

Newsletter for the Asia Pacific Flyways

Editor: Liz Crawford Email: tattler@awsg.org.au No. 27 January 2013

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Tattler is the quarterly newsletter of the Australasian Wader Studies Group. Contributions are welcome and encouraged from all working with shorebirds and their habitats along the East Asian - Australasian Flyway.

Please contact the editor for more information.

Editorial

Increasingly, the internet is being used to create awareness about issues and to generate petitions to lobby governments for change, or, as in the case below, to lobby governments to maintain an existing program. Two thousand signatures are required to justify a petition - please add yours to the Shorebird Recovery Program Petition.

Several articles in this *Tattler* involve flagging and banding of shorebirds and their subsequent detection on the Flyway - all assisting in our understanding of the use of various sites by shorebirds. It is with great sadness that we record the passing of Heather Gibbs, custodian of the AWSG banding and flagging database, and friendly communicator to all who sent in sightings of bands or flags.

As the human population grows and development extends over more and more shorebird habitat, it is critical to be aware of changes and to try to negotiate ecologically viable outcomes - examples from South Korea highlight the pressures being exerted on the natural environment and a possible lifeline offered by eco-tourism. Torres Strait shorebirds will benefit from Indigenous Protected Areas. The Towra Point Nature Reserve grey listing reveals the inherent difficulties associated with managing a natural area, especially when many different parties are involved.

We must keep trying to make positive changes for shorebirds throughout the Flyway.

Shorebird Recovery Program Petition - NSW

I've started a petition to the Shoalhaven, Eurobodalla & Bega Valley Councils & NSW Government asking that they reaffirm support for the Shorebird Recovery Program. Your help will get it off the ground and make it a success.

We've had a few specific issues here at Cudmirrah-Berrara-Sussex Inlet this season and there's a small local endeavour to discredit and even terminate aspects of the program which is designed to protect threatened beach-nesting birds. It's obvious many of us feel some sense of isolation and whilst often rewarded by the work, we despair at the senseless resistance we experience from a small section of the community. Although motivated by some of these negatives it is intended to rise above and make explicit

the program's core values and practices.

Here's the link:

http://www.change.org/en-AU/petitions/to-reaffirm-support-for-the-shorebird-recovery-program?utm_source=supporter_message&utm_medium=email&utm_source=share_petition&utm_medium=url_share&utm_campaign=url_share_before_sign

Please sign this petition to indicate your support for the Shorebird Recovery Program, its volunteers and the measures it employs to protect threatened species. You can sign the petition.

Thanks! Mike Clear

Compiled and published by the Australasian Wader Studies Group

A Special Interest Group of BirdLife Australia





Ruddy Turnstone - ideal species for geolocator studies at King Is



The Ruddy Turnstone Arenaria interpres is a small wader in the sandpiper family Scolopacidae. Its high site-faithfulness and consistent foraging habits in the kelp-rich rocky shores on the King Island west coast make it an ideal species for recapture using cannon netting. Consequently light-sensitive geolocators have been successfully deployed in tracking their annual migration paths to Siberian breeding grounds and return. Since 2009 the VWSG has been using these 1 gm geolocators affixed to Darvic leg flags positioned on the bird's tibia.

Twenty years ago light-level geolocators were developed for elephant seals and then sea birds by the British Antarctic Survey. But it has only been in the last five years or so that the miniaturized 1 gm units have become available. The cost is now about \$200 each which makes it viable for the VWSG, AWSG and other volunteer NGOs to use with waders. There are a small number of manufacturers in Europe. Unfortunately some of these devices have not been up to the task of withstanding the rugged treatment in the rocky salty environment making the exercise more costly and frustrating. (Some Biotrack units on Turnstones retrieved on King Island in November 2012 had failed prematurely due to saltwater seeping into casing cracks). Only the best quality units should to be used in the future.

Prior to migration Ruddy Turnstones must increase their mass from about 90-100 grams to about 180-190gms. At King Island, groups of up to 40+ individuals forage for maggots and hoppers in rotting kelp patches, making them an ideal target for cannon netting. A small mesh net and careful planning, combined with an experienced team, mean that fatalities are most infrequent. Catching foraging Ruddy Turnstones differs from most other waders which are caught while roosting at high tide when they are clumped together and relatively still.

At King Island an ideal volunteer team size is a small plane load of 8 fit regulars from the mainland supplemented by about 6 enthusiastic



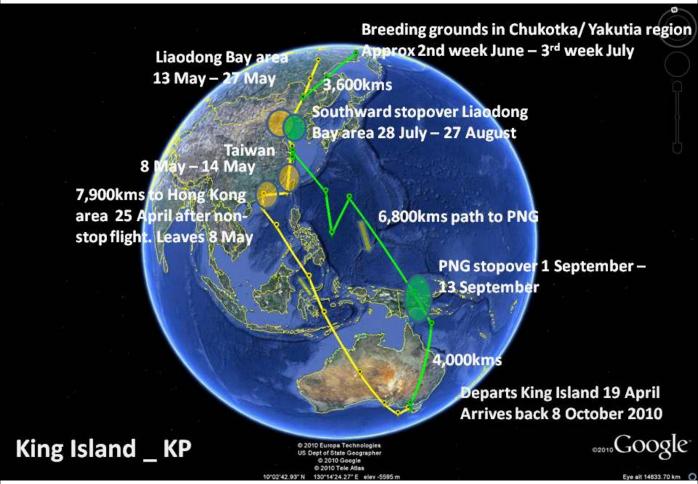
Ruddy Turnstones in kelp on King Island (above left) and fitted with geolocator, flags and bands (above). Photos - Margaret Bennett

locals. In 5 years they have acquired a detailed knowledge of the likely catching spots and the bird movements to and from roosting spots on offshore rocky islets. "Twinkling" has become a new art form involving clambering over slippery rocks and balancing on outcrops. Hiding involves lying low in snaky sedges or crouching behind boxthorn bushes. The average age of the team is well over 70. This was the case between 14 and 22 November 2012 when 9 birds with geolocators were recaptured out of 133 individuals caught in total. Five new geolocators were added. At first glance, it was a highly successful effort by the team.

Now returning to the birds and their long hazardous journey. Waders are by far the most numerous and species-rich taxa among all Arctic waterbirds and serve as good indicators on the state of global coastal wetlands, pointing to numerous pressures mostly in non-breeding areas. The key refuelling stopover points they use to build up their fat reserves are identified as priority zones for conservation. This applies particularly for their northward passage where geolocators show that Ruddy Turnstones mainly use the northern Yellow Sea area. Geolocators show southward migration of Ruddy Turnstones ranges widely from Mongolia to the central Pacific. Generally, individual birds seem to retrace their paths in subsequent years.

It is well known amongst wader volunteers that a large proportion of intertidal habitat in the Yellow Sea region has been lost primarily to land reclamation by China and South Korea. Widespread hunting and harvesting together with pollution also exist along the flyway. Unsurprisingly, in the East Asia - Australasian Flyway all of the populations of migratory Arctic waders with known trends are declining in numbers. (cf Arctic waders in all flyways where 40% are declining and only 9% are showing increasing trends. Wetlands International 2012

Ruddy Turnstone - ideal species for geolocator studies cont.



While each bird follows a slightly different track this diagram is fairly typical: a long first leg to Hong Kong/ Hainan and/or Taiwan. Then further stopover in the northern Yellow Sea before proceeding to the breeding grounds in Chukotka. The return journey is more variable; this one came via the Pacific and Papua New Guinea but some follow south through Asia and several have even gone as far west as Mongolia. - Ken Gosbell

figures). Although the East Asia - Australasian Flyway boasts the most species-rich complex, it has the least number of individuals. The November 2012 Ruddy Turnstone count at King Island was 680 individuals compared with 720 in 2011 and over 1000 three years earlier.*

In addition to Ruddy Turnstones the VWSG and AWSG have affixed geolocators to Eastern Curlew, Sanderling and Greater Sand Plover. Due to the species' behaviour and numbers the retrieval of geolocators from Eastern Curlew and Sanderling has proved to be much more difficult. Despite that, valuable information to assist with breeding characteristics and their influence on population dynamics has been obtained.

One other difficult species in Australia has been the Red Knot. In the USA geolocators were first used to track Red Knot in May 2009 at Delaware Bay, New Jersey. Three individuals from 47 geolocator-fitted birds were recaptured in May 2010 and their flight paths ascertained (Niles *et al.* 2010). But in late November 2012, attempts by the VWSG to catch Red Knot at Thompsons Beach on Gulf St Vincent proved extremely difficult.

Although bird numbers seemed adequate, their readiness to move to various locations made them a difficult target. Unlike at King Island, there was great difficulty in assessing the high-tide level on this Gulf. Only one Red Knot was caught in 4 days.

Concern has mainly focussed on the threats to the waders outside their Arctic breeding sites. Whether these are more important in the long term only time will tell. Of the 132 Ruddy Turnstones caught on our November expedition only 3 were juveniles. This indicates a poor breeding season for this species in 2012. In the past 5 years there have been two other disastrous breeding years. As reported at the recent Australasian Shorebird Conference in Adelaide, the long held alternative prey hypothesis (showing regular lemming cycles are indirectly responsible for breeding success in waders) has not been valid over the last 2 decades (Yaara Aharon Rotman 2012). Rapid changes in global weather patterns, rising Arctic temperatures, melting permafrost, changed plant flowering dates, changes in insect and microorganism abundance could continue to adversely affect Ruddy Turnstone breeding

Ruddy Turnstone - ideal species for geolocator studies cont.

Ken Gosbell's excellent analysis showing how geolocators record second nesting attempts by Ruddy Turnstones would indicate flexible survival strategies. But the question remains - Will they and the other migratory Arctic waders be able to adjust to dramatic long-term Climate Change?

Other important information derived from geolocator data concerns departure and arrival dates and average flight speed calculations. Analysed flight data from the geolocators show that the Turnstones habitually fly non-stop from Australia to Taiwan, a distance of about 7600 km, in six days, a speed of between 50 and 55 kph. After about 8 to 18 days there they fly 1700km further north to the rich tidal flats of the Yellow Sea where they refuel for about 8 days before their ultimate flight to their Siberian breeding grounds.

Ongoing skilled analysis of data retrieved from well focussed projects will not only increase our understanding of wader behaviour and ecology but will also provide essential tools for saving these species in the long term. The Ruddy Turnstone is currently listed as secure federally

and in all Australian states. But the rapid decline of this species and all Arctic breeding waders using the East Asian - Australasian Flyway will hopefully cause the Federal Government to use the bilateral treaties CAMBA and ROKAMBA and apply great pressure on China and South Korea to protect the Yellow Sea mudflat habitat.

Team Members on the November King Island Ruddy Turnstone Expedition

From Victoria: Clive Minton, Robyn Atkinson, Prue Wright, Penny Johns, David Wilbraham, Peter Jenkins, Annabel Richards, Roger Richards From King Island: Margaret Bennett, Don Robertson, Graeme Batey, Margaret Batey

Notes

- *Counting of Ruddy Turnstones in jagged rocks or clumpy kelp is notoriously hard and is often more accurate when the birds are in flight.
- 1. The opinions expressed are mine and do not represent those of any organisation.
- 2. References have not been given as the historical information can easily be "googled".

Roger Richards PO Box 21 Hastings VIC 3915 Email ornithology3@yahoo.com.au

E7, Long Haul Champion Godwit

Tattler readers may well remember the excitement in 2007 when 'E7', the female Bar-tailed Godwit fitted with a satellite tag at Miranda in New Zealand, flew to Yalu Jiang in China, a non-stop flight of 10,200km. She followed this with a 7,000km non-stop flight to Alaska. Then on 30 August 2007 she set off from the Kuskokwim Shoals in western Alaska on what was to be a record breaking non-stop flight, straight down the Pacific back to Miranda, a journey of at least 11,690km, that lasted 8.1 days. This was the longest non-stop flight of any land bird ever recorded. Of course she was not the only bird to do this; it is now clear that the vast majority of Bar-tailed Godwits fly non-stop from Alaska to New Zealand and eastern Australia each southern spring. Some birds may well be flying further than E7, possibly over 12,000km non-stop.

Five years on, E7 and most of the other tagged birds have been forgotten but are any of them still around? Well E7 was last seen on 14 July 2012 but instead of being in Alaska breeding, she appears to be in permanent retirement at the small Maketu Estuary in the Bay of Plenty on New Zealand's east coast. At some point she lost a leg but we don't know how. Then between January and April 2009 she moved from Miranda to Maketu. She wasn't seen for another year so

may have gone north to breed. However, since March 2010 she has been seen summer and winter at Maketu, so has clearly given up on migrating but in spite of only having one leg she appears to be in good health.

Of the others, E2 and E4 were last seen at Yalu Jiang in China in April 2010, E3 was last seen in Taiwan in April 2009 and E5 was last seen at Miranda in January 2009.

From the birds tagged at Miranda in February 2008, D5 was seen at Miranda 33 times until September 2010. Instead of going north in 2008, D5 did two trips in quick succession to Okarito, a small estuary on the west coast of the South Island, before settling back at Miranda. D8 has been seen 26 times at Miranda and once at Yalu Jiang in China. Last sighting was February 2012 and as there are no winter sightings at Miranda it is assumed D8 has continued to migrate each year. Stop Press: The black flagged male D8 is back at Miranda as of 23 December 2012.

We shall continue to monitor these birds in New Zealand over the coming years.

Adrian Riegen

New Zealand Wader Study Group

Shorebird Banding at Java, Indonesia

Training in shorebird banding has been conducted at Trisik Beach, Yogyakarta, Indonesia with the Cikabayan Bird Banding Club from Bogor and the Paguyuban Pengamat Burung Jogja Bird Banding Club from Yogyakarta. This activity took place from 8-11 February 2011, 26 January – 1 February 2012 and 11-14 October 2012. Passerines as well as shorebirds were caught and banded.

Trisik Coast, Kulonprogo, Yogyakarta is one of the wintering areas in Yogyakarta for some migratory shorebirds. Since the Trisik Coast has several types of habitat such as rice fields, sandy fields, forests, estuaries, lagoons, and deltas, it is possible for the coast to provide various kinds of food for birds. As many as 137 species of birds from 45 families were observed. Families with the most species recorded were Scolopacidae (26 species), Sylviidae (11 species) and Ardeidae (11 species).

Birds were captured using mist nets between dusk and dawn, making use of the tidal changes on the beach. Once caught, morphometric measurements (length of head, beak length, tarsus length, diameter of tibia and tarsus, wing length and body length) were recorded, coloured flags specific for Java (black over orange) were placed on the right leg, and an individually numbered Indonesian ring (e.g. "ID-LIPI-BGR 1A....." or "LIPI 16911 Indonesia 10 Y-......") was placed on the left leg.

Table 1. Number of shorebirds caught on Trisik Beach, Yogyakarta between 8-11 February 2011, 26 January – 1 February 2012 and 11-14 October 2012.

Waders			2011	2012
No	Common Name	Scientific name		
1	Javan Plover	Charadrius javanicus	1	
2	Pintail Snipe	Gallinago stenura		1
3	Common Sandpiper	Actitis hypoleucos		1
4	Red-necked Stint	Calidris ruficollis		23
5	Long-toed Stint	Calidris subminuta		4
6	Broad-billed Sandpiper	Limicola falcinellus		1
7	Redshank	Tringa totanus		1
TOTAL			1	31
Tern				
1	Greater Crested Tern	Sterna bergii		2
TOTAL				2

Photos from top:

The mist net put in place where shorebirds rest on Trisik Beach © Fransisca Noni

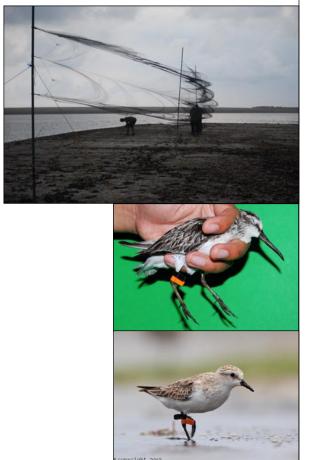
Broad-billed sandpiper with Java Flag © PPBJ/CBC Birdwatcher succeeds in photographing Red-necked Stint with Indonesian flag on Trisik Coast © Boas Emmanuel

The total number of waders caught was 32 individual birds, consisting of 7 species, while the total number of terns caught was 2 individual birds, consisting of 1 species (**Table 1**). The most commonly caught wader species were Rednecked Stint *Calidris ruficollis*, Least Concern (23 individuals) and Long-toed Stint *Calidris subminuta*, Least Concern (4 individuals). The caught tern species was Greater Crested Tern *Sterna bergii*, Least Concern (2 individuals).

Acknowledgements

This activity was made possible thanks to Dr Dewi Malia Prawiradilaga as a coordinator of the Indonesian Bird Banding Scheme (IBBS); the Wildlife Conservation Society-Indonesia Program for the equipment; and Dr Yeni Mulyani, Ir. Ign. Pramana Yuda, Iwan "Londo" Febrianto and me as a trainers. Thanks to Boas Emmanuel for the picture. The trainees from Cikabayan Bird Banding Club and Paguyuban Pengamat Burung Jogja Bird Banding Club were: Abdu Rohman, Alifi Fitriana R, Aronika Kaban, R. Arif Alfauzi, M. Mustafid Amna, Elisabet Rose Rahayu B.Hutabarat, Walesa Edho Prabowo, Imam Fadila, Irwan Maulana, Zulgarnain Assidiggi, Waskito Kukuh W., Nanang Khairul Hadi, Abdul Mujib, Muhamad Cahadiyat Kurniawan, Fikri Bakhtiar, Nurdin Rahmawan, Putri Wardhani, Agung Satria Wibowo, Sitta Yusti Azizah, Shaim Bashari, Fahrudin Surahmat, Ahmad Zulfikar Abdullah, Dlohak Annahwi, Andri Hertanto, Muhammad Arifin, Munifah, Helida Azmi, Agus Kristian.

Fransisca Noni



Gulf of Carpentaria Spring Survey - September 2012

After NW Australia's Roebuck Bay and 80 Mile Beach the next most important Australian wader site is the southeast Gulf of Carpentaria in northern Queensland. Little is known about waders in the Gulf as the area is rarely visited by ornithologists. The Gulf is an extremely important area, not just as a wintering ground but also as a key staging site for waders on northward and southward migration so it is disappointing that so few wader surveys have been undertaken there.

There are reasons for this inactivity. The Gulf is remote, hot and wet in the summer and the waders are only really accessible by boat or plane and crocodiles and stingrays patrol the waters. But the real problem for wader surveys are the tides. Unlike most places, the Gulf has only one high tide a day. This leads to periods of high tides at night so waders are only roosting in the dark, or periods with lower tides which do not force birds to roost in large flocks, scattering instead over large areas of sandflats, making it more challenging to count them. From time to time the tides do suit surveying, as occurred in late September 2012.

Undaunted by these problems Peter Driscoll, past chair of the Queensland Wader Study Group



Typical Gulf coast - Photos Adrian Riegen





(QWSG) bought an Ultralight in the 1990s and learnt to fly, enabling him to undertake aerial surveys of the southern Gulf in 1997-99, backed up by two men in a boat. In March-April 1999, I was one of the men in the boat for what turned out to be the last systematic survey of the southeast Gulf.

At long last the QWSG has made plans to re-visit the Gulf in March 2013 but thought it wise to recce the area ahead of time and plan logistics for March. I joined Peter again in September for a brief visit to the Gulf using his new plane, still small but enclosed and with great viewing windows.

Based at Karumba, we spent four days flying sections of the coast, starting at first light and flying north or west at an altitude of usually less than 100m while counting. High tides had occurred during the night but as it takes 12 hours to recede, there was still time in the early morning to find birds roosting in flocks of 3,000-6,000 on sandy beaches, usually at the mouths of rivers.

The coast is flat, often fringed with a band of mangroves up to 200m deep and backed by dry and often vast claypans which extend inland for up to 30km. Meandering tidal rivers and creeks dissect the plains, creating chaotic but surprisingly beautiful patterns on the vast landscape. King tides can spill over to cover the claypans and tropical rains in summer often cause widespread flooding.

Gulf of Carpentaria Spring Survey - September 2012 cont.

Waders and other waterbirds, particularly Whimbrel, Eastern Curlew, Common Greenshank, Black-winged Stilt, egrets and herons, also roost in the mangroves. In order to count these we flew low enough to flush them out. Peter and I counting them out of each side of the plane (Peter flying the plane as well as counting!). This is an inexact method but it works reasonably well over such large areas.

We landed on claypans close to large roosts to conduct ground counts to compare with the aerial count. Generally we felt we undercounted from the air and certainly picking up stints from the air was only really possible if they were flushed.

The ground counts were very rewarding. At Mark's Beach (named after Mark Barter in 1998): over 5,000 waterbirds of 35 species including 23 wader species were counted. Red Knots were the most numerous with 1,500, followed by 1,250 Black-tailed Godwit, 1,000 Great Knot, 600 Rednecked Stint, 220 Black-winged Stilt and 100 Sharp-tailed Sandpiper. Five white-flagged Red Knot from New Zealand, including three with engraved flags, three orange-flagged knots from Victoria and other birds banded at Chongming Dao near Shanghai in China were also seen.

Gore Point, some 100km west of Karumba: just under 5,000 birds of 23 species were counted, including 2,215 Great Knot, 985 Red Knot, 393 Red-necked Stint, 315 Black-tailed Godwit, 295



Above: Gulf river and claypans Below: Typical wader roost - Photos Adrian Riegen

Greater Sand Plover, 196 Lesser Sand Plover and 33 Bar-tailed Godwit.

Camp Misery (an unpleasant camp site in 1999): almost 7,500 birds of 29 species were counted. Great Knot dominating again with 2,354, followed by 1,620 Red-necked Stint, 1,321 Red Knot, 1,025 Black-tailed Godwit, 315 Sharp-tailed Sandpiper, including many juveniles, 140 Greater Sand Plover and 55 Broad-billed Sandpiper. More flagged birds were seen at these sites, all from Victoria, New Zealand or Chongming Dao.

Plans were also advanced for the expedition in March-April 2013. The Gulf is a significant staging

and non-breeding site for waders and it is hoped the 2013 survey will add greatly to our knowledge of this vitally important site.

There may still be a few places on the expedition so anyone interested in being involved should contact the author for more details.

Adrian Riegen riegen@xtra.co.nz



MSc Thesis on Stopover Decisions of Migratory Shorebirds

Ryan James Stutzman (2012), recently completed a thesis at the University of Nebraska, titled: Stopover Decisions of Migratory Shorebirds: An Assessment of Habitat Use, Food Availability, Behaviour and Phenology

It is available at the following link:

http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1061&context=natresdiss

Volunteers sought for Chongming Dongtan - March to May 2013

Chongming Dongtan National Nature Reserve (CMDT) and the Australasian Wader Studies Group (AWSG) are looking for experienced Volunteers to join the CMDT northward migration research programme from March 10 to May 10 2013. Chongming Dongtan National Nature Reserve is 55km NE of Shanghai City centre.

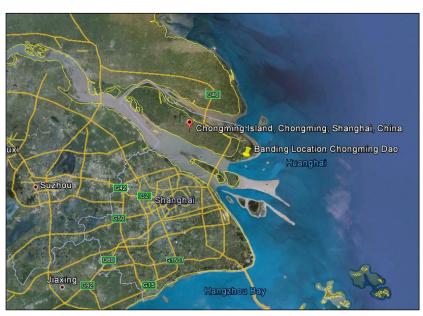
The volunteers will be based at the reserve headquarters where they will eat and sleep. The field work will take place within the reserve boundary and be supervised by experienced CMDT staff members.

A typical day would be to leave for the banding station at about 6:00 am. The finish time will vary and depend

on the size of the catch. Usually it will be about 11:00 am. If the tide height is suitable you will be asked to go scanning for marked birds in the afternoons.

CMDT and AWSG understand that more people have banding skills than scanning skills and you will be welcome if you do not have scanning skills.

Experienced volunteers are required. It will be an educational experience as you will handle different species and species you are familiar with but at a different stage of their life-cycle. It is not a suitable programme for inexperienced people. You will need to be fit and healthy. The walk to the banding boat can be very strenuous through deep mud. Preferably you will need a telescope. You will need to be able to work in



a group environment and take instruction from the CMDT staff (regardless of your experience at your own banding site).

Volunteers will be met at Shanghai Airport and transported to the reserve.

The full cost of the return flights to and from Shanghai will be at the volunteers' expense. All transport and food will be supplied by the reserve. Personal drinks and other variables will be the responsibility of the volunteer. You will need a Tourist Visa, the cost of your Chinese Tourist Visa will be at your own expense.

You will need to be available for at least 14 days at the reserve. Participants who can stay longer will be particularly welcome.

Please contact *Chris Hassell* to register your interest **turnstone@wn.com.au**

Are these Spoon-billed Sandpipers on an Estuary near you?

Nine Spoon-billed Sandpipers were artificially reared on the breeding grounds this summer and were released as juveniles. All migrated in mid-August 2012 and we hope that they will be seen on autumn migration or in winter. Each bird has a lime green leg flag with a single character engraved on it and a single colour ring.

The chance of one of these being seen is low but it would be fantastic if we did find them. All records of Spoon-billed Sandpipers are valuable so please send them to..... mailto:Christoph. Zockler@consultants.unep-wcmc.org

There are still gaps in our knowledge of the migration routes and wintering areas but, with your help, we will fill them.



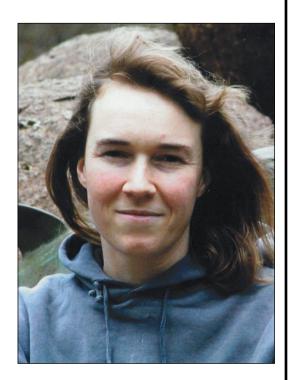
Christoph Zöckler

Vale Heather Gibbs

Tragically, Heather Gibbs died, suddenly, on 9 November 2012. She was 39 years old.

Heather, for the last 6 years, had managed the legflag database and the banding database for the AWSG and the VWSG. She did this in the most efficient and user-friendly way and through these activities she had built up a huge network of contacts throughout the East Asian - Australasian Flyway. Because of her cooperative and helpful attitude they all regarded her as a friend. Her loss will be deeply felt by all who knew her.

Heather started participating in VWSG fieldwork some 30 years ago when, as an 8-year-old, she accompanied her parents on wader banding activities at Queenscliff. She had continued active involvement throughout her life taking part in several NW Australia Wader Expeditions and, in recent years, getting great satisfaction from bringing her two young children (Dominic, 8, and Amy, 6) with her.





Heather obtained her zoology degree from Melbourne University and carried out her honours year studying the feeding of Gannets at the Pope's Eye colony and Queenscliff. She then worked for Birds Australia for several years, in a variety of roles, including HANZAB (The Handbook of Australian, New Zealand and Antarctic Birds). She even managed to fit in a working visit to Antarctica, on a boat from Hobart.

Heather was extremely bright and intelligent and developed great expertise in data processing on computers, including programming. She did most of the technical work to develop the leg-flag database and was always looking for ways to improve this (and the banding database). She was the quickest and most capable person I've ever come across in relation to **extracting** data and in presenting it in a form most helpful to the user.

In recent years Heather has also been working on a PhD project, on the effects of climate change on birds, and several papers on this have already been published.

Heather was a member of the AWSG committee and made valuable input to a wide variety of discussions. She was always willing to put her hand up to take on extra tasks and to assist other people's projects in a variety of ways. A driving force was her deep commitment to conservation.

Heather proved to be an exceptionally good mother with great patience to explain everything to her children and to involve them in practical ways. Her partner Brian, and Dominic and Amy, will miss her greatly – as we all will in Australia and the EAAF.

Clive Minton

Heather presenting a paper on banding results at the Australian Ornithological Conference in Cairns, October 2011 Photo - Phil Straw

Update on an important site: Yeongjong Island, South Korea

Yeongjong Island (Yeongjong-do, Yong-Jong Island) is an internationally important site for migratory shorebirds (Site 379 in Bamford *et al.* 2008) in the West (Yellow) Sea near Incheon, South Korea. In terms of number of shorebird species for which it is internationally important (15: Bamford *et al.* 2008), it can be considered equal second rank in South Korea since the demise of the previous top two sites (both now inside the Saemangeum seawall). A number of re-sightings of leg flags (e.g. Bar-tailed Godwit, Great Knot) have confirmed a connection between Yeongjong Island and non-breeding sites in the south of the flyway, notably NW Australia.

During 2009-11, we were employed in the Incheon area and conducted a number of informal investigations of waterbirds using the southeastern side of Yeongjong Island. Also I visited the site with David Milton and Sandra Harding on 17 August 2012 when we were transiting through Korea. In each instance, our focus was on the intertidal mudflats roughly 10 km long and up to 4 km wide, straddled by the Incheon Grand Bridge, particularly the associated high-tide roosts. Extensive intertidal flats also occur elsewhere on the island, notably on the NNE side where they are crossed by the Airport-Seoul expressway, but we did not survey these relatively inaccessible areas.

Early in our investigations, we discovered that many shorebirds that fed on the south-eastern mudflats later roosted at high tide in two areas; one in the east and one in the west. Both roosts were patches of mudflat that had been narrowly separated from the main mudflats by the seawall and public road that presently define the southern edge of the island, but remained tidally connected. Some also roosted on longabandoned, small, salt production ponds next to the main western roost. Others, mostly the smallest species, did not roost in large numbers at any of these roosts. Furthermore, on highest 'spring' tides (approximately above 9.0 m), the main western and eastern roosting bays were totally inundated and too deep for standing shorebirds so most of the shorebirds were absent, presumably at a roost site not known to us.

Much if not all of the area landward of the southern seawall, including the eastern and western roost sites, has for some time been designated for landfill and urban or other development in the master plans for future growth of the greater Incheon Metropolitan Area. During our 2009-11 investigations, partial land fill occurred using material from the removal of adjacent small hills and major changes to road alignments were implemented, but the roosts were still intact

and being used by shorebirds. However, beside the roosts, under the powerlines that run along the coast road, CCY detected several shorebirds (e.g. godwits) that had been killed by collisions with the wires.

On the very early morning of 17 August 2012, RJ and colleagues visited these roosts during a high tide of about 8.0 m, which had inundated all of the main seafront mudflats. We observed that the principal western roost site had been substantially land-filled and, perhaps for that reason, was not being used by roosting shorebirds. Furthermore, the main eastern roost site, though little changed and potentially still suitable for roosting, supported only a few tens of birds. As the tide fell we observed several thousand shorebirds (curlews, whimbrels, plovers, others) arriving from the ENE to start feeding on the mudflats; we would expect numbers to be higher a little later, at the peak dates for migration. Though just a single survey, nevertheless this suggested that shorebirds may have abandoned the previous roost sites immediately next to the main mudflat feeding areas, due to landfill and/or increased disturbance. Possibly the birds now roost on ponds about 2 km wide and partly filled with dredged sediments, situated beside the Seoul Expressway bridge off the NE side of Yeongjong Island, or nearby.

If the observations of 17 August reflect a permanent change in roosting behaviour, this extra travel of 4-12 km between the roosting and feeding areas must be depleting vital energy reserves that migrating shorebirds otherwise require for onward travel. And presumably the north-eastern dredge ponds will soon be filled and then developed for urban or industrial purposes, probably becoming unsuitable for shorebird roosting. Alternative, undisturbed roosting sites on the island are few and ever longer journeys to roost on satellite islands may become necessary. On 16 August 2012 we saw about 400 Whimbrels flying towards the far western side of the main Yeongjong Island mudflats, possibly from an unknown high tide roost to the west (a high shelly beach on the NE side of Silmi Islet near the NW side of Muii Island is a candidate).

As far as we are aware, there is no direct short-term threat to the main feeding area for shorebirds along the SE side of Yeongjong Island. Projects for inter-island seawalls to establish a vast tidal power project have been initiated or are being considered for the northern side, between Yeongjong Island and Ganghwa Island. Since 2009, we have counted or estimated shorebird numbers in excess of 10,000 during partial surveys of the site's roosts and numbers of at

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Update on an important site: Yeongjong Island, South Korea cont.

least several species (e.g. Far Eastern Curlew, Whimbrel, Common Greenshank) remain well above 1% thresholds (RJ and CCY unpublished data).

However, we conclude that in order to preserve the international importance of Yeongjong Island for shorebirds it may be necessary to protect or create secure high-tide roosts for the affected shorebirds. This firstly requires a comprehensive study of present shorebird usage of the island and vicinity and of potential existing roosts.

Secondly, it should be possible to increase public awareness of shorebirds and migration and simultaneously increase visitor numbers in this area, in an appropriate way. The function of the public observatory beside the island end of Incheon Grand Bridge could be extended to highlight shorebird conservation values and facilitate observation of feeding birds; there are many good models in Korea and the wider region. Subject to scientific and engineering investigations, it also may be strategic to create an artificial roost on high mudflat in front of the observatory, which is centrally located in the mudflat system, provided shorebird collisions with overhead obstacles and excessive disturbance can be avoided.

We realise that the City authorities potentially may have other plans for the area but for relatively low cost, valuable outcomes for conservation and ecotourism could be incorporated into the present site development. Meanwhile, the management authorities for Incheon International Airport may have valid concerns about proximity of shorebirds to low-flying aircraft. However, the nearest approach path for aircraft is about 1.5 km west of the western side of the main shorebird feeding area and the runway starts 2.0 km inland of the seawall.



Bar-tailed Godwit with bill damaged by collision with overhead wires near high-tide roost, 19 April 2011, Yeongjong Island, South Korea.

Photo: Choi Chang-yong.

We recommend that domestic and international shorebird conservationists, as well as Partners in the Partnership for the East Asian – Australasian Flyway, urgently and constructively discuss how the habitat management needs at Yeongjong Island can be resolved. This site is of high relevance to many countries and has great potential to be a showcase for sustaining waterbird migration. Successful models from Yeongjong Island could be applied to other situations in the flyway where changes to patterns of shorebird roosting are occurring.

Roger Jaensch and Choi Chang-yong

Reference:

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Conservation initiatives at Seocheon, South Korea

Seocheon is adjacent to the huge tidal flat reclamation project of Saemangeum. It is surrounded by internationally important habitats for migratory waterbirds, such as Yubudo Island EAAF Network Site, Seocheon Tidal Flat Ramsar Site, Geum River Estuary EAAF Network Site and Shinseongli Rice Paddy. Seocheon is a significant location as one of the stopover sites for migratory shorebirds along the EAAF. High numbers of shorebirds including the critically endangered Spoon-billed Sandpiper, Bar-tailed Godwit and Eastern Curlew, and a great number of ducks and geese, including 300,000 Baikal Teal visit Seocheon every year.

An International Migratory Waterbird Symposium was held at Seocheon on 16 November 2012 to explore options and learn from international best practice to ensure the conservation and management of migratory waterbird habitats for Seocheon, including appropriate ecotourism development. Over 100 participants, including delegates from National Parks Board of Singapore, WWF-Hong Kong, Japanese Association for Wild Geese Protection, University of Queensland, Australia, Aurich County, Germany and EAAFP Secretariat as well as Ministry of Land, Transport and Marine Affairs, Korea and other domestic organisations attended the meeting.

Conservation initiatives at Seocheon, South Korea cont.

Presentations were given on current habitat status of Seocheon, present plans for conservation and management of Hong Kong Mai Po Wetland Reserve and of Singapore Sungei Buloh Wetland Reserve, declining status of shorebird populations in the EAAF and rice paddy management for geese and cranes in Japan. Following the presentation session, the panel discussion went on before and after dinner with Seocheon Mayor Na So-Yeol and key delegates. The delegates advocated a holistic approach to conservation and eco-tourism and urged the governments to consider the needs and function of other wetlands county-wide when setting priorities and making decisions. In this sense a county-wide Action Plan was advocated. Site-specific suggestions included developing a

management plan for the Ramsar site, the need to restrict access to and on Yubu-do EAAF Network Site, and creating high-tide Yubudo Tidal Flat, Seocheon, South Korea roosts at the former salt pan on Yubu-do and close to the visitor centre.

This symposium was organised by the Korea Waterbird Network and Ecotourism Korea and supported by Seocheon County, Ministry of Land, Transport and Marine Affairs of Korea, EAAFP Secretariat and the Ornithological Society of Korea.

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Conservation of Shorebirds in Torres Strait

Shorebirds and their habitats are under threat worldwide, with migratory species and Australian shorebird numbers having declined in recent decades (Oldland *et al.* 2009). Australia's offshore islands are considered important areas for shorebirds. Of the 314 Important Bird Areas (IBAs) recognised in the country, 95 (almost one third) wholly or partly include islands (Dutson *et al.* 2009, Kirkwood & O'Connor 2010).

Torres Strait, located between northern Australia and southern New Guinea, spans a geographic area of approximately 48,000 km². Within this region there are hundreds of reefs and over 150 islands and sand cays, 17 of which are permanently inhabited. There is considerable diversity in terms of island geomorphology and vegetation communities, as well as extensive areas of estuarine and intertidal habitat.

Torres Strait also occupies a strategic position in the migratory path of many species and it is well positioned within the East Asian-Australasian Flyway to provide en route migrant resources. The region is located just north of three IBAs (Lockerbie Scrub, Cape York to Cape Grenville Islands, and Raine Island/Moulter & MacLennan Cays) and is adjacent to two contiguous wetlands listed under the Ramsar Convention (Tonda Wildlife Management Area in southwest Papua New Guinea and Wasur National Park in southeast Papua Province, Indonesia). Although the islands are known to support many species of resident and migratory shorebirds (Draffan et al. 1983), no recent comprehensive surveys have been completed for the Strait.

Most of the Torres Strait islands are under indigenous ownership (e.g. native title).

Indigenous control and participation management regimes continues to increase as local communities assert their ownership rights. Under the guidance of the Torres Strait Regional Authority (TSRA), indigenous ranger programs have been established on the inhabited islands, and several Indigenous Protected Areas (IPAs, part of Australia's National Reserve System) have been declared. Establishing an IPA over lands and seas allows communities to access funding for conservation, management and education activities. As these initiatives gain momentum, it is an opportune moment to highlight the region's migratory and resident shorebirds as a conservation issue.

We have been working in the Torres Strait over the past decade and have noted that its importance for these birds has not been formally recognised. The combination of shallow productive waters and a large tidal range generate massive expanses of habitat for roosting and foraging, rich in food. To date, 54 species of shorebird and an additional 23 species of seabird have been recorded on the inhabited Torres Strait islands. The most numerically dominant species are the Lesser Sand Plover, Grey-tailed Tattler, Bar-tailed Godwit and Great Knot (Draffan et al. 1983). Several of the shore (and sea) bird species recorded for the region are listed as threatened under the International Union for Conservation of Nature (IUCN) Red List, Queensland's Nature Conservation Act 1992 (NCA) and the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act 1999, including Beach Stone-curlew, Eastern Curlew, Sooty Oystercatcher, Little Tern and Red-tailed Tropicbird and many other species listed under the marine, wetland and migratory provisions.

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Conservation of Shorebirds in Torres Strait cont.



Greater Sand Plover, Grey-tailed Tattler, Common Greenshank, Bar-tailed Godwit, Pacific Golden Plover and Rednecked Stint in Torres Strait

The majority of the Torres Strait islands lack any formal protection, such as National Parks or Conservation Areas. There are currently no marine parks between the northern tip of the Great Barrier Reef Marine Park and the Queensland-Northern Territory border. The introduction of IPAs and ranger programs therefore represents an important mechanism for biodiversity conservation in the region, not only for single species but also habitats and ecosystems. IPAs take advantage of the unique opportunities offered by customary land ownership to conserve traditional culture and environmental values and offer an additional source of employment through ranger programs. These programs

will facilitate conservation education, including species identification and survey training, and will also offer an opportunity to overcome the challenges of isolation and access. With respect to shorebirds, the rangers will play an important role in monitoring, identification of threats, and protection, including collaboration with scientists on relevant research projects, and future field surveys to support a declaration of the region, or a part or parts therein, as an Important Bird Area in Australia.

Justin Watson, Garrick Hitchcock and Tyrone Lavery

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Towra Point Nature Reserve Ramsar Site - Grey Globe Award

Towra Point Nature Reserve Ramsar Site in Sydney was presented with a Grey Globe Award at the 11th Ramsar Conference of Contracting parties in Bucharest, Romania last year. A Grey Globe Award is nothing to be proud of! It is awarded by the World Wetlands Network to draw attention to Ramsar-listed wetlands when their ecological character and values are under threat.

Towra Point Nature Reserve Ramsar Site covers 386.5 hectares of wetlands on the southern shore of Botany Bay, Sydney. It was listed as a Ramsar wetland of international significance in 1984. The site meets four Ramsar criteria. It is home to 3 threatened species, contains an important complex of saltmarsh, mangroves and sea meadows, provides nursery habitat for approximately 60 species of fish, and supports up to 34 species of migratory shorebirds protected by international agreements. The endangered Little Tern successfully breeds on Towra Spit most years.

Threats associated with development pressures including the Sydney Airport, Port of Botany Bay and residential areas of a major metropolis are complex. The open expanse of saltmarsh

used by shorebirds for foraging and roosting is contracting and being taken over by weeds and mangroves. As a result, saltmarsh specialists including two migratory waders, the Pacific Golden Plover and Sharp-tailed Sandpiper, and White-fronted Chat are no longer seen. The eroded shoreline repaired ten years ago has again degraded, threatening to inundate the freshwater lagoon with sea water. Assessing an acceptable level of change and identifying feasible courses of action to remediate these pressures will be challenging.

The Australasian Wader Study Group and Australian Wetland Alliance used the Grey Globe Award to call for prioritisation of Towra Point Nature Reserve and increased resources to protect the outstanding ecological values of this internationally significant wetland on Sydney's doorstep. As a result, Andres Bianchi, Towra Point Ranger with the NSW National Parks and Wildlife Service called a site meeting in December to inspect positive management initiatives, discuss issues and consider priorities for future projects. The meeting was attended by a who's who of wetland decision-makers. Tony Slatyer, Jim Mollison and Greg Manning

Towra Point Nature Reserve Ramsar Site - Grey Globe Award cont

from the Aquatic Systems Policy Branch at the Department of Sustainablity, Environment, Water, Population and Communities flew in from Canberra to attend the meeting. Susy Cenedese, Brian Leahy and Neil Saintilan from the Water and Wetlands Strategy Section of the NSW Office of Environment and Heritage also attended, along with Phil Straw from the Australasian Wader Study Group and Louise Duff from WetlandCare Australia. The meeting was a first step to renew the collaborative approach to management that has protected natural values at Towra Point in the past. The forthcoming Caring for Our Country program soon to be launched by the Australian Government will provide an ideal opportunity to undertake the necessary studies and implement a remediation program.



L-R Tony Slatyer, Louise Duff, Phil Straw and Greg Manning were amongst wetland managers and decision-makers who attended a site meeting to better understand the issues at Towra Point Nature Reserve. Photo - Louise Duff

Louise Duff
Secretary
Australian Wetland Alliance

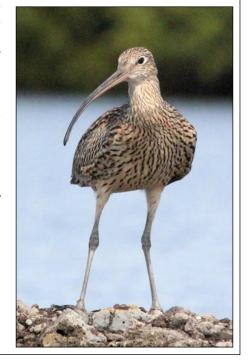
Numenini Workshop on 30 September 2013

On 30 September 2013, following the next meeting of the International Wader Study Group in Wilhelmshaven, Germany, there will be a workshop to review the knowledge on, and conservation needs of, the world's Numenini species; as well as all *Numenius* and *Limosa* species, this will include consideration of Upland Sandpiper. For each biogeographical population, the workshop will compare and contrast what is known about the population ecology, status, pressures and conservation responses. It will identify key gaps in information and make recommendations regarding priorities for conservation action. (The workshop will be followed by an invitation-only workshop of the African-Eurasian Waterbird Agreement to develop a flyway species action plan for the Eurasian Curlew *N. Arquata*). To express interest in being involved or for further information contact: **Nicola.crockford@rspb.org.uk**

Nicola Crockford

International Species Policy Officer The RSPB - BirdLife in the UK

Ed:This workshop is a great incentive to collate local information about Eastern Curlews to add data to the discussion. Photo - Chris Herbert



Stilt's Production Editor Steps Down

In 1996, Andrew Dunn stepped up to the role of Production Editor for *Stilt* - a new role created at that time in the steady evolution of the journal. The layout and general look of *Stilt* improved substantially during the 17 years that Andrew held the job. Family commitments have now eroded his "spare time" and he has regretfully stepped down from the role. We are indebted to Andrew for the countless hours of "behind-the-scenes" work he has completed to maintain the high production standard of *Stilt*.

A vacancy now exists for someone keen to maintain the high production level of *Stilt* into the future. Please contact *Stilt's* editor, Birgita Hansen for further information by email on: editor@awsg.org.au

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Arctic Report Card November 2012 - Waders

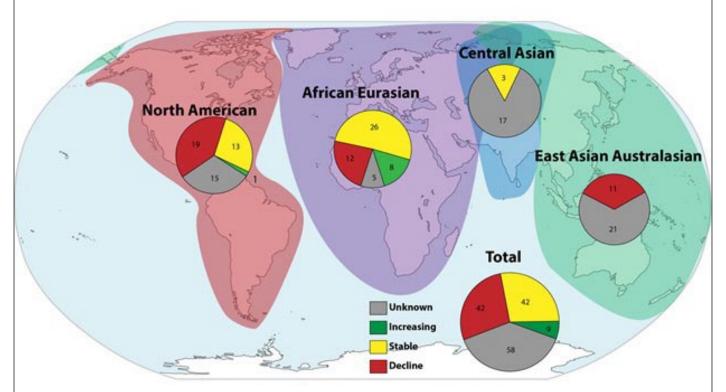


Fig. 4.11. Arctic wader population trends by major flyway, based on CAFF (2001) for definition of Arctic and largely on WPE5 for population trends, with minor adjustments for three selected populations. Numbers in the circle sectors are the number of populations with a particular trend (unknown, increasing, stable, decline).

This year's Arctic Report Card, an initiative of the National Oceanic and Atmospheric Administration (NOAA), also features some trends in shorebirds. Some of the data, especially for East and Central Asia are quite poor and also the methodology could be improved but the overall picture remains dire for all Arctic waders and especially those breeding in the EAAF part of the Arctic. This article has been extracted from the Arctic Report Card: http://www.arctic.noaa.gov/reportcard/waders.html

Introduction

Migratory Arctic birds fly to virtually all corners of the world, apart from Antarctica, via their migratory routes. They migrate to almost all inland and coastal wetlands, and offshore waters are often utilised by Arctic breeding waders in winter. Most Arctic waders (shorebirds), spend only two to three months on the Arctic breeding grounds during the brief summer.

Across the Arctic a total of eight flyways that connect geographic areas to the south have been described (Boere & Stroud 2006). For this comparative analysis, the three American flyways have been combined into one and the Black Sea/Mediterranean has been combined with the African Eurasian, leaving four major flyways for discussing the status and trends of waders (**Fig. 4.11**). Trend data are primarily from Wetlands International (2012) and supplemented by published reports from selected representative

key sites in the region to provide the best information available for analyses and discussion from an Arctic and flyway perspective.

Waders are by far the most numerous and speciesrich taxa among all Arctic waterbirds and serve as good indicators on the state of global coastal and inland wetlands, pointing to numerous pressures mostly in the non-breeding areas. Arctic waders include 71 species and 70 separate populations amounting to almost 50 million individuals which regularly undertake long-distance migrations to all corners of the globe (Zöckler 2012).

East Asian - Australasian Flyway. Trend information for a large proportion (about 66%) of the 32 wader populations in the East Asian Australasian Flyway (EAAF) is unavailable. Of the few known population trends, all are declining. Although the flyway boasts the most species-rich complex, it has the least number of individuals. Many regions, mainly in Indonesia, Vietnam and China, remain devoid of migratory wader population data. It remains likely that the unknown populations are also declining and many recent data from Australia point to a continuing decline of many populations. Gosbell & Clemens (2006), for example, documented a long-term rapid decline in Curlew sandpipers C. ferruginea (see **Fig. 4.13**). Wilson et al. (2011) considered 22 migrant and 8 resident species with seven species of migrants to be declining significantly, and abundance of one species as

Arctic Report Card November 2012 - Waders cont.

significantly increasing. Declines of 43-79% in migrant abundance over 15 years were also observed. Among the declining species were ten Arctic waders, while two populations, Red-necked Stint and Sharptailed Sandpiper, were increasing. With the exception of the Curlew Sandpiper, it is not clear how representative these results are of the entire flyway.

The Eastern Curlew and Great Knot have recently been classified as Vulnerable and added to the IUCN list of globally-threatened species, having experienced declines of 30-49% over the last 20-30 years (BirdLife International 2012). Populations of Red Knots and Bar-tailed Godwits from Siberian and Alaskan breeding grounds are also declining; having lost over half of their individuals

they have declined at a rate of 5-9% per year in the last decade (Wilson *et al.* 2011). One of the key species under threat on the flyway is the Spoon-billed Sandpiper.

The situation in the EAAF is of particular concern. The EAAF supports more migratory waterbird species and a higher proportion that is globally threatened than any other flyway in the World (MacKinnon *et al.* 2012; Amano *et al.* 2010). It also has the highest rate of loss of intertidal wetlands (as much as 50% in the last 30 years) (Barter 2006; Yang et al. 2011) and only 5% of intertidal wetlands are protected.

Threats

Although the surveys above provide information on the status and trends of shorebirds breeding in the Arctic, they can be difficult to interpret as they often do not provide enough information to determine the mechanisms behind any declines or increases, the life stage when shorebird populations are likely to be limited breeding, migration, non-breeding), how climate conditions may influence recovery. To address some of these limitations, the Arctic Shorebird Demographics Network was established in 2010 to collect demographic data on shorebirds breeding in the Arctic (http://www. manomet.org/arctic-shorebird-demographicsnetwork). The Network is composed of 14 field sites (2 in Russia, 7 in Alaska, 5 in Canada) that collect data to generate estimates of adult bird survival, nesting success, and reproductive effort. At each site environmental data that are sensitive to climate change are collected, and this information is used to help interpret changes in the demographic traits.

Although the breeding period is a very important



Fig. 4.13. Curlew Sandpiper trends monitored at seven sites in Australia (Gosbell & Clemens 2006).

and sensitive time for arctic waders, stressors and/or threats that occur outside the Arctic are often considered more important when trying to understand observed population trends of these global creatures.

Hunting & harvesting. Hunting of shorebirds is widespread across all major global flyways and could be a significant factor in the observed declines in all flyways (Zwarts *et al.* 2010; Zöckler *et al.* 2010a; Morrison *et al.* 2012; Balachandran personal communication). Moreover, harvesting of food in critical migration feeding areas can also increase pressure on migrating populations.

Pollution. The use of pesticides in agricultural areas such as rice fields may affect shorebirds using those habitats directly, and drainage of pesticides into coastal areas and onto mudflats also has the potential to affect shorebirds (Morrison *et al.* 2012).

Habitat loss. Major projects are developing and rapidly altering the Asian coastlines. Intertidal mudflats are disappearing at a rate of 350,000-400,000 ha /decade in the Yellow Sea, a major stop-over and key moulting area for several wader species in the EAAF (Murray *et al.* 2011; Yang *et al.* 2011; Ko *et al.* 2011).

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The complete reference list is available on line at the link provided above.