The WOW factor

The Wings Over Wetlands project has put flyway-scale conservation firmly on the map. WOW's legacy includes a joined-up, cross-border approach to conservation planning for migratory waterfowl, and a new era of cooperation.

Loss of breeding, wintering and stopover sites is contributing to a decline in migratory waterbirds like the Common Redshank *Tringa totanus* (Simay Gábor) Migratory waterbirds are in trouble across the world. Vital links in the chains of wetlands they use are being lost to development or reclamation, or are under such pressure from hunters and other kinds of disturbance that they can no longer provide the safe havens the birds need to rest and refuel on their long journeys across countries and continents.

There have been many local victories in the struggle to conserve these sites, but the future for these birds depends on maintaining the networks of wetlands that connect their breeding and wintering areas.

Wings over Wetlands (WOW) was set up in 2006 to take a flyway-scale approach to the conservation of migratory waterbirds in all 118 countries in the AEWA (African-Eurasian Migratory Waterbird Agreement) region. WOW is a joint effort between BirdLife, Wetlands International, AEWA. the Ramsar Convention on Wetlands, the United Nations **Environment Programme's** World Conservation Monitoring Centre (UNEP-WCMC), and a range of local partners along the African-Eurasian Flyways including many national BirdLife Partners and the people who pursue their livelihoods in and around the wetlands.

The project covers 294 waterbird species which occur in the AEWA region, but within the same species, different populations can behave in very different ways, using different networks of wetlands, and even moving in different directions.

To apply conservation at the flyway scale requires a knowledge of the routes and sites used by all these populations. When WOW began work, much of this information had been assembled, but was spread across a number of different databases held by different organisations, and it was not easy to get the necessary overview. BirdLife's World Bird Database (WBDB), for example, stores information on the key sites (Important Bird Areas—IBAs) identified for the conservation of bird species. Data on the size of populations which trigger IBA identification are stored in the WBDB, together with information on threats and conservation measures at the site.

Much important information on populations is also contained in the International Waterbird Census (IWC) database. Maintained by Wetlands International, this includes the most complete waterbird count data available in the African-Eurasian region and other flyways.

Information on the protected status of sites is held in the World Database on Protected Areas (WDPA), managed by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP– WCMC), in partnership with the IUCN World Commission on Protected Areas. The Ramsar Sites Information Service (RSIS) provides further data on wetlands of international importance.

"We felt that all this information needed to be accessible in one place, where it would be available to decisionmakers at all levels from site managers to national authorities, and global and regional conventions", says BirdLife's Global Flyways Officer, Dr Vicky Jones. The result, after four years of combined effort by BirdLife, Wetlands International and UNEP-WCMC, is the Critical Site Network Tool (www.wingsoverwetlands.org/ csntool), a web portal which provides public access to all the data currently available on waterbird species and the sites they depend upon in the AEWA region, through a single userfriendly interface.

Critical sites were identified by applying two criteria to the combined data. These criteria relate to the presence of globally threatened species, or presence at the site of >1%of the population of that flyway.

After entering a species's name, you can request to see 'critical sites' and flyways for the different populations, sites where the species triggers IBA criteria, International Waterbird Census sites and the distribution



The future of the Biharugra Fishponds in Hungary, an important staging or wintering site for around 100,000 waterbirds, now seems secure. The company managing the ponds has introduced, with WOW's support, nature-friendly fish farming practices and is now an active ambassador for the approach. The fishponds are part of the Körös-Maros National Park, and BirdLife Partner MME has worked with the park authorities to develop the ecotourism potential of the site. A video about the Biharugra Fishponds has been screened on two national TV channels, and also won first prize in its category in the Hungarian Naturefilm Festival—Pusztaszer. "The site managers can be justifiably proud", said Jonathan Barnard, BirdLife's Senior Programme Manager.



WOW's Critical Site Network tool identifies distinct populations of species like Black-winged Stilt *Himantopus himantopus* (above) and Bittern *Botaurus stellaris* (below), and the different flyways and sites they use (Simay Gábor)



map for the species, displayed on a map of the AEWA region. You can access BirdLife species factsheets, including detailed information on the species' ecology, derived from more than 2.000 references.

You can also display tables showing estimates of the size of populations that use particular AEWA flyways. Displaying critical sites by what proportion of the population occurs at that site or by protection status gives an immediate flyway overview invaluable to decision-makers. Further filters allow you to define your own specific query. For example, you could display just the critical sites in a certain country, those for a particular taxonomic group, or those for species with a particular Red List status, or listed under a particular instrument/ convention.

Searching by site, you can see the boundaries/location of the critical site and any IBA, IWC sites or protected areas associated with it, as well as a species list for the site. You can call up IBA factsheets, Ramsar site sheets where relevant and IWC census data for individual sites showing how counts have varied over time.

The CSN Tool can therefore help plan broad-scale interventions and identify countries, regions and sites where conservation efforts should be prioritised. For example, a governmental agency investing in the conservation of particular migratory waterbird species can quickly locate critical sites beyond its national boundaries which are used by these species and seek opportunities for more effective cooperation with relevant countries along the flyway.

"People may be unaware of the importance of a site in the flyway context", Dr Vicky Jones explains. "The critical site layer flags to decision makers the most important sites for a given population. It provides a lot of data in one place; they can see what the threats are to the species, what habitats those species rely upon and which sites are in most urgent need of protection." The Tool has been designed with the national reporting requirements of AEWA and Ramsar in mind.

Now covering over 3,020 sites of importance to 561 populations of waterbirds a consultation version of the CSN Tool was launched in June 2010, at a meeting celebrating the 15th Anniversary of AEWA. Improvements are currently being made based on user feedback. This work will be finalised in December 2010. but the portal has been designed so that new functionality can be added; for example, to help countries fulfil reporting requirements of conventions or to add new sources of information, like ring recovery data.

Getting the different databases to 'talk' to one another was a tricky task, not least because they used different data formats. Some differences in taxonomic approach had to be ironed out and the geographical relationships between IBAs and IWC sites had to be established. There was also work to do in completing the existing spatial data-set, so that species range maps and flyways were available for all 294 species, and site boundaries or coordinates provided for 3,000-plus sites.

Once the data had been brought together, it was possible to identify gaps in the network of sites, and the coverage of populations. WOW ran a series of four regional workshops, where national bird experts from the regions were asked to examine country maps showing the existing data, and to identify sites they felt should be surveyed and, potentially, added to the network. The WOW team also used these workshops as an opportunity to glean feedback on early versions of the CSN tool to inform the development process.

"Now that the functionality has been worked out, and the

technological details of getting the different databases to talk to one another have been overcome, there is great potential to adapt the CSN Tool for other flyways, since the databases are all global", says Dr Jonathan Barnard. BirdLife's Senior Programme Manager. "There has been interest from those concerned with the East Asia-Australasia flyway as well as the Americas. It could also be adapted to other groups, for example, soaring birds."

Although the term 'flyway' has been used since the 1950s, and AEWA has been promoting flyway-level conservation since the mid-1990s, the concept, and what it really means in practice, is still relatively unfamiliar in many parts of the world. In parallel with the CSN Tool, WOW has produced a Flyway Training Kit, a comprehensive guide to understanding, planning, implementing and monitoring flyway-level conservation.

Available in hard copy form or as free PDF downloads, the Kit is divided into three modules: Understanding the Flyway Approach, Applying the Flyway Approach, and Communicating the Flyway Approach. Making no assumptions about levels of knowledge and experience, each module provides a thorough grounding in its subject (such as bird migration, wetland ecology and international conservation conventions) before moving on to practical matters (site management plans in the flyway context; population monitoring; ringing/banding and satellite telemetry).

Together with coordinated presentations and supporting materials, the modules are designed to be adapted to local needs to provide targeted training, with case studies and species added or changed as appropriate. There are English, French, Arabic and Russian versions of the training kit. The Royal Society for the Conservation of Nature (RSCN—the BirdLife Partner in Jordan) has already carried out a training workshop using the Kit, and found it so useful that it has adopted the Kit into its existing regional training programmes.

As the project comes to an end in December 2010, so will its direct involvement in eleven demonstration projects in twelve countries spanning the AEWA region, from Estonia in the north to Africa in the south. However, the achievements will be sustained through the work of the local beneficiaries, as detailed in the last update on WOW's progress in *World Birdwatch*, September 2009. BirdLife and its national Partners, and other NGOs which have participated in the WOW projects, will also continue their work at these sites.

"WOW has been a technically challenging project, but by working well together in cross-institutional teams we have been able to deliver a really innovative conservation tool", says Vicky Jones

"WOW has come to a successful end, having largely met all its objectives", says Jonathan Barnard. "One of the great successes of the project has been fostering close cooperation between two international NGOs, BirdLife and Wetlands International, and two Multilateral Environmental Agreements, AEWA and Ramsar."

So successful has the collaboration been that at AEWA's 15th Anniversary event, BirdLife, Wetlands International. AEWA and Ramsar signed an agreement to continue their work together. WOW may have come to an end, but its crowning achievement may prove to be a permanent foundation for international cooperation to protect the birds and sites of the African-Eurasian flyway. WB

By Nick Langley

For more information visit www.wingsoverwetlands.org



WOW's work at Wakkerstroom in South Africa, implemented by BirdLife South Africa, has resulted in a wider and more equitable distribution of the revenue from ecotourism. Local people, who once wanted to see the site opened up to grazing and other activities that would have provided their impoverished communities with desperately needed income, have instead become enthusiastic conservationists, helping to manage the site and protect its birdlife. Woodcarver Muzi Makhubu, helped by the WOW-supported Indalo Carving Project, has been so overwhelmed with orders that he has formed an alliance with carvers near the Kruger National Park to collaborate on work and share skills. He uses the wood of invasive tree species to create carvings of birds such as cranes for sale to tourists. His creations are so realistic that they are used as decoys to attract wintering Grey Crowned-cranes *Balearica regulorum* to feed outside BirdLife South Africa's Wakkerstroom Visitor Centre.