Godwit snapped in China

July 2015



Yalu Jiang reserve, north east China. Photo: Mingyu Liu

Tony Flaherty, Manager Coast and Marine, Natural Resources Adelaide and Mt Lofty Ranges

As the arctic summer draws to a close, many shorebirds will soon depart for their epic journey south.

Many Godwits and Great Knots have finished nesting at breeding grounds in Siberia, northern China and Alaska and are flocking to staging areas in preparation for migration.

Millions of birds will journey back through to China and East Asia to Australia and New Zealand along the East-Asian Australasian flyway with thousands due to arrive on our shores in spring.

Leg bands

A dedicated network of volunteers, across this "Oz-Asia" flyway, play an important role in understanding shorebird migration and conservation. For decades the use of small metal leg bands has been used to study all sorts of birds. In Australia this is coordinated through the Australian Government under the auspices of the Australian Bird and Bat Banding Scheme which manages information on threatened and migratory bird and bat species. Bird banders undertake training to gain their licences and be registered with the scheme. The recovery of bands has been instrumental in understanding migration and habitat use along the flyway.

Many banded shorebirds are now also fitted with numbered, coloured leg "flags". These enable observers to identify where a bird was banded without having to re-capture it. This has revolutionised the study of migratory birds.

As part of an international shorebird conservation effort, guidelines for banding and flagging birds have been developed so that different countries and regions use distinct colours to enable observers to identify where the bird was banded. Flags may also be numbered in order to identify individual birds. This allows a network of bird sighters throughout the flyway, and a Global Flyway Network team working in the Yellow Sea to identify where the birds have come from.

Long v short haul

From researcher's examination of flag sightings, it appears that different shorebird species have unique migration patterns, using different routes, stop-overs, and strategies, such as long haul flights or short hops. Of note is that more shorebirds flagged in Australia are seen at some stop-over sites in Asia on the northward migration than the southern migration.

From sightings and tracking studies it appears that some species such as Bar-tailed Godwit fly directly south across the Pacific, to Northern Australia and New Zealand. Some Ruddy Turnstones fly north up through Asia to Alaska but make their southward leg across the Pacific, with stopovers on south pacific islands such as Vanuatu, Marshall and Gilbert Islands.

Since 2012, with support from the Adelaide and Mt Lofty Ranges Natural Resources Management Board, a band of dedicated volunteers, led by Clive Minton from the Victorian Wader Studies Group together with Maureen Christie from the Friends of Shorebirds South East, have flagged shorebirds at Thompson Beach, north of Adelaide.

Birds flagged in South Australia have orange over yellow flags on their right leg. We have a Bar-tailed Godwit (flagged AKK) which was banded at Thompson Beach in 2012 which has been re-sighted at Nanpu in Bohai Bay China in 2013, 2014 and 2015. It was also re-sighted at Thompson Beach in 2014.

In April this year, another Thompson Beach-banded bird, a male with the flag AKL, has been photographed in north-east China near the Korean border. Another godwit CAH was also seen there in 2014. The Yalu Jiang coastal wetland is an important stopover site along the flyway during northward migration for

Bar-tailed Godwit, Great Knot, and Far Eastern Curlew. Between April to May, up to 300,000 shorebirds use this reserve as a staging site before heading to their northern breeding grounds. Up to 115,000 Bar-tailed Godwits use the reserve.

Part of this coastal wetland was designated as the Dandong Yalu Jiang Estuarine Wetland National Nature Reserve in 1997, to conserve the coastal wetland ecosystem and wildlife. This reserve area is typical of the Chinese Yellow Sea coast, with bare intertidal mudflats and some areas of reed marsh, next to a seawall bordered by farmland and aquaculture ponds for shellfish, jellyfish and sea cucumbers. The shorebirds use aquaculture ponds for roosting during high tide and some feeding.

Mr Quingquan Bai from the Forestry Bureau of Dandong City is a regular contributor of sightings of Australian banded birds at Yalu Jiang reserve. Qingquan Bai joined the China coastal waterbird census team in 2005, counting the waterbirds of Yalu Jiang coastal wetland every month and coordinating volunteers. During the northward and southward shorebird migration he counts the population, recording and photographing leg flags.

The dedication of Qingquan and thousands of volunteers across the flyway is making a valuable contribution to shorebird science and conservation.

Protection of shorebird feeding habitats across the flyway is important to their survival. Locally, the establishment of the Adelaide International Bird Sanctuary and the Northern Gulf St Vincent Marine Park will play an important role in these global conservation efforts.



Godwit AKL with leg flag (centre) in China. Photo: Quingquan Bai



Anyone along the flyway can help in shorebird conservation by reporting leg flags. In the lead up to our shorebird season which begins in spring, NR AMLR and BirdLife Australia will run Adelaide shorebird identification workshops and training for shorbird counters to prepare for the Shorebird 2020 counts. These counts involve volunteers from Birds SA and BirdLife Australia and the general public.

More information

For more information: Email: DEWNR.AMLR@sa.gov.au Telephone: (08) 8273 9100

www.naturalresources.sa.gov.au/adelaidemtloftyranges

For more information on shorebirds visit:

http://www.naturalresources.sa.gov.au/adelaidemtloftyranges/plants-and-animals/native-plants-animals-and-biodiversity/native-animals/birds/shore-birds-project

For reports on shorebirds in the Adelaide Mt Lofty Ranges and Gulf St Vincent visit the **Samphire Coast Icon Project** website at birdlife.org.au/projects/samphire-coast-icon-project

For more information on the leg flags used in different countries and reporting flag sightings visit the **Australian Wader Study Group** website http://www.awsg.org.au/

Shorebird flag sightings can be reported through the AWSG website www.awsg.org.au/reportform.php

A guide to the shorebird Leg Flags used in the East-Asian Australasian Flyway can be found on the **Asia-Pacific Shorebird Network** website at http://www.shorebird-network.net/shorebird-leg-flags/

Information on the **Australian Bird and Bat Banding Scheme**, database and becoming a bander is available at www.environment.gov.au/science/bird-and-bat-banding

Shorebirds 2020 National Shorebird Monitoring Program birdlife.org.au/projects/shorebirds-2020

For more about **Dandong Yalu Jiang National Nature Reserve,** visit the NZ Miranda Shorebird Centre website www.miranda-shorebird.org.nz/archives/97

A research paper on the importance of the reserve is available via the Wetlands Oceania website at www.wetlands-oceania.org/downloads/Barter%20Publications/Yalu%20Jiang%201999.pdf

For information on the **Global Flyway Network** partnership of shorebird researchers worldwide visit <u>globalflywaynetwork.com.au/</u>



Yalu Jiang reserve, north east China. Photo: Quingquan Bai

