Waterbird Population Estimates

Fourth Edition

Compiled and edited by
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A part of the flock of 2.88 million Oriental Pratincoles *Glareola maldivarum* on 80 mile Beach, NW Australia, on 7 February 2004

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Foreword

Waterbirds are amongst the most well-studied of animals, and this is in no small part due to the long-term efforts of Wetlands International, in their unique position of coordinating the thousands of experts (many of them volunteers) globally, through the International Waterbird Census (IWC) in counting and assessing the status of all species and populations of waterbirds. The IWC now compiles data annually from over 10,000 sites in more than 100 countries. Many waterbirds are highly migratory, and their conservation is the shared responsibility of all countries along their flyways. Furthermore such migratory waterbirds act as sentinels of global change, since their survival depends on the continued health of the many different wetland ecosystems.

The regular tracking of changes in the status of all waterbirds becomes of even greater relevance to us all as we move rapidly towards the year 2010, and the commitment made by the world's heads of state in 2002 at the World Summit on Sustainable Development in Johannesburg to significantly reduce the rate of loss of biological diversity by that time. This new edition of *Waterbird Population Estimates*, coming 12 years and three editions after it was first published, provides the most comprehensive coverage yet of our state of knowledge of the sizes and trends of the world's waterbirds.

The report makes sobering reading for all of us striving to meet the 2010 biodiversity target. The state of the world's waterbirds is continuing to deteriorate and now 44% of waterbird populations for which there is data are in decline or have already gone extinct – but only 17% are increasing. This pattern of decline appears in all parts of the world but the situation is most alarming in Asia, where almost two-thirds (62%) of populations are in decline or extinct, and only 10% increasing.

Perhaps this assessment should not really surprise us, given the Millennium Ecosystem Assessment's (MA) advice that both coastal and inland wetland ecosystems have deteriorated, and continue to deteriorate and be lost, faster than any other ecosystems. But nevertheless it further emphasises just how much greater are the efforts that are now needed if we are to ensure that wetlands and their biodiversity (including waterbirds) can continue to deliver their ecosystem services to people now and in the future.

The *Waterbird Population Estimates* series supports countries' efforts to secure this through implementation of the Ramsar Convention and of the Convention on Migratory Species (CMS). In particular, the volumes provide the authoritative and approved source of up-to-date "1% population thresholds" for the application of Ramsar's "1% Criterion" for the identification and designation of Wetlands of International Importance (Ramsar Sites) – some 522 of which have now been designated using this data. Providing this information was the underlying purpose for preparing the first edition, then called *Waterfowl Population Estimates*, over 12 years ago. The 1% thresholds are, of course, also used throughout the European Union in the identification of Special Protection Areas (SPAs) for waterbirds under its Birds Directive, as part of the Natura 2000 site network. Through the huge efforts of Wetlands International and its expert networks, the number of populations for which a 1% population threshold is available has now risen in the 4th edition to 1,816, 79% of all populations covered. By providing updated information on the status and trends of populations of migratory waterbirds, the *Waterbird Population Estimates* allows identification of those species requiring internationally coordinated conservation efforts under the Convention on Migratory Species. This is mainly obtained through the inclusion of species or their individual populations in the CMS appendices, the designation of species for Concerted or Cooperative Actions under the convention and the conclusion of inter-governmental Agreements for individual species or entire flyways.

The importance of reliable data on waterbird populations has become critical since the emergence and spread of the Highly Pathogenic Avian Influenza (HPAI) virus subtype H5N1 in recent years. Sound data on populations of various waterbird species and their movements helps to inform assessments and predictions about the role of waterbirds in the transmission of avian influenza, as well as the impact of the virus on wild birds. The CMS-led Scientific Task Force on Avian Influenza and Wild Birds includes experts from Wetlands International, Ramsar and ten other bodies which make use of IWC data.

We congratulate Wetlands International and their network of experts on producing another authoritative compilation, and commend this important publication as a vital source of information for all those concerned with the conservation and wise use of wetlands and their biological diversity.

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Summary

This publication contributes strongly to waterbird and wetland conservation
Crucial information necessary for the conservation of any species, or population of a species, includes:

- Where individuals live (geographical distribution)
- How many individuals exist (population estimate)
- Whether numbers are increasing, stable, or decreasing (population trend)

Waterbird Population Estimates presents this information for the 878 species recognised by Wetlands International as "waterbirds", and this Fourth Edition provides a comprehensive update on information last provided in 2002. The publication contributes to wetland conservation policy at international level by providing the authoritative basis of Criterion 6 of the Ramsar Convention on Wetlands, under which any site that regularly holds 1% or more of a waterbird population qualifies as a Wetland of International Importance under the Convention.

This publication is a result of an enormous effort which is mostly voluntary
The most important single source of the information presented is the International Waterbird Census (IWC) coordinated by Wetlands International since 1967. This publication thus represents the distillation of about 50,000 hours of fieldwork carried out every year by mostly voluntary expert observers in more than 100 countries in Africa, Asia, Oceania, South America and Europe. Over 600 published and unpublished sources have also been used as a basis of the information provided, especially from North America, which remains the biggest gap in the IWC network.

Waterbird populations are rather well known
Waterbirds are now one of the best-known groups of animals. We have divided the 878 species recognised as "waterbirds" into 2,305 "biogeographic populations". We now have estimates for 1,816 (79%) of these populations. Population trend information is more difficult to estimate, and we now have trends for 1,200 populations (52%).

Many waterbird populations are small and vulnerable
At global level, a high proportion of known waterbird populations is small, with 550 populations (30% of the total for which data are available) estimated to have populations below 10,000 individuals. Large waterbird families having more than half of their known populations below 10,000 individuals are Storks, Cranes and Rails.

Nearly half of waterbird populations are decreasing globally but only one in six is increasing
At global level, 44% of populations for which trend data are available are decreasing or extinct, 34% are stable and only 17% are increasing. Altogether, 12 families have half or more of their populations showing a decreasing trend: Darters, Storks, Shoebill, Screamers, Rails, Finfoots, Jacanas, Painted-Snipes, Stone Curlews, Plovers, Seedsnipes and Skimmers.

The conservation status of waterbirds is most critical in Asia, where nearly two-thirds of known waterbird populations are decreasing, and in Oceania, where one in six is already extinct.
In every region, the proportion of known populations exhibiting a decreasing trend markedly exceeds the proportion exhibiting an increasing trend.

- The situation is most critical in Asia, where a disquieting 62% of known populations are decreasing or extinct, and only 10% are increasing. Asia holds 815 waterbird populations – 35% of those described – and the fact that so many of them suffer from a poor conservation status is cause for very considerable concern.
- The next-highest proportion of decreasing populations, 48%, is found in Africa, followed by Oceania (45%), South America (42%), Europe (41%) and North America (37%).
- 17% of waterbird populations in Oceania have gone extinct, a reflection of the impact of human settlement on specialised island forms.

Globally Threatened waterbird species are worse off in 2006 than they were in 2002
The threat status of Globally Threatened waterbird species, identified for birds by BirdLife International on behalf of IUCN, worsened to a considerable degree between the last review in 2002 and the current review. Altogether 23 waterbird species have a higher threat status in 2006 than in 2002, and only 10 species have a lower threat status.