduce measures to monitor and regulate other international and domestic trade

Few countries in the AEWA area currently monitor all imports and exports of birds, including species not listed by CITES (only Denmark and the U.K.). Data on trade in migratory waterbirds could be substantially improved if all countries with known trade (determined through Step 1) were to introduce such comprehensive monitoring.

The monitoring and regulation of domestic trade in migratory waterbirds is likely to be substantially more difficult and resource intensive than is the case with international trade. Individual traders may work with many hundreds of contacts in dispersed rural villages who trap, or arrange for the trapping of, wild birds. It is therefore not surprising that there is currently little monitoring or control of domestic trade in wild birds, legal or otherwise, in many countries.

In those countries where capture of migratory waterbirds is serving a significant domestic market, there should, where possible, be more detailed assessments of the impact of harvests for domestic trade on wild bird populations. Ideally, an annual capture quota should be developed to cover species harvested for domestic use or export. Quotas should be allocated and monitored to keep harvests within established limits. To be effective, capture and export regulatory systems should be linked to ensure that permitted trapping levels do not exceed established harvest quotas.

High standards of animal welfare should be a fundamental component of all bird trade. This is also a conservation measure, since trade-associated mortality (through poor welfare) is likely to increase the number of birds removed from the wild to meet demand. As a result, this mortality may itself be considered a factor contributing to the decline of wild bird populations. Trade-associated mortality has been linked to inadequate provision of food and water, exposure to extreme temperatures, lack of adequate ventilation, disease, aggression and other causes. Ensuring acceptable levels of care is the responsibility of the trappers, the traders and all other persons involved.

Overall, where domestic trade appears significant for migratory waterbirds, regulatory procedures may be modelled on, and integrated with, those developed for CITES, and implemented through domestic legislation, as far as the resources and infrastructures of individual AEWA Range States will permit.

Step 5: Ensure any trade is sustainable for waterbird populations

Priority should be placed on determining the capacity of particular waterbird species to sustain various levels of harvest for trade. Using general knowledge of species biology and basic census techniques, it should be possible to establish safe harvest quotas without performing detailed studies of each and every species in trade. A sustainable trade harvest regime might include at least three major elements:

- harvest and export quotas based on monitoring of populations and ecological studies;
- monitoring and reporting of trapping and export activities;
- a system of profit-sharing with local communities.

The latter is important to ensure a sense of ownership and provide an incentive for wildlife conservation at the local level. Without such a programme of harvest management, any revision of quotas will be scientifically unfounded and cannot be expected to ensure that harvest levels are sustainable. It seems possible that harvest frameworks for hunting (see Guidelines No.5: *Guidelines on sustainable harvest of migratory waterbirds*) could be integrated with a framework for sustainable trade, since hunted birds may often be traded.

Step 6: Educate and raise awareness of trade issues

Many people, such as tourists and business travellers, remain unaware of international trade controls. Campaign materials, posters and information leaflets can be displayed or distributed, for example at airports, public meeting places and markets, to advise the general public about trade regulations. CITES materials are already available, but local education and awareness raising programmes, targeted where waterbirds are being collected for domestic or international trade, seem to be needed.

Also needed are partnerships that build links amongst all interested groups. These groups, which may involve governmental, non-governmental or commercial interests, may look at problems, share information, investigate issues and implement changes. When working together, each becomes more aware of the priorities of its partners. Further, the interest generated in combined efforts continues beyond the individual project, and with improved communication and information dissemination, each partner becomes more effective in regulating or managing trade on a sustainable basis.

References and useful web sites

1. ACTION PLANS

References and further reading

- Circumpolar Seabird Working Group 1997. *Circumpolar Eider Conservation Strategy and Action Plan*. CAFF Conservation of Arctic Flora and Fauna.
- Collar, N.J., M.J. Crosby & A.J. Stattersfield 1994. *Birds to Watch 2: The World Checklist of Threatened Birds*. BirdLife Conservation Series No.4. BirdLife International, Cambridge, U.K.
- Council of Europe 1997. *Drafting and implementing action plans for threatened species. Workshop, Bértiz, Navarre (Spain), 5-7 June 1997*. Environmental Encounters 39. Council of Europe Publishing, Strasbourg, France.
- Gimenez Dixon, M. 1996. The IUCN/SSC action plans for species conservation, concepts and basic guidelines. *Gibier Faune Sauvage, Game and Wildlife* 13: 1143-1152.
- Heredia, B., L. Rose, & M. Painter (eds.) 1996. *Globally threatened birds in Europe: Action Plans*. BirdLife International, Cambridge and Council of Europe, Strasbourg, France.
- Hilton-Taylor, C. (Compiler) 2000. *2000 IUCN Red List of Threatened Species*. IUCN, Gland, Switzerland and Cambridge, U.K.
- Meine, C.D. & G.W. Archibald 1996. *The Cranes: Status Survey and Conservation Action Plan*. IUCN, Gland, Switzerland and Cambridge, U.K.
- O'Donnell, C. & J. Fjeldsa 1997. *Grebes: Status Survey and Conservation Action Plan*. IUCN, Gland, Switzerland and Cambridge, U.K.
- Pihl, S. 1997. *European Species Action Plan: Steller's Eider Polysticta stelleri*. In: Final Technical Report and Claim, 1 March 1996 – 30 November 1997. Species Action Plans for 8 European Threatened Bird Species. RSPB, Sandy, U.K.
- RSPB 1997. *Species Action Plans for 8 European threatened species*. Royal Society for the Protection of Birds, Sandy, U.K.
- Stroud, D.A. 1992. *Greenland White-fronted Goose Anser albifrons flavirostris: International Conservation Plan*. National Parks and Wildlife Service of the Office of Public Works, Ireland, and the International Waterfowl and Wetlands Research Bureau, Slimbridge, U.K.
- Threatened Waterfowl Specialist Group. In prep. Global Action Plan for the Conservation of Anseriformes (Ducks, Geese, Swans and Screamers). IUCN, Gland, Switzerland.

Useful web sites

AEWA Action Plans can be found at:

http://www.unep-aewa.org/publications/technical_series.htm

Action Plans for EC Birds Directive Annex 1 species can be found at:

<http://europa.eu.int/comm/environment/nature/directive/birdspriority.htm>

IUCN Species Survival Commission Specialist Groups

<http://www.iucn.org/themes/ssc/sqs/sqs.htm>

IUCN Species Survival Commission Specialist Groups Action Plans

<http://www.iucn.org/themes/ssc/pubs/sscaps.htm>

2. EMERGENCY SITUATIONS

References and further reading

- Beintema, N 2001. *Lead poisoning in waterfowl, International Update Report 2001*. Wetlands International – AEME, Wageningen, The Netherlands.

- Gibbons, D.W., Smith, K.W., Atkinson, P., Pain, D., Arendt, W.J. gray, G., Hartley, J., Owen, A. & Clubbe, C. 1998. After the Volcano: a future for the Montserrat Oriole? *RSPB Conservation Review* 12: 97-101.
- Stanners, D. & P. Bourdeau (eds.) 1991. *The Dobris Assessment*. European Environment Agency, Copenhagen, Denmark. See also web site.
- Stroud, J.M. 1992. *Statutory suspension of wildfowling in severe weather: Review of past winter weather and actions*. JNCC Report 75. Joint Nature Conservation Committee, Peterborough, U.K.

Useful web sites

Botulism

<http://www.pnr-rpn.ec.gc.ca/nature/migratorybirds/avianb/ce00s02.en.html>

Diseases

<http://www.avianbiotech.com/diseases/newcastle.htm>

Algal blooms

<http://www.epa.gov/OWOW/estuaries/piesteria/>

<http://www.whoi.edu/redtide/>

Lead poisoning

<http://www.unep->

[aewa.org/publications/other_publications.htm](http://www.unep-aewa.org/publications/other_publications.htm)<http://www.britishcolumbia.com/Wildlife/wildlife/information/Lead%20Poisoning%20of%20Water%20Birds.htm>

Oil spill in Wales

<http://www.swan.ac.uk/biosci/empress/news.htm>

Oil spill in the Russian Federation

<http://www.american.edu/projects/mandala/TED/KOMI.HTM>

Oils spill in South Africa

<http://web.uct.ac.za/depts/stats/adu/oilspill/>

Cyanide pollution of river Tisza

<http://nfp-hu.eionet.eu.int/cyanide.html>

Heavy metal pollution of Coto Doñana

<http://www.yale.edu/ynhti/curriculum/units/1999/6/99.06.01.x.html>

National Response Center

<http://www.nrc.uscg.mil/nrchp.html>

Emergency Response Notification System

<http://www.nrc.uscg.mil/nrchp.html>

National Response Team

<http://www.nrt.org>

3. SITE INVENTORIES

References and further reading

- Burgis, M.J. & J.J. Symoens 1987. *African Wetlands and Shallow Water Bodies*. ORSTOM, Paris, France.
- Carp, E. 1980. *A Directory of Western Palearctic Wetlands*. UNEP, Nairobi, Kenya and IUCN, Gland, Switzerland.
- Costa, L.T., J.C. Farinha, N. Hecker & P. Tomàs Vives 1996. *Mediterranean Wetland Inventory: A Reference Manual*. MedWet/Instituto da Conservação da Natureza/Wetlands International Publication, Volume I.
- Cowardin, L.M., V. Carter, F.C. Golet & E.T. Laroe 1979. *Classification of wetlands and deep water habitats of the United States*. US Fish and Wildlife Service, Washington DC, USA.
- De Beaufort, F. & A.-M. Czajkowski 1986. *Zones Humides d'Afrique septentrionale, centrale et occidentale. II: Inventaire préliminaire et méthodologie*. Secretariat de la Faune et de la Flore, Museum National d'Histoire Naturelle, Paris, France.
- Ethiopian Wildlife and Natural History Society & BirdLife International 1996. *Important Bird Areas of Ethiopia. A First Inventory*. Ethiopian Wildlife and Natural History Society, Addis Ababa, Ethiopia.

- European Commission 1994. *Natura 2000. Special Protection Areas*. European Commission, Brussels, Belgium.
- European Communities 1991. *CORINE Biotopes: the design, compilation and use of an inventory of sites of major importance for nature conservation in the European Community. Report and Manual (3 volumes)*. Office for Official Publications of the European Communities, Luxembourg.
- Evans, M. I. (ed.) 1994. *Important Bird Areas in the Middle East*. BirdLife Conservation Series No.2. BirdLife International, Cambridge, U.K.
- Farinha, J.C., L. Costa, E. Fitoka, A. Mantzavelas, G. Zalidis, N. Hecker & P. Tomàs Vives 1996. *Mediterranean Wetland Inventory. Habitat Description System*. MedWet/Instituto da Conservação da Natureza/Wetlands International/EKBY Publication, Volume III.
- Frazier, S. 1999. *Ramsar Sites Overview: A Synopsis of the World's Wetlands of International Importance*. Wetlands International, Wageningen, The Netherlands.
- Frazier, S. 2002. *A Directory of Wetlands of International Importance*. CD-RoM. Wetlands International, Wageningen, The Netherlands.
- Heath, M.F. & Evans, M.I. (eds.) 2000. *Important Bird Areas in Europe: Priority sites for conservation*. 2 vols., Cambridge, U.K.: BirdLife International (BirdLife Conservation Series No. 8).
- Hecker, N. & P. Tomàs Vives (eds.) 1995. *The Status of Wetland Inventories in the Mediterranean Region*. MedWet Publication/IWRB Publication No.38. IWRB, Slimbridge, U.K.
- Hughes, R.H. & J.S. Hughes 1992. *A Directory of African Wetlands*. IUCN, Gland, Switzerland/UNEP, Nairobi, Kenya/ WCMC, Cambridge, U.K.
- Luther, H. & J. Rzóska, 1971. *Project Aqua: a source book of inland waters proposed for conservation*. IBP Handbook No.21. Blackwell Scientific Publications, Oxford.
- Magnin, G. & M. Yazar 1997. *Important Bird Areas in Turkey*. Dogal Hayati Koruma Dernegi, Istanbul, Turkey.
- Olney, P. 1965. *Project MAR. List of European and North African Wetlands of International Importance*. IUCN New Series No.5. IUCN, Morges, Switzerland.
- Scott, D.A. 1980. *A Preliminary Inventory of Wetlands of International Importance for Waterfowl in West Europe and Northwest Africa*. IWRB Special Publication No.2. IWRB, Slimbridge, U.K.
- Scott, D.A. (ed.) 1995. *A Directory of Wetlands in the Middle East*. IUCN, Gland, Switzerland and IWRB, Slimbridge, U.K.
- Scott, D.A. & P.M. Rose 1996. *Atlas of Anatidae Populations in Africa and Western Eurasia*. Wetlands International Publication No.41. Wetlands International, Wageningen, The Netherlands.

Useful web sites

- Ramsar sites directory
<http://www.wetlands.org/RDB/Directory.html>
- Ramsar Information Sheet
http://www.ramsar.org/key_ris_index.htm
- Ramsar Information Sheet explanatory notes and guidelines
http://ramsar.org/key_ris.htm#note
- Ramsar criteria
http://ramsar.org/key_criteria.htm
- UNESCO World Heritage List
<http://fp.thesalmons.org/lynn/world.heritage.html>

4. SITE MANAGEMENT

References and further reading

- Alexander, M. & J.M. Perrins 1993. *Countryside Management System*. Countryside Council for Wales, Barmouth, U.K.

- Eurosite Working Group on "Management Plans: Methods and Techniques" 1996. *European Guide for the Preparation of Management Plans for protected and managed natural and semi-natural areas*. Eurosite, Tilburg, The Netherlands.
- NCC 1983. *A handbook for the preparation of management plans*. Nature Conservancy Council, Peterborough, U.K.
- NCC 1987. *Site management plans for nature conservation, a working guide*. BP edition. Nature Conservancy Council, Peterborough, U.K.
- Scott, D.A. (ed.) 1982. *Managing Wetlands and their Birds: A Manual of Wetland and Waterfowl Management*. IWRB, Slimbridge, U.K.

Useful web sites

New guidelines for management planning for Ramsar sites and other wetlands

http://ramsar.org/key_guide_mgt_new_e.htm

Ramsar wise use guidelines

http://ramsar.org/key_wiseuse.htm

Additional guidance for the implementation of the Wise Use concept

http://ramsar.org/key_add_guide.htm

Eurosite Management Planning Toolkit

<http://www.seit.ee/projects/toolkit.pdf>

5. SUSTAINABLE HARVEST

References and further reading

- BASC 1994. *Shooting: Countryside Sport and Conservation. A Teacher's Resource Pack*. British Association for Shooting and Conservation, Rossett, U.K.
- Begbie, E. (ed.) 1989. *The New Wildfowler*. Third Edition. Stanley Paul, London.
- Beintema, N. 2001. *Lead poisoning in waterfowl, International Update Report 2001*. Wetlands International – AEME, Wageningen, The Netherlands
- Freese, C.H. (ed.) 1997. *Harvesting Wild Species: Implications for Biodiversity Conservation*. Johns Hopkins Press, Baltimore and London.
- Harradine, J. (ed.) 1992. *Wings in Waterfowl Research and Management*. Proc. 2nd Meeting IWRB Hunting Research (Wing Studies) Group. Saarbrücken, Germany, 9-10 April 1992. Wetlands International, Slimbridge, U.K.
- Laws, T. & Y. Lecocq 1996. The contribution of European hunting organisations in Anatidae conservation. In: M. Birkan, J. van Vesseem, P. Havet, J. Madsen, B. Trolliet & M. Moser (eds.), Proceedings of the Anatidae 2000 Conference, Strasbourg, France, 5-9 December 1994. *Gibier Faune Sauvage, Game Wildl.* 13: 1257-1260.
- Madsen, J. 1998. Experimental refuges for migratory waterfowl in Danish wetlands. II: Tests of hunting disturbance effects. *J. Appl. Ecol.* 35: 398-417.
- Madsen, J. & A.D. Fox 1995. Impacts of hunting disturbance on waterbirds - a review. *Wildlife Biology* 1: 193-203.
- Matthews, G.V.T. (ed.) 1990. *Managing Waterfowl Populations*. Proc. IWRB Symposium, Astrakhan, 1989. IWRB Special Publication No.12. IWRB, Slimbridge, U.K.
- Nichols, J.D. & F.A. Johnson 1996. The management of hunting of Anatidae. In: M. Birkan, J. van Vesseem, P. Havet, J. Madsen, B. Trolliet & M. Moser (eds.), Proceedings of the Anatidae 2000 Conference, Strasbourg, France, 5-9 December 1994. *Gibier Faune Sauvage, Game Wildl.* 13: 977-990.
- Pain, D.J. (ed.) 1992. *Lead poisoning in waterfowl*. IWRB Special Publication No.16. IWRB, Slimbridge, U.K.

Useful web sites

Federation of Field Sports Associations of the EU (FACE)

<http://www.face-europe.org/>

The Game Conservancy Trust (UK)
<http://www.gct.org.uk/>
International Council for Game and Wildlife Conservation (C. I. C.)
<http://www.cic-wildlife.org/>
Lead poisoning
<http://www.npwrc.usgs.gov/resource/othrdata/pbpoison/pbpoison.htm>
International Wildlife Rehabilitation Council
<http://www.iwrc-online.org/>

6. REGULATING TRADE

References and further reading

Bradley Taylor, M. 1996. *Wildlife Crime: A Guide to Law Enforcement in the United Kingdom*. Stationery Office, London.
Crawford, A. (compiler) 1997. *Making CITES Work: Examples of Effective Implementation and Enforcement*. TRAFFIC International, Cambridge, U.K.
De Klemm, C. 1993. *Guidelines for legislation to implement CITES*. IUCN, Gland, Switzerland and Cambridge, U.K.
Thomsen, J.B., S.R. Edwards & T.A. Mulliken (eds.) 1992. *Perceptions, Conservation & Management of Wild Birds in Trade*. TRAFFIC International, Cambridge, U.K.
Wijnstekers, W. 1995. *The Evolution of CITES. A reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora*. Fourth Edition. CITES Secretariat, Switzerland.
World Conservation Monitoring Centre 1995. *Checklist of birds listed in the CITES Appendices*. Joint Nature Conservation Committee Report No.236. JNCC, Peterborough, U.K.

Useful web sites

IUCN Species Survival Commission Specialist Groups
<http://www.iucn.org/themes/ssc/pubs/sscaps.htm>
CITES
<http://www.cites.org>
<http://international.fws.gov/cites/cites.html>
EU wildlife trade regulations
http://europa.eu.int/comm/environment/cites/legislation_en.htm
<http://www.wcmc.org.uk/species/trade/eu/>

7. DEVELOPMENT OF ECOTOURISM

References and further reading

Claridge, G. & B. O'Callaghan (eds.) 1997. *Community involvement in wetlands management: lessons from the field*. Incorporating the Proceedings of Workshop 3, Wetlands, Local People and Development, of the International Conference on Wetlands and Development, October 1995. Wetlands International, Kuala Lumpur, Malaysia.
Davidson, N. & P. Rothwell (eds.) 1993. Disturbance to waterfowl on estuaries. *Wader Study Group Bulletin 68, Special Issue*.
Eagles, P.F.J. 1997. *International Ecotourism Management: Using Australia and Africa as Case Studies*. IUCN World Commission on Protected Areas, Albany, Australia.
Henkens, R.J.H.G. 1998. *Ecologische capaciteit natuurdoeltypen I: methode voor bepaling effect recreatie op broedvogels*. IBN-rapport 363. Wageningen, The Netherlands.
Holt-Biddle, D. 1996. Vision of wildlife, ecotourism and the environment in southern Africa. In: *The Endangered Wildlife Trust, 1996 Annual*. Johannesburg, South Africa
IUCN 1992. *Proceedings of the IV World Congress of National Parks and Protected Areas*. Caracas, Venezuela.

- Kusler, J.A. (ed.) 1991. *Ecotourism and Resource Conservation*. 2 vols. Association of Wetland Managers, Berne, New York, USA.
- Lindberg, K., M. Epler Wood & D. Engeldrum (eds.) 1998. *Ecotourism: a guide for planners and managers*. 2 vols. The Ecotourism Society, North Bennington, Vermont, USA.
- Lindberg, K. & D.E. Hawkins (eds.) 1993. *Ecotourism: A Guide for Planners and Managers*. The Ecotourist Society, North Bennington, Vermont, USA.
- The Ecotourist Society (TES) 1993. *Ecotourism guidelines for nature tour operators*. North Bennington, Vermont, USA.
- Tourism Research and Education Centre 1990. *Towards Serving Visitors and Managing Our Resources*. Proceedings of a North American Workshop on Visitor Management in Parks and Protected Areas. University of Waterloo, Ontario, Canada
- UNEP IE Tourism Programme. Focus numbers and technical reports, e.g.
- Focus No.1, 1995: National Ecotourism Strategy, Australia.
 - Focus No.8, 1997: (Recreational) Carrying Capacity.
 - Technical Report No.29, 1995: Environmental Codes of Conduct for Tourism.
- U.S. Agency for International Development 1994. *An assessment of ecotourism associated with Bao Bolon and Kiang West National Park in the Gambia*. Office of Operations and New Initiatives, Africa Bureau, US-AID. Labat-Anderson Incorporated.
- WTO/UNEP 1992. *Guidelines: Development of National Parks and Protected Areas for Tourism*. WTO/UNEP Joint Publication, UNEP-IE/PAC Technical Report Series No.13, second printing 1994. Madrid, Spain.

Useful web sites

- The International Ecotourism Society TES
<http://www.ecotourism.org>
- The World Travel & Tourism Council WTTC
<http://www.wttc.org>
- The World Tourism Organisation WTO
<http://www.world-tourism.org>
- United Nations Environment Programme, Industry and Environment, UNEP-IE: Tourism
<http://www.unepie.org/tourism>

8. REDUCING CROP DAMAGE, DAMAGE TO FISHERIES, BIRD STRIKES AND OTHER FORMS OF CONFLICT

References and further reading

- Allan, R. 1996. *The grain-eating birds of sub-Saharan Africa. Identification, biology and management*. University of Greenwich, Natural Resources Institute.
- Birkan, M., J. van Vesseem, P. Havet, J. Madsen, B. Trolliet & M. Moser (eds.) 1996. *Proceedings of the Anatidae 2000 Conference, Strasbourg, France, 5-9 December 1994*. Gibier Faune Sauvage, Game and Wildlife 13.
- Blokpoel, H. In prep. *Review on bird strikes*. Canada.
- Ezealor, A.U. & R.H. Giles Jr. 1997. *Wintering Ruffs *Philomachus pugnax* are not pests of rice *Oryza spp.* in Nigeria's Sahelian wetlands*. Wildfowl 48: 202-209.
- Fox, T., J. Madsen & J. van Rhijn (eds.) 1991. *Western Palearctic Geese*. Proc. IWRB Symp. Kleve, Germany, February 1989. Ardea 79 (2).
- Linell, M.A., M.R. Conover & T.J. Ohashi 1996. *Analysis of bird strikes at a tropical airport*. Journal of Wildlife Management 60: 935-945.
- Meinzingen, W.F. 1993. *A guide to migrant pest management in Africa*. FAO, Rome.
- Monaghan, P., C.B. Shedden, K. Ensor, C.R. Fricker & R.W.A. Girdwood 1985. *Salmonella carriage by Herring Gulls in the Clyde area of Scotland in relation to their feeding ecology*. Journal of Applied Ecology 22: 669-680.
- Murton, R.K. & E.N. Wright (eds.) 1968. *The problems of birds as pests*. Academic Press, London.
- Piersma, T. & A. Koolhaas 1997. *Shorebirds, shellfish(eries) and sediments around Griend, Western Wadden Sea, 1988-1996: single large-scale exploitative events lead to long-*

- term changes of the intertidal birds – benthos community*. NIOZ-Report 1997-7. Netherlands Institute for Sea Research, Den Burg, The Netherlands.
- Pimentel, D. 1991. *CRC Handbook of pest management in agriculture II*. CRC Press, Boca Raton, Ann Harbour, London, Tokyo.
- Tréca, B. 1990. *Régimes et préférences alimentaires d' Anatidés et de Scolopacidés dans le delta du Sénégal*. Thesis, Paris, France.
- Tréca, B. & S. Manikowski 1998. *Bird pests*. CTA, Wageningen, The Netherlands. (In French).
- Van Dam, C., A.D. Buijse, W. Dekker, M.R. van Eerden, J.G.P. Klein Breteler & R. Veldkamp 1995. *Cormorants and commercial fisheries*. Report IKC Nature Management, Wageningen, The Netherlands.
- Van Eerden, M.R. 1997. *Patchwork. Patch use, habitat exploitation and carrying capacity for water birds in Dutch freshwater wetlands*. Report RIZA, Lelystad and thesis State University Groningen, Groningen, The Netherlands.
- Van Roomen, M. & J. Madsen 1992. *Waterfowl and agriculture: review and future perspective of the crop damage conflict in Europe*. IWRB Special Publication No.21. IWRB, Slimbridge, U.K.

Useful web sites

Bird strikes

<http://www.birdstrike.org/birds.htm>

www.airsafe.com

Conflict between fisheries and waterbirds

<http://www.cormorants.info/pdfs/WM14.pdf>

http://banchory.ceh.ac.uk/conflict/case_studies/case%20studies.htm

Costs and benefits of managing wild geese in Scotland

<http://www.scotland.gov.uk/cru/kd01/purple/cbmwgs-05.asp>

9. WATERBIRD MONITORING PROTOCOL

References and further reading

- Aubrecht, G. & H. Winkler 1997. *Analyse der internationalen Wasservogelzählungen (IWC) in Österreich 1970-1995 - trends und Bestände*. (Analysis of the international waterbird census (IWC) in Austria 1970-1995 - trends and numbers). Österreichische Akademie der Wissenschaften.
- Bibby, C.J., D.A. Hill, N.D. Burgess & S. Mustoe 2000. *Bird Census Techniques*. 2nd edition Academic Press, U.K.
- Colhoun, K. 2001. *The Irish Wetland Bird Survey 1998-99: Results from the fifth winter of the Irish Wetland Bird Survey*. BWI/NPW/WWT Dublin, Ireland.
- Boer, P. de, B.J. Koks, M.W.J. van Roomen, & E.A.J. van Winden. 2001. *Watervogels in de Nederlandse Waddenzee in 1997/98 en 1998/99*. SOVON Monitoringrapport 2001/04. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.
- Delany, S.N., C. Reyes, E. Hubert, S. Pihl, L. Haanstra, E. Rees & A. van Strien 1999. *Results from the International Waterbird Census in the Western Palearctic and Southwest Asia, 1995 and 1996*. Wetlands International, Wageningen, The Netherlands.
- Dodman, T., H.Y. Beibro, E. Hubert & E. Williams 1999. *African Waterbird Census, 1998*. Wetlands International, Dakar, Senegal.
- Dodman, T. & Diagana, C.H. *African Waterbird Census / Les Dénombrements d'Oiseaux d'Eau en Afrique 1999, 2000 & 2001*. Wetlands International Global Series No. 16, Wageningen, The Netherlands.
- Ecoscope Applied Ecologists. In press. *A species and habitats monitoring handbook*.
- Gilbert, G., D.W. Gibbons & J. Evans 1998. *Bird Monitoring Methods: a manual of techniques for key UK species*. RSPB, Sandy, U.K.
- Gillissen, N., Haanstra, L., Delany, S., Boere, G., & Hagemeyer, W. 2002. *Numbers and distribution of wintering waterbirds in the Western Palearctic and Southwest Asia in*

- 1997, 1998 and 1999. Results from the International Waterbird Census. Wetlands International Global Series No. 11, Wageningen, The Netherlands.
- Komdeur, J., J. Bertelsen & G. Cracknell (eds.) 1992. *Manual for aeroplane and ship surveys of waterfowl and seabirds*. IWRB Special Publication No.19. IWRB, Slimbridge, U.K.
- Madsen, J., G. Cracknell & A. Fox 1999. *Goose Populations of the Western Palearctic: A Review of Status and Distribution*. Wetlands International Publication No.48. National Environment Research Institute, Denmark and Wetlands International, Wageningen, The Netherlands.
- Meltofte, H., J. Blew, J. Frikke, H.-U. Rösner & C.J. Smit 1994. *Numbers and distribution of waterbirds in the Wadden Sea. Results and evaluation of 36 simultaneous counts in the Dutch-German-Danish Wadden Sea 1980-1991*. IWRB Special Publication No.34; Wader Study Group Bulletin No.74, Special Issue. IWRB, Slimbridge, U.K.
- Perennou, C., T. Mundkur, D.A. Scott, A. Follestad & L. Kvenild 1994. *The Asian Waterfowl Census 1987-91: Distribution and Status of Asian Waterfowl*. AWB Publication No.86, Kuala Lumpur, Malaysia. IWRB Publication No.24, Slimbridge, UK.
- Pettifor, R.A. 1997. Population behaviour in response to anthropogenic change in wetland habitats: the use of long-term datasets as tools in conservation. Pp 103-115 in: J.D. Goss-Custard, R. Rufino & A. Luis, *Effect of habitat loss and change on waterbirds. Proc. 10th International Waterfowl Ecology Symposium, Aveiro, Portugal, 18-21 September 1995*. ITE Symposium No.30; Wetlands International Publication No.42. London.
- Pollitt, M.S., Cranswick, P.A., Musgrove, A.J., Hall, C., Hearn, R.D., Robinson, J.A. & Holloway, S..J. 2000. *The Wetland Bird Survey 1998-99: Wildfowl & Wader Counts*. BTO/WWT/RSPB/JNCC, Slimbridge, UK.
- Poot, M., L.M. Rasmussen, M. van Roomen, H.-U. Rösner & P. Sudbeck 1996. *Migratory Waterbirds in the Wadden Sea 1993/94*. Wadden Sea Ecosystem No.5. Common Wadden Sea Secretariat, Trilateral Monitoring and Assessment Group & Joint Monitoring Group of Migratory Birds in the Wadden Sea, Wilhelmshaven, Germany.
- Scott, D.A. & P.M. Rose 1996. *Atlas of Anatidae Populations in Africa and Western Eurasia*. Wetlands International Publication No.41. Wetlands International, Wageningen, The Netherlands.
- Serra, L., Magnani, A., Dall'Antonia P. & Baccetti, N., 1997. Risultati dei censimenti degli uccelli acquatici svernanti in Italia, 1991-1995. *Biol. Cons. Fauna*, 101: 1-312.
- SOVON Ganzen-en Zwanenwerkgroep 2000. *Ganzen- en zwanentellingen in Nederland in 1998/99*. SOVON monitoringrapport 2000/03, RIZA-rapport BM99.15, Expertisecentrum LNV coproductie 336. SOVON Vogelonderzoek Nederland, Beek-Ubbergen
- Ter Braak, C.J.F., A.J. van Strien, R. Meijer & T.J. Verstrael 1994. Analysis of monitoring data with many missing values: which method? Pp 663-673 in: E.J.M. Hagemeyer & T.J. Verstrael (eds), *Bird Numbers 1992. Distribution, monitoring and ecological aspects*. Proc. 12th International Conf. of IBCC and EOAC, Noordwijkerhout, The Netherlands.
- Underhill, L.G. & R.P. Prys-Jones 1994. Index numbers for waterbird populations. I: Review and methodology. *J. Appl. Ecology* 31: 463-480.
- Voslamber, B., E van Winden & M. van Roomen 2000. *Midwintertelling van Watervogels in Nederland, januari 1999*. SOVON monitoringrapport 2000/02. RIZA-rapport BM99.14. Expertisecentrum LNV coproductie C31. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.
- Voslamber, B., E. A.J. van Winden 1999. *Watervogels in de Zoete Rijkswateren in 1997/98*. SOVON monitoringrapport 99/07, RIZA-rapport BM98.10. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.
- Wetlands International. 2002.. *Waterbird Population Estimates, Third Edition*. Wetlands International Global Series No 12. Wetlands International, Wageningen, The Netherlands

Useful Web Sites

Wetlands International - International Waterbird Census
IWC brochure (global): <http://www.wetlands.org/IWC/about.htm>

Manuals for IWC coordinators and counters: <http://www.wetlands.org/IWC/Manuals.htm>

African Waterbird Census, reports, news, recording forms:
<http://www.wetlands.org/IWC/africa/africa.html>

Western Palearctic and Southwest Asia Waterbird Census, Background information and reports: <http://www.wetlands.org/IWC/wpal&swa/wpal.htm>

IWC publications: <http://www.wetlands.org/IWC/wpal&swa/output/about.htm>

Census procedures and recording forms for Africa, Western Palearctic and Southwest Asia:
http://www.wetlands.org/IWC/docs/census_proc.htm

Western Palearctic and Southwest Asia, national site lists (clickable map):
<http://www.wetlands.org/IWC/wpal&swa/output/sites.htm>

Western Palearctic and Southwest Asia, national coverage history, 1967-1996 (clickable map):
<http://www.wetlands.org/IWC/wpal&swa/output/coverage.html>

Western Palearctic and Southwest Asia: National Coordinators of waterbird monitoring:
<http://www.wetlands.org/IWC/wpal&swa/partner/WPaINC.htm>

Asian waterbird Census, information, Coordinators, reports, news:
<http://www.wetlands.org/IWC/awc/awcmain.html>

Avian Demography Unit, University of Cape Town
<http://www.uct.ac.za/depts/stats/adu/>

Patuxent Wildlife Research Center: Colonial Waterbird Inventory and Monitoring
<http://www.pwrc.usgs.gov/>

US Fish & Wildlife Service, Division of Migratory Bird Management, Bird Monitoring
<http://migratorybirds.fws.gov/statsurv/mntrtbl.html>

Useful contacts

General

African-Eurasian Waterbird Agreement
UNEP/AEWA Secretariat
UN-Premises, Martin-Luther-King-Str. 8
53175 Bonn, Germany
Tel: (+49) 228 815 2413
Fax: (+49) 228 815 2450
E-mail: aewa@unep.de
WWW: <http://www.unep-aewa.org>

Bern Convention Secretariat (Secretariat of the Convention on the Conservation of European
Wildlife and Natural habitats)
Environment Conservation and Management Division
67075 Strasbourg Cedex
France
Tel.: +33-3-88413559/2256
Fax: +33-3-88413751
E-mail: gill.steimer@coe.int
WWW: <http://www.nature.coe.int/english/cadres/bern.htm>

BirdLife International
Wellbrook Court
Girton
Cambridge CB4 3QX
United Kingdom
Tel.: +44-1223-277318
Fax: +44-1223-277200
E-mail: birdlife@birdlife.org
WWW: <http://www.birdlife.org/>

CBD Secretariat - Secretariat for the Convention on Biological Diversity
World Trade Centre
393 St. Jacques Street
Office 300
Montréal, Québec H2Y 1N9
Canada
Tel.: +1-514-2882220
Fax: +1-514-2886588
E-mail addresses: <http://www.biodiv.org/secretariat/contact.asp>
WWW: www.biodiv.org

Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
UNEP/CMS Secretariat
United Nations Premises in Bonn
Martin-Luther-King Straße 8
53175 Bonn
Germany
Tel.: +49-228-815-2401 and +49-228-815-2402
Fax: +49-228-815-2449

E-mail: secretariat@cms.int
WWW: <http://www.cms.int>

Council of Europe
Environment Conservation and Management Division
Palais de l'Europe
Avenue de l'Europe
67075 Strasbourg Cedex
France
Tel.: +33-3-88412253
Fax: +33-3-88413751
E-mail: infopoint@coe.int
WWW: <http://www.coe.int>

EC - European Commission
Wetstraat 200
1049 Brussels
Belgium
Tel.: +32-2-2351111
E-mail: europawebmaster@cec.eu.int
WWW: www.europa.eu.int/comm/index.htm

ECNC - European Centre for Nature Conservation
PO Box 1352
5004 BJ Tilburg
The Netherlands
Tel.: +31-13-4663240
Fax: +31-13-4663250
E-mail: ecnc@ecnc.org
WWW: www.ecnc.nl

International Council for Game and Wildlife Conservation (C. I. C)
PO Box 74
H - 2092 Budakeszi
Hungary
Tel: 0036 60 444 647
Fax: 0036 60 444 648
E-mail: budapestoffice@cic-wildlife.org
WWW: <http://www.cic-wildlife.org/>

IUCN - the World Conservation Union
28, rue Mauverney
1196 Gland
Switzerland
Tel.: +41-22-9990001
Fax: +41-22-9990002
WWW: www.iucn.org
E-mail addresses at: <http://www.iucn.org/wl/db/sitefeedback.cfm>

IUCN/ELC - Environmental Law Centre
Adenauerallee 214
53113 Bonn
Germany
Tel.: +49-228-2692231
Fax: +49-228-2692250
E-mail: <http://www.iucn.org/themes/law/elc01.html>

Ramsar Convention Bureau
28, rue Mauverney
1196 Gland
Switzerland
Tel.: +41-22-999-0170
Fax: +41-22-999-0169
E-mail: ramsar@ramsar.org
WWW: www.ramsar.org

UNEP - United Nations Environment Programme
PO Box 30552
Nairobi
Kenya
Tel.: +254-2-621234
Fax: +254-2-226890 and +254-2-215787
E-mail addresses: <http://www.unep.org/Contacts/>
WWW: www.unep.org

UNESCO/MAB - Man and Biosphere Programme
Ecological Sciences Division
1, rue Miollis
75732 Paris Cedex 15
France
Tel.: +33-1-45684151
Fax: +33-1-40659897
E-mail: mab@unesco.org
WWW: <http://www.unesco.org/mab/>

UNESCO/WHC - World Heritage Centre
Place de Fontenoy 7
75352 Paris Cedex 07
France
Tel.: +33-1-45681443
Fax: +33-1-40569570
E-mail: wh-info@unesco.org
WWW: www.unesco.org/whc

UNEP - WCMC - World Conservation Monitoring Centre
219, Huntingdon Road
Cambridge CB3 0DL
United Kingdom
Tel.: +44-1223-277314
Fax: +44-1223-277136
E-mail: info@unep-wcmc.org
WWW: <http://www.unep-wcmc.org/>

Wetlands International
PO Box 471
6700 AL Wageningen
The Netherlands
Tel.: +31-317-478854
Fax: +31-317-478850
E-mail: post@wetlands.org
WWW: www.wetlands.org

WWF-International - World Wide Fund for Nature
Avenue du Mont-Blanc
1196 Gland
Switzerland
Tel.: +41-22-3649111
Fax: +41-22-3642926
E-mail addresses: http://www.panda.org/about_wwf/who_we_are/offices/offices.cfm
WWW: www.panda.org

Species Action Plans

IUCN Species Survival Commission
c/o IUCN (see under **General**)

Wetlands International Specialist Group Co-ordinators
c/o Wetlands International (see under **General**)
<http://www.wetlands.org/networks/SGroups.htm>

BirdLife International (see under **General**)

Emergency situations

No specific addresses. See under **General**, according to circumstances.

Site inventories

MedWet Coordination Unit
Villa Kazouli, Kifissias & Gr. Lambraki 1
14561 Kifissia
Greece
Tel.: +30-210-8089270
Fax: +30-210-8089274
E-mail: info@medwet.org
WWW: www.medwet.org

Ramsar Convention Bureau (see under **General**)

Site management

EUROSITE - European Network of Site Management Organizations
PO Box 1366
5004 BJ Tilburg
The Netherlands
Tel.: +31-13-4678638
Fax: +31-13-4634129
E-mail: eurosite@kub.nl
WWW: www.eurosite-nature.org

Ramsar Convention Bureau (see under **General**)

Sustainable harvest

International Council for Game and Wildlife Conservation (C. I. C) (see under **General**)

FACE - Fédération des Associations de chasseurs de l'EU
82 Rue F. Pelletier
B-1030 Brussels
Belgium
Tel: +32-2-732.69.00
Fax: +32-2-7327072
E-mail: face.europe@infoboard.be
WWW: <http://www.face-europe.org/>

Trade

TRAFFIC International
219c Huntingdon Road
Cambridge CB3 0DL
UK
Tel: (44) 1223 277427
Fax: (44) 1223 277237
E-mail: traffic@WCMC.org.uk

TRAFFIC Europe
Waterloosteenweg 608
1060 Brussels
Belgium
Tel.: +32-2-3470111
Fax: +32-2-3440511
WWW: www.traffic.org

UNEP/CITES Secretariat (Convention on International Trade of Endangered Species,
Washington Convention)
PO Box 456
Geneva Executive Centre
1219 Châtelaine (Geneva)
Switzerland
Tel.: +41-22-9799139 and 9799140
Fax: +41-22-7973417
E-mail addresses: <http://www.cites.org/eng/disc/sec/index.shtml>
WWW: <http://www.cites.org/>

Ecotourism

The Ecotourism Society TES
PO Box 755
North Bennington
VT 05257
USA
Tel: +1-802-447-2121
Fax: +1-802-447-2122
E-mail: ecomail@ecotourism.org
WWW: <http://www.ecotourism.org>

Bird damage

FAO - Food and Agriculture Organization
Forest Resources Division
Viale delle Terme di Caracalla
00100 Rome
Italy
Tel.: +39-06-57053589
Fax: +39-06-57055137
WWW: www.fao.org/fo

IBSC - International Bird Strike Committee
C/o National Bird Strike Committee
Royal Netherlands Airforce Airstaff
P.O.Box 20703
2500 EB The Hague
The Netherlands
Tel: +31-70-3396911

Waterbird Monitoring

International Waterbird Census (IWC) & African Waterbird Census (AfWC)
Waterbird Conservation Officer
c/o Wetlands International (see under **General**)

SOVON
Rijksstraatweg 178
6573 Beek-Ubbergen
The Netherlands
Tel: 024 684 81 11
Fax: 024 684 81 88
WWW: <http://www.sovon.nl/>

The Wildfowl & Wetlands Trust
Slimbridge
Gloucester
GL2 7BT
UK
Tel: +44 1453 890333
Fax: +44 1453 890827
E-mail addresses: <http://www.wwt.org.uk/contact/>
WWW: <http://www.wwt.org.uk/>

British Trust for Ornithology
The Nunnery
Nunnery Place
Thetford
Norfolk
IP24 2PU
UK
Tel: +44-1842-750050
Fax: +44-1842-750030
E-mail: info@bto.org

WWW: <http://www.bto.org/>

The Avian Demography Unit
Department of Statistical Sciences
University of Cape Town
Rondebosch 7701
South Africa
Tel: +27 (021) 650 3219
Fax: +27 (021) 650 7578
E-mail addresses: http://web.uct.ac.za/depts/stats/adu/staff/p_staff.htm
WWW: <http://www.uct.ac.za/depts/stats/adu/>

The European Bird Census Council
WWW: <http://zeus.nyf.hu/~szept/ebcc.htm>

Training facilities

Within the AEWA region, there are many facilities for training at different levels, ranging from three-day courses on various environmental topics for people with no prior knowledge, to Ph.D. level at universities. Many universities and institutes offer courses of varying lengths on wildlife management, site management, wetland ecology, sustainable development, ecotourism development, and many other related topics. UNEP maintains a database listing hundreds of courses. The Ramsar Convention Bureau maintains a list of environmental courses specifically aimed at wetland management. For information contact:

UNEP Directory on Environmental Education and Training Opportunities worldwide:
<http://www.unep.org/unep/products/publicat/education/index.htm>

The Ramsar Convention Bureau
Rue Mauverney 28, CH-1196 Gland, Switzerland
Tel: +41-22-999-0170; fax: +41-22-999-0169
E-mail: ramsar@ramsar.org
WWW: <http://www.ramsar.org>

There are several schools in Africa that specifically offer education in wildlife management and site management. These are attended by wardens and reserve managers from all over the continent. The most important are:

Ecole de Faune de Garoua
B.P. 271, Garoua, Cameroun
Tel/fax: +237-273135

College of African Wildlife Management
Mweka, P.O. Box 3031, Moshi, Tanzania
Tel/fax: +255-55-51113
E-mail: ulgtan@eoltz.com
WWW: <http://www.mwekawildlife.org/>

Kenya Wildlife Training Institute
P.O. Box 842, Naivasha, Kenya
Tel: +254-0311-20267/21329
Fax: +254-0311-20577
E-mail: kwsti@users.africaonline.co.ke

Southern African Wildlife College
Private Bag X3015, Hoedspruit, 1380, South Africa
Tel/fax: +27-15-7932621
E-mail: sawc@iafrica.com
WWW: <http://www.wildlifecollege.org.za/>

Special wetland courses for managers from developing countries and countries with economies in transition are given by the Wetland Advisory and Training Centre (WATC) of the Institute for Inland Water Management and Waste Water Treatment (RIZA) of the Netherlands Ministry of Transport, Public Works and Water Management. For information contact:

WATC
P.O. Box 17, 8200 AA Lelystad, The Netherlands

AEWA Conservation Guidelines

Tel: +31-320-298346; fax: +31-320-298339
E-mail: watc@riza.rws.minvenw.nl

IUCN also regularly organises short courses on wetland management at different levels, both for managers with little prior education and for decision makers at higher levels. These courses are given in the region (*e.g.* in West Africa). For information contact:

IUCN
Rue Mauverney 28, CH-1196 Gland, Switzerland
Tel: +41-22-999-0001; fax: +41-22-999-0002

Appendix II

GLOBALLY THREATENED MIGRATORY WATERBIRD SPECIES IN AEWA RANGE STATES

The occurrence of globally threatened species of migratory waterbirds in AEWA Range States, based on BirdLife International 2000 *Threatened Birds of the World*, the official source for birds in the 2000 IUCN *Red List of Threatened Species*. Breeding species are indicated with a 'B'; species occurring only as passage migrants and winter visitors are indicated with a 'W'. No attempt has been made to indicate relative numbers, and in some instances, the numbers of birds involved may be very small. Codes followed by an asterisk * mark species not included in *Threatened Birds of the World* but known nevertheless to occur in the country.

	Slaty Egret	Wadtrapp	White-headed Duck	Lesser White-fronted Goose	Red-breasted Goose	Marbled Teal	Siberian Crane	Blue Crane	Wattled Crane	Sociable Lapwing	Slender-billed Curlew	Total Number of species
Algeria			B			B					W	3
Armenia						B						1
Azerbaijan			W	W	W	B						4
Botswana	B								B			2
Bulgaria			W	W	W						W	4
Chad						W						1
Democratic Republic of Congo	B								B			
Eritrea										W		1
Estonia				W								1
Ethiopia									B			1
Finland				B								1
Greece			W	W	W						W	4
Hungary				W	W						W	3
Iran			B			B	W			W		4
Iraq			W			B				W		3
Israel			W			W				W		3
Italy											W	1
Jordan						W						1
Kazakhstan			B	W	W	B				B	W	6
Lithuania				W								1
Malawi									B			1
Mali						W						1
Morocco		B				B					W	3
Mozambique	B								B			2
Namibia	B							B	B			1
Netherlands					W							1
Nigeria						W						1
Norway				B								1
Oman										W		1
Poland				W								1
Romania			W	W	W						W	4
Russia			B	B	B	B	B			B	B	7
Saudi Arabia										W		1
Senegal						W						1

AEWA Conservation Guidelines

	Slaty Egret	Waldrapp	White-headed Duck	Lesser White-fronted Goose	Red-breasted Goose	Marbled Teal	Siberian Crane	Blue Crane	Wattled Crane	Sociable Lapwing	Slender-billed Curlew	Total Number of species
South Africa	B							B	B			3
Spain			B			B						2
Swaziland								B				1
Sweden				B								1
Syria		B	W			W				W		4
Tunisia			B			B					W	3
Turkey			B	W		B				W	W	5
Turkmenistan			B	W*		B				W		4
Ukraine				W*	W						W	3
Uzbekistan			B	W*		B				W	W*	4
Serbia & Montenegro											W	1
Zambia	B								B			2
Zimbabwe	B								B			2

Appendix V

STATUS OF WATERBIRD POPULATIONS COVERED BY CITES and EC TRADE REGULATIONS

Key to columns

AEWA: see the AEWA Action Plan for details of the status classifications used. These classifications refer to populations and each is presented, separated by a colon (:).

CITES: the appendix on which the species is listed is shown. Brackets are used where AEWA subspecies have been assumed to have the same CITES classification.

EC: the annex from trade regulations 338/97 and 1808/2001 on which the *species* is listed is shown. Brackets are used where AEWA subspecies have been assumed to have the same EU classification.

Table 1: Status of waterbird populations currently listed in the AEWA Action Plan against trade regulations.

	AEWA	CITES	EC ¹
<i>Spheniscus demersus</i>	A1b, B2a, B2c	II	B
<i>Pelecanus crispus</i> ²	A1a, 1c: A1a, 2	I	A
<i>Egretta garzetta</i>	C (1): C1: B(1)	III	A
<i>Casmerodius albus albus</i>	A2: B(1)	III	A
<i>Bubulcus ibis</i>	A2: C1: C1: C1	III	A
<i>Ciconia nigra</i>	A1c: A1c: A2	II	A
<i>Balaeniceps rex</i>	A1c	II	B
<i>Geronticus eremita</i> ²	A1a, 1b, 1c: A1a, 1b, 1c	I	A
<i>Threskiornis aethiopicus aethiopicus</i>	A1c: C1	III	C
<i>Platalea leucorodia leucorodia</i>	A1c: A2	II	A
<i>Platalea leucorodia archeri</i>	A1c	(II)	(A)
<i>Platalea leucorodia balsaci</i>	A1c	(II)	(A)
<i>Platalea leucorodia major</i>	A2	(II)	(A)
<i>Phoenicopterus ruber roseus</i>	A3a: A3a, 3a: B2a: B2a	II	A
<i>Phoenicopterus minor</i>	A2: A3a: B2a, 2c	II	B
<i>Dendrocygna bicolor</i>	C(1): C(1)	III	C
<i>Dendrocygna viduata</i>	C1: C1	III	C
<i>Oxyura leucocephala</i> ²	A1a, 1b, 1c: A1a, 1b, 1c: A1a, 1b, 1c	II	A
<i>Branta ruficollis</i> ²	A1a, 1b, 3a	II	A
<i>Alopochen aegyptiacus</i>	A2: C(1)	III	C
<i>Plectropterus gambensis gambensis</i>	C1: C1	III	C
<i>Plectropterus gambensis niger</i>	B1	(III)	(C)
<i>Sarkidiornis melanotos melanotos</i>	B1: C1	II	B
<i>Nettapus auritus</i>	A1c: C(1)	III	C
<i>Anas penelope</i>	B2c: B2c: C1	III	C
<i>Anas crecca crecca</i>	B2c: C1: C1	III	C
<i>Anas capensis</i>	A1c: A1c	III	C
<i>Anas acuta</i>	B1: B2c: C(1)	III	C

AEWA Conservation Guidelines

<i>Anas querquedula</i>	B2c: C(1)	III	A
<i>Anas clypeata</i>	B1: B2c: B2c	III	C
<i>Aythya nyroca</i> ²	A1a, 1b, 1c: A1a, 1b, 3c: A1a, 1b, 3c	III	A
<i>Balearica pavonina pavonina</i>	A2	II	
<i>Balearica pavonina ceciliae</i>	3c	II	
<i>Balearica regulorum regulorum</i>	A1c	II	
<i>Balearica regulorum gibbericeps</i>	3c	II	
<i>Grus leucogeranus</i> ²	A1a, 1b, 1c	I	A
<i>Grus virgo</i>	A1c: A1c: B1	II	
<i>Grus paradisea</i>	A1b, 2	II	
<i>Grus carunculatus</i>	A1b, 1c	II	
<i>Grus grus</i>	A1c: A3c: B1: B1: B(1)	II	A
<i>Numenius tenuirostris</i> ²	A1a, 1b, 1c	I	A

¹ There are no Annex D waterbird species applicable to the AEWA area.

² Species also listed on Appendix 1 to the Bonn Convention.

UNEP/AEWA Secretariat
UN Campus
Hermann-Ehlers-Str. 10
53113 Bonn
Germany
Tel.: +49 (0)228 815 2413
Fax: +49 (0)228 815 2450
aewa@unep.de
www.unep-aewa.org