



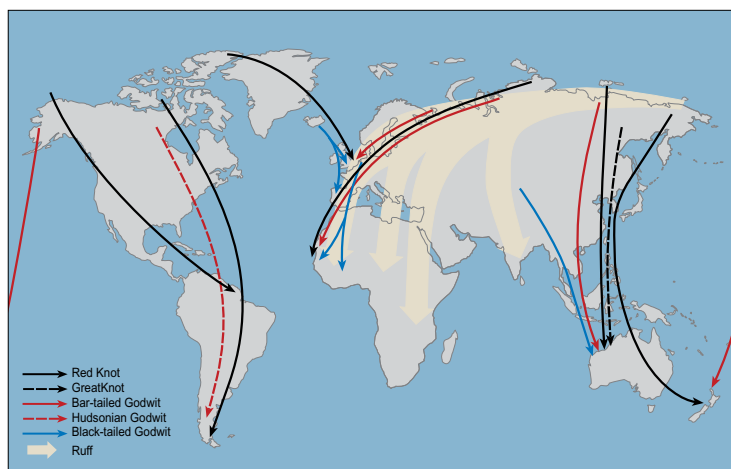
Notes & News is compiled by Silke Nebel to whom contributions should be sent.
 (School of Biological, Earth & Environmental Sciences, University of New South Wales,
 Sydney, NSW 2052, Australia; fax: +61-2-9385-1558; email: silke.nebel@unsw.edu.au)

PROJECT NEWS

Established in 2006: the Global Flyway Network

Following intense discussions among science partners and BirdLife Netherlands, in 2006 the outlines of a long-term *Global Flyway Network* were established and endorsed by BirdLife. Briefly, the Global Flyway Network is a partnership between researchers worldwide devoted to long-term – usually demographic – work on long-distance migrating shorebirds. The partnership aims to build on the strengths of comparative demographic shorebird studies worldwide, with the aim of understanding and analysing the factors determining shorebird numbers in a rapidly changing world. Covering all major flyways and incorporating representatives of several different scientific specializations, the network aims to encompass the changing world with a system of continuous critical observations on the ecological demography, body condition, health status and relevant genetic variability in sixteen (or more) distinct populations of long-distance migrant shorebirds (see map below). In practice it also tries to fill major gaps in fieldwork coverage of the world's most threatened shorebird flyways.

What we hope for is a truly *worldwide observatory* of the changing fates of some of the world's more characteristic and charismatic long-distance shorebird populations and the habitats upon which they depend for their existence. The Global Flyway Network wants to (1) provide an instantaneous **sentinel service** for the global conservation community: an early warning system of flyway populations under threat, the early identification of populations in decline and in need of recovery action, as well as monitoring the fates of populations



The shorebird ecological demographics and conservation initiative: a sentinel system for our longest-distance migrant shorebirds

Global Flyway Network

The shorebird ecological demographics & conservation initiative



known to be in dire straits; (2) help generate the **stories** that need to be told to fuel the imagination and the goodwill of people that can make a difference to the fate of the habitats and populations under threat; and further the **science**, including the understanding of the historical background and the current demographic processes and ecological, genetic and immunological constraints that determine whether populations flourish or flounder.

In late 2006 a foundation by Dutch law was established. The Global Flyway Network is directed by Theunis Piersma of the Royal Netherlands Institute for Sea Research (NIOZ)/Univ. of Groningen and Allan J. Baker of the Royal Ontario Museum/University of Toronto and, with managerial help from Petra de Goeij (NIOZ/Univ. of Groningen) and financial assistance from Bob Loos (Texel), who also acts as treasurer. From Dec 2006 we started to financially support two long-established key-workers along the West-Atlantic Flyway (Patricia M. González, San Antonio Oeste, Argentina) and the East Asian–Australasian Flyway (Chris Hassell, Broome, Australia) for a period of at least three years. Already (in 2006), the partners within the Global Flyway Network have made contributions to (1) elucidating the role of horseshoe crab bait fisheries to the ongoing decline of Red Knots *Calidris canutus rufa*, (2) establishing the involvement of Dutch shellfish dredging practices in protected nature reserves in accounting for W European declines in *Calidris canutus islandica*, (3) providing an analysis of the importance of human disturbance in the use of critical shorebird high tide roosts around a tropical bay in NW Australia, (4) establishing the existence of trans-Pacific flights by Bar-tailed Godwits *Limosa lapponica baueri* from Alaska to New Zealand in relation to synoptic wind systems, based on the latest generation satellite technology, and (5) for the first time establishing repeatability measures for individual breeding plumage scores in Bar-tailed Godwits, to validate their use to assess individual body condition in relation to environmental change.

Contact: Theunis Piersma
 (theunis@nioz.nl)



WORKSHOP REPORTS

Lessons learnt from recent outbreaks of highly pathogenic avian influenza H5N1

In June 2007, an international workshop was convened by the Scientific Task Force on Avian Influenza, and organised in Scotland by the Convention on Migratory Species and Scottish Natural Heritage on the theme of 'practical lessons learnt' from recent cases of infection. The meeting condemned the continued misplaced practice of actively killing wild birds and destroying their nest sites and wetland habitats in response to, or in avoidance of, infection within a country, a practice which is contrary to the recommendations of many international bodies including the Ramsar Convention. Such approaches to the prevention or control of avian influenza are wasteful, damaging to conservation, and have no scientific basis. They may also exacerbate the problem by causing further dispersion of infected birds. A brief report on the workshop is posted at http://www.ramsar.org/wn/w.n.avian_flu_aviemore.htm, and a 27-page document containing conclusions and recommendations can be found at http://www.ramsar.org/wn/w.n.avian_flu_aviemore_conclusions.pdf.

CONSERVATION NEWS

Contributing factors sought as Red Knot population plummets

A new report has revealed a drastic population decline in the Red Knot subspecies *Calidris canutus rufa*. Numbers at their wintering grounds in southern South America have fallen drastically in recent years; from 51,300 in 2000 to approximately 30,000 in 2004, and still further to just 17,200 in 2006. The 2007 Red Knot Assessment Report, prepared by the US Fish and Wildlife Service and based on demographic studies covering 1994–2002, reveals that the *rufa* subspecies could become extinct within ten years, if adult survival remains low. As result of the significant declines, *C. c. rufa* has been included under Appendix I of the Convention of Migratory Species by request of the Argentinean government. In Canada, the Committee on the Status of Endangered Wildlife in Canada has listed it as Endangered.

Of the six *C. canutus* subspecies, *rufa* travels the longest distance, between breeding areas in the Canadian Arctic and wintering areas in Patagonia and Tierra del Fuego. Although the causes of the population crash are not yet fully understood, the dramatic decline is mainly attributed to the low availability of horseshoe crab eggs in Delaware Bay, USA, a key stopover site for *C. c. rufa*. The lack of eggs has been attributed to an elevated harvest of adult crabs for bait in the conch and eel fishing industries. Studies show that Red Knot individuals with lower body weight at departure in Delaware Bay have lower survival than heavier birds. Even if crab exploitation ceases immediately, scientist predict it would take years before the horseshoe crab population recovers to its former level. Other possible contributing factors in the decline include the loss of critical habitats, contamination and the spread of non-controlled tourism activities at their wintering and migration areas.

Recent unexplained Red Knot die-offs have highlighted further the need for research into the variety of threats afflicting the already declining *rufa* population. In April, 312 dead *C. c. rufa* were discovered by a park guard at Playa La Coro-

nilla in southeastern Uruguay and the same day over 1,000 birds were found dead at a second site nearby. Of the events Joaquín Aldabe, IBA coordinator at Aves Uruguay (BirdLife in Uruguay) commented: 'It seems possible that harmful algal blooms could be related to it, although additional studies are required in order to fully understand this unexpected event.' Aves Uruguay, in connection with other national and international organisations, is already working in the area to establish the possible causes of the casualties and the role of Uruguay as stopover for the species. 'The death of more than 1,300 Red Knots in Uruguay is of particular concern given the low overall population size,' said Rob Clay, Conservation Manager of BirdLife's Americas Secretariat. 'This number represents over 6% of the [*rufa*] population, all of which winter in southern South America. The discovery underlines the need to better understand factors which may be affecting the species during migration and on its wintering grounds.'

The Western Hemisphere Shorebird Reserve Network (WHSRN), a partnership of organisations working to conserve shorebirds and their habitats through a network of key sites across the Americas, will soon release a Species Conservation Action Plan for the Red Knot in the Western Hemisphere. The plan is the work of the Red Knot Species Assessment Team, comprising dozens of expert authors across the hemisphere. Charles Duncan, Director of the Executive Office of WHSRN said: 'We are committed to working collaboratively with partners, like BirdLife's network of affiliates, at the enormous geographic scale needed to ensure not only the survival, but the recovery of healthy populations, of Red Knots and other shorebirds in the Americas. This will require targeted conservation action, scientific understanding of the causes of the declines, and monitoring of threats and population levels.' The Executive Office of WHSRN is a key program of the Manomet Center for Conservation Sciences, in Manomet, Massachusetts, USA.

BirdLife International News, 14 August 2007
Thanks to Humphrey Sitters for this item

Ramsar News

Mexico, which already had the second highest number of Wetlands of International Importance (after the UK), has designated two more sites. **Laguna Huizache-Caimanero** (48,283 ha) is located in the southeastern part of the Gulf of California in Sinaloa state. The site consists of a series of wetlands, ranging from coastal and continental to artificial. Due to its location along the Migratory Corridor of the Pacific, it is a site of high importance for migratory birds in Mexico, including the American White Pelican and the Roseate Spoonbill. It is also the habitat of a wide range of fish, mammals, reptiles, amphibians and invertebrates, including species in danger of extinction or vulnerable, such as the American Crocodile, the Mexican Beaded Lizard, the Boa, and the Mallard.

Parque Estatal Lagunas de Yalahau (5,683 ha) in Yucatán state, comprises a series of continental wetlands, with lagoons and deep underground water reservoirs being the most representative. The underground reservoirs are typical of the karstic systems of the Yucatan Peninsula. This, combined with the topography of the region, allows a diversity of habitats which host a variety of animal and plant species, many of which are migratory, endemic and/or in danger of extinction; among the latter are the Muscovy Duck, the Spider Monkey and the Ocelot. During winter, the park gives



shelter to migratory birds, and during the dry season, the lagoons and the deep underground water reservoirs provide a source of water for species like the Crocodile, the White-tailed Deer and the Jaguar. The dominant vegetation type is tropical deciduous forest with more than 200 plant species, a high number given the small size of the area. Land and cattle activities are common at the site. Illegal hunting is the main negative effect. Areas previously affected by anthropogenic activity are already under restoration.

The Republic of South Africa announced two new Ramsar listings. The sub-Antarctic *Prince Edward Islands* (37,500 ha) include the larger Marion Island and the smaller Prince Edward Island, which are of volcanic origin. They are protected natural habitats and do not support any consumptive or exploitative activities. The three main terrestrial habitats are unvegetated uplands, well-drained vegetated slopes, and poorly-drained vegetated coastal plains. Significant wetland formations include non-forested peat lands (swamps and bogs), intermittent streams, waterfalls, freshwater ponds, crater lakes, rocky marine shores, kelp beds, sea cliffs and sand shores. The islands host numerous breeding seabirds like the vulnerable Wandering Albatrosses and White-chinned Petrel and the endangered Sooty Albatross and Yellow-nosed Albatross. Three penguin species breed and moult on the rocky areas around the coastline; the King Penguin, Macaroni Penguin and Eastern Rockhopper Penguin. Commercial tourism and fishing within territorial waters are prohibited. The principal activities on these islands since their annexation by South Africa in 1947 and 1948 include meteorological observations, scientific research, logistic support for research and conservation and management activities. More applied research programs address the roles of introduced species, including house mice, invertebrates and plants, and on aspects relating to human disturbance and pollution. Geophysical studies have included volcanology, geology and geomorphology. Illegal, unreported and unregulated fishing for Patagonian Toothfish in the surrounding waters caused a reduction in fish stocks and high levels of incidental mortality of seabirds. It is worth noting that this is the first time that a Ramsar site has been designated in the sub-Antarctic region where many of the wetlands are untouched.

The *Makuleke Wetlands* (7,757 ha), most of which lie within the Kruger National Park, is bordered by Zimbabwe and Mozambique and is an excellent example of a vlei-type floodplain. Prominent features include riverine forests, riparian floodplain forests, floodplain grasslands, river channels and flood pans. Flood pans are depressions in the floodplains which are intermittently filled from floods and rains – they are of great importance in this ecosystem as they hold water right into the dry season, thus acting as a refuge point for wildlife and waterbirds during both winter and summer months, and there are 31 of them found on these floodplains, where herds of Hippopotamus are found. The floodplains attenuate floods, resulting in reduced flood damage in downstream areas of Mozambique, are important for groundwater recharge, and maintain riparian and floodplain vegetation. Some photographs of the Makuleke Wetlands can be seen at http://www.ramsar.org/wm/w.n.southafrica_makuleke.htm.

Peru has designated its 12th Wetland of International Importance. *Lagunas Las Arreviatadas* (1,250 ha) is located in the austral region of the Northern Andes Ecoregional Complex and Northwest Peru. It contains four main high Andean lagoons of glacial origin and a series of small lagoons and minor ponds, surrounded by peaks of more than 4,000 m

in altitude. It is habitat for many vulnerable or endangered species, such as the Andean tapir, the little red brocket deer and the spectacled bear, an emblematic species of the Andes, as well as the golden-plumed parakeet and the red-faced parrot. The site assists in regulation of the local climate and promotes other hydrological processes, including aquifer recharge, capture and storage of pluvial water and permanent water supply for the water courses that go down to the floor of the valleys of the region. To date, there are no threats affecting this area.

PUBLICATIONS

Numbers and distribution of waterbirds and wetlands in the Asia–Pacific region: results of the Asian Waterbird Census 2002–2004

Wetlands International has just released the latest results of the Asian Waterbird Census (AWC). The new publication presents count data from 2,032 sites in 22 countries. Altogether, a total of 274 species of waterbirds and 61 other wetland-dependent species were recorded and approximately 8 million waterbirds counted each year. Amongst these sites, a total of 459 met the criteria for international importance by either recording more than 20,000 waterbirds or 1% or more of the population of at least one species. Totals of 79 Ramsar Sites, 36 Migratory Waterbird Network Sites in the East Asian–Australasian Flyway and 280 Important Bird Areas identified by BirdLife International were covered. One hundred and fifty-nine species covered by the census are listed in the Appendices of the Convention on Conservation of Migratory Species of Wild Animals.

The data collected by the AWC was the main source of information for the Asia–Pacific region in providing an assessment of waterbird numbers and trends for *Waterbird Population Estimates – Fourth Edition* (Wetlands International 2006). This showed that waterbirds in Asia are under more pressure from human development than on any other continent. Altogether, 62% of waterbird populations with known trends are now decreasing or have become extinct in Asia, and only 10% are increasing. The AWC information also identified partial or complete reclamation as the biggest threat to wetlands and their use by waterbirds across the Asian region.

The International Waterbird Census (including the AWC) coordinated by Wetlands International conducted each year in January collects long term data on waterbird distribution and abundance on a large number of coastal and inland wetlands worldwide. Since its initiation, the AWC has covered more than 6,100 sites from 26 countries, with the active participation of thousands of volunteers. The data are useful to identify internationally important sites for wetland biodiversity and, when linked to predictive modelling of climate change impacts on wetlands habitats, can help to highlight particularly vulnerable biodiversity hotspots and species at risk.

The report can be downloaded from <http://www.wetlands.org/> and is on sale at <http://www.nhbs.com/>.

Shorebirds of Australia

By Andrew Geering, Lindsay Agnew & Sandra Harding, this beautiful volume, published June 2007, brings together the latest information about the evolution, ecology and behaviour of shorebirds and how they are distributed in Australia.



Complete with colour photographs and up-to-date distribution maps, it provides descriptions and tips to assist with the identification of all species of shorebird in Australia, which comprise about 10 per cent of Australia's total avifauna. In addition to information about their habitats, the most significant threats to their existence are mentioned, as well as actions in place to help conserve these birds. The book is a valuable reference for a broad range of people, from birdwatchers and field naturalists to professional ornithologists and land managers entrusted with the responsibility of protecting Australia's natural resources, especially its wetlands and coastal regions. It is available at CSIRO Publishing (<http://www.publish.csiro.au/pid/5345.htm>) for AU\$49.95.

Status of the Red Knot (*Calidris canutus rufa*) in the Western Hemisphere

This thorough study of the Red Knot of the West Atlantic Flyway (the *rufa* subspecies) which has undergone a precipitous decline over the past 20 years was published as a PDF via the US Fish & Wildlife Service's website on 20 July 2007 (<http://www.fws.gov/northeast/endangered/Red%20Knot%20Assessment%20May%202007.standard.pdf>). It has 18 authors (Niles, L.J., Sitters, H.P., Dey, A.D., Atkinson, P.W., Baker, A.J., Bennett, K.A., Clark, K.E., Clark, N.A., Espoz, C., Gonzalez, P.M., Harrington, B.A., Hernandez, D.E., Kalasz, K.S., Matus, R., Minton, C.D.T., Morrison, R.I.G., Peck, M.K. & Serrano, I.L.) and tells the sorry tale of a population that has plummeted from 100,000–150,000 in the 1980s to 18,000–33,000 now.

ONLINE TOOLS

E-mail forum for the Asian Waterbird Census

The Asian Waterbird Census (AWC) is a long term waterbird monitoring program under the Wetlands International umbrella. It has been conducted every January since 1987. The count is carried out by volunteers and led by a national coordinator. In the last 20 years, 6,000 wetlands have been surveyed at least once. The recently established e-mail forum for the AWC is meant to facilitate discussions between country coordinators, AWC volunteers and anybody interested in the AWC. Members are encouraged to use this forum to share information on waterbird counts, waterbird survey reports, waterbird

population status, waterbird monitoring and conservation events in the Asia-Pacific region. To join the group, send an email to asianwaterbirdcensus-subscribe@yahoo.com or write an email to david@wetlands.org.my.

David Li, AWC International Coordinator

...AND LAST BUT NOT LEAST!



Ruddy Turnstones rule the shorebird philately world...

Philopatry in shorebirds regularly features in published research papers, but philately and shorebirds has been paid much less attention. As part of an assessment of the extent to which shorebirds feature on postage stamps from around the world (being prepared for submission to the *Wader Study Group Bulletin*), I have been looking at which shorebird species feature most frequently on stamps. Given that they are not the most strikingly-plumaged of shorebirds (certainly in winter), perhaps surprisingly the outright winner is the Ruddy Turnstone *Arenaria interpres*, which features on 41 different stamps from 29 countries. "Runner-up" is the Northern Lapwing *Vanellus vanellus*, with 39 stamps but from the largest range of countries (31). The popularity of depicting Ruddy Turnstones on postage stamps may be largely due to their being amongst the most ubiquitous of shorebirds, with an almost worldwide distribution, broad habitat usage and very wide latitudinal breeding and wintering ranges. It is striking that many stamps featuring Ruddy Turnstones are small islands: 16 countries (55%) are either independent small island states or dependent or overseas territories of other countries. These include the Turks and Caicos Islands in the Caribbean, which featured in our sugar-eating Turnstones story in the previous issue of the *Wader Study Group Bulletin*.

Nick Davidson



Note the Turnstone's species name: *Porzana carolina*. Pictures sourced by Nick Davidson.

