

Protecting Asia's flyways

This month marks the second year of Birdfair's support for BirdLife International's Flyway Programme, with money going to conserve the East Asian-Australasian Flyway. Ed Parnell looks at the importance of this route for migrating shorebirds, and finds out how the funds raised will help protect it.

Since the first Birdfair in 1989, Rutland Water's annual August event has raised more than £2.5 million for a variety of bird conservation projects around the globe. With some 11 per cent of the world's migratory birds classified on the IUCN Red List as Globally Threatened or Near Threatened, in 2011 the Birdfair chose to support BirdLife International's Flyway Programme for its next three years, with 2012 dedicated to Asia.

The East Asian-Australasian Flyway extends from Arctic Russia and Alaska down to Australia and New Zealand, encompassing large tracts of eastern Asia and all of South-East Asia. More than 50 million migratory waterbirds, including around eight million waders, use the flyway each year. Yet birds are not the only ones to take advantage of its ever-shrinking resources: more than a third of

the global human population lives in the countries that the migration route crosses, sharing the same crowded space.

"Migratory birds are in serious trouble and we need joined-up action if we are to conserve them. We need to safeguard breeding, passage and wintering sites. BirdLife is well placed to do that, as we have partners and local groups all along the flyway which, with the Birdfair's fantastic support, are pulling together to help conserve this migratory spectacle," says BirdLife's Head of Conservation, Richard Grimmett.

Of the 33 Near Threatened and Globally Threatened bird species occurring in the flyway, 24 are dependent on the food-rich mudflats and marshes of the intertidal zone. In addition, there are significant gatherings of a number of more common species familiar to British birders, including Bar-

Asia's coastal wetlands are vital for a range of waterbirds, including **Baikal Teal (left)**. **Great Knot (right)**, which is classified as **Vulnerable**, relies on habitats along the flyway and is suffering as sites come under pressure from land development.

tailed Godwit, Dunlin, Grey Plover and Eurasian Curlew. One of the flagship species featured on this year's Birdfair artwork by Robert Gillmor is Lesser Sand Plover. A common and easily seen bird in many parts of the flyway, it is a rare vagrant to Britain, where there are just five accepted records, including two of the East Asian form *mongolus* (also known as Mongolian Plover) in Hampshire and Lothian in 2003 and 2004, respectively.

Greatly sought after

A species that has proved even harder to catch up with in Britain is another of the Birdfair's poster birds, illustrating the main conservation issues affecting the flyway's avian visitors. Great Knot is much sought after by British and Irish listers, having occurred three times in Britain and just once in Ireland. The largest *Calidris* sandpiper, Great Knot is slightly bigger, longer billed and longer bodied than our familiar Knot, with breeding adults having distinctive black-chevrons, pale underparts and lacking any red in their plumage.

The first British individual – a one-day bird on Shetland in September 1989 – was an adult, as were the two other British records in 1996 and 2004. With no subsequent accepted records, the prospect of future British stragglers looks increasingly slim, the species having undergone a sharp population decline recently, seemingly the result of a single large-scale land reclamation scheme in South Korea.

Saemangeum, situated on South Korea's west coast (on the Yellow Sea that shares its coastline between the Korean peninsula and China), was historically one of the most important sites for shorebirds in the region, with significant counts of Great Knot and three other globally threatened species: Spoon-billed Sandpiper, Nordmann's Greenshank and Saunder's Gull.

Starting in the 1990s, the Korean government began a massive land reclamation scheme, planning to transform 40,000 ha (two-thirds the size of The Wash) of tidal mudflats and



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shallows – comprised of the estuaries of two rivers – into an agricultural reservoir and farmland. After a long campaign fought by local people and conservationists, including local NGO Birds Korea, in April 2006 the Korean government finished the construction of a 20-mile seawall, cutting off large areas of food-rich intertidal habitat from the sea.

When areas of habitat used by birds on their migration are lost, there can be a tendency to think that, although obviously grim from a conservation perspective, the result won't necessarily be catastrophic as the birds will adapt their behaviour and move elsewhere. Indeed, this was the argument used by the Korean government, which claimed that shorebirds would "move their habitats to the neighbouring Geum Estuary or Gomso Bay or other tidal-flats," which are both ironically now threatened with development.

Data gathered after Saemangeum's degradation shows the folly of this thinking. In 2002, Great Knot had, according to Wetlands International, an estimated global population of 380,000, with around 119,000 – just over 30 per cent – using Saemangeum as a staging area, and 176,000 in total moving through South Korea on their northward migration.

To monitor the effects of the reclamation project on the site, a joint project was carried out between 2006 and 2008 by Birds Korea and the Australasian

Wader Studies Group (part of BirdLife Australia). The Saemangeum Shorebird Monitoring Program aimed to quantify the impact of enclosing the intertidal habitat used by migrating shorebirds during their northbound migration, as well as any knock-on effect at neighbouring sites. The counts produced a staggering conclusion in relation to Saemangeum's visiting Great Knot population: 86,288 in 2006, 31,739 in 2007 and just 12,460 in 2008, by which time the wetland habitat at the site had deteriorated further.

Great decline

Neighbouring Yellow Sea sites reported no increases in Great Knot numbers in the period, leading to the conclusion that the loss of important passage has a major influence on the species' population. Long-term wintering counts from sites in Western Australia seem to back this up: over the past 25 years they have shown a 50 per cent drop in Great Knot numbers.

As a result, BirdLife International 'uplisted' the species' conservation status in 2010 to Vulnerable, extrapolating an estimated population decline of around 25 per cent since 2000. Given that the pressures on suitable habitat around the Yellow Sea and other areas along the flyway will only increase with the region's burgeoning economies and human populations (a recent study found that up to 51 per cent of coastal wetlands

have been lost over the past 50 years), BirdLife's concerns do not seem like scaremongering.

Another of the flyway's birds has suffered an even more precipitous decline: Spoon-billed Sandpiper is the region's – and perhaps the world's – most endangered wader. Now classified as Critically Endangered, denoting the highest level of threat, this iconic species has a population of fewer than 100 pairs.

From its breeding grounds in Arctic Russia's Chukotsk Peninsula, the species migrates south through the flyway to winter in Bangladesh and Burma, passing through sites like Saemangeum – or at least, it used to. Habitat loss and degradation along its route have undoubtedly been a large factor in the species' decline, although startling evidence has recently emerged from Spoon-billed Sandpiper expert Christoph Zöckler that wader trapping at wintering sites in Burma and Bangladesh (at some localities large numbers of waders and terns are caught in nets at night) has played a major role.

“The current consensus is that the big problem for Spoon-billed Sandpiper stems from first-year birds not returning to the Arctic and therefore not being recruited into the breeding population,” explains Richard Grimmett.

As if hunting and habitat loss aren't enough to deal with, there is also speculation that increased gull, skua and Arctic Fox predation on the breeding grounds could be having an impact. The potential effects of climate change on coastal habitation is being touted as another potential problem, along with habitat changes caused by invasive *Spartina*

The East Asia Flyway is also used by the remaining population of Red-crowned Crane, which is listed as Endangered by IUCN.



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The East Asian form of Lesser Sand Plover, also known as Mongolian Plover, has been recorded in Britain. Strongly migratory, it relies on the Asian flyway.

grass at migration sites in China. All of this led to the instigation, in 2011, of a multi-agency Spoon-billed Sandpiper captive breeding programme, to be based at Slimbridge WWT.

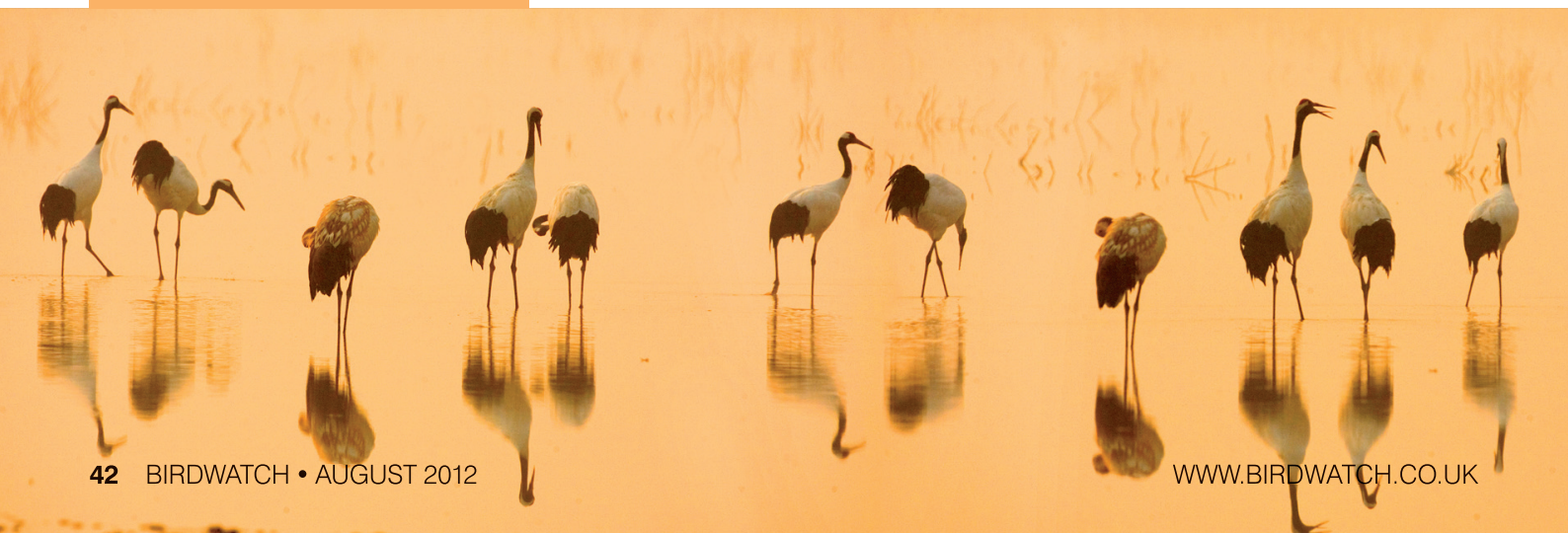
With luck, the tide may just be turning for the unique bearer of that spatulate bill. It certainly is not too late for the other 50 million migratory waterbirds that rely on the flyway. This year's Birdfair aims to make a big difference, with donations leading to a range of vital activities and actions throughout the region.

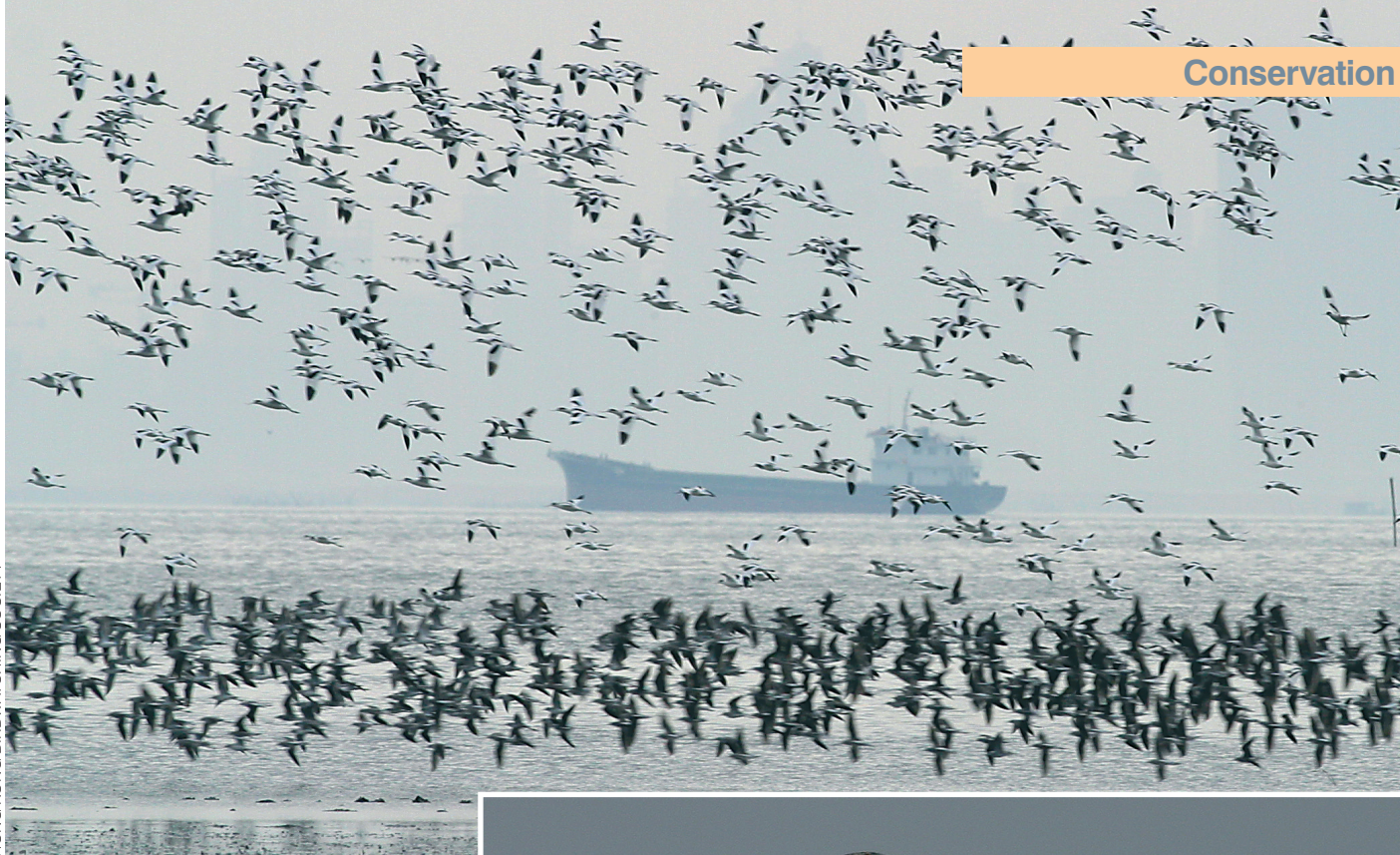
How Birdfair will help

“Birdfair will support site-based work at a number of key intertidal sites along the flyway,” says Richard Grimmett. “These will mainly support local organisations, including Important Bird Area (IBA)

support groups, to advance better habitat protection and improve integration around coastal zone planning.”

Birdfair will also help the future conservation effort by filling in the gaps of our scientific knowledge of the flyway's birds and their movements through supporting waterbird censuses and monitoring schemes, as well as facilitating better sharing of data and knowledge between different national programmes. In addition, one of the most important Birdfair outcomes will be to raise awareness around the region as a whole about the importance of intertidal wetlands, which as well as being invaluable to birds and other biodiversity,





Sites along the East Asian-Australasian Flyway are hugely important to vast numbers of migrating waders (above); habitat loss will impact them all. Spoon-billed Sandpiper (right) is the subject of a multi-agency captive breeding programme which could save this endangered species.

also have an enormous value to local communities – they attract tourists, are important for shellfish, help form coastal defences and provide many other key ecosystem services.

Wetlands as wasteland

Intertidal wetlands are often viewed as wastelands ripe for industrial development, with some of that development undertaken merely to inflate the economy, rather than for any tangible benefit to local people, or indeed the wider public. This certainly seems to be the case at Saemangeum, where the planned new agricultural land has not yet materialised; in fact the land may not even be suitable for farming. Other mooted uses, such as a leisure development, may well prove not to be economically viable. It would seem that Spoon-billed Sandpiper, Great Knot and the vast mixed shorebird flocks have lost their stop-over site to a grand political whim.

Richard Grimmett describes a similar situation in Japan, although this, at least, led in the longer term to some positive outcomes for wildlife: “In the 1970s and 1980s Japan pursued a very active programme of converting estuarine systems to agriculture and port



development. Some of those high-profile projects were a disaster, proving not to be suitable for agriculture and leading to the collapse of local marine fisheries. As a result, in Japan today there are strong local forces to conserve remaining habitat and to open up dykes where wetlands have been lost.”

Richard Grimmett hopes the raised profile stemming from Birdfair might have a similar effect around this flyway in years to come. The early signs from last

year’s work are promising. “In 2011, we gratefully received Birdfair’s support towards BirdLife’s Africa-Eurasia Flyway programme in the Sahel and Sub-Saharan region of West Africa. Already, we’re starting to see a much greater awareness and commitment from governments in the region to addressing the conservation of landbirds along that flyway. Hopefully this year will lead to similar positive outcomes for the migrating shorebirds of Asia and Australasia.” ■

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