

Tattler

Newsletter for the Asia Pacific Flyways & Australian Shorebirds 2020 Project

No. 39 April 2016

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Editorial

The recent launch of the Wildlife Conservation Plan for Migratory Shorebirds by the Australian Government provides an opportunity for focussed action on preventing further declines in shorebird populations. Actions by governments at all staging sites along the EAAF are needed to halt the declines – it's great to see China and NZ entering into agreements that may help preserve shorebird habitat at some crucial staging sites in the Yellow Sea.

The value of field observations and hard work by banders and researchers is celebrated in this issue – the more we can define the Flyway and its critical staging sites, the more chance we have of preserving them. Long-term records assisted in modifying the harvesting of beach-wrack on a South Australian beach used by shorebirds.

As this issue goes to print, Grey Plover migration routes are being defined by birds carrying satellite transmitters, revealing fascinating details of their annual adventures to the breeding grounds. And the passage of birds through the Luannan coast of China is being monitored by members of the Global Flyway Network.

Liz Crawford, Editor

Contributions are welcome and should be sent to: tattler@awsg.org.au



Grey Plover CYA carrying satellite transmitter at Thompsons Beach, South Australia (Photo Peter Owen)

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Wildlife Conservation Plan for Migratory Shorebirds

Launched by the Australian Government at the Shorebirds Summit in Melbourne on 8 April 2016, the Wildlife Conservation Plan (WCP) is a framework to guide conservation efforts for shorebirds. It assesses many of the factors responsible for the decline in shorebirds, providing key insights and identifying key actions that can be taken to protect shorebird populations.

- The WCP identifies habitat loss resulting from development as the most significant threat Australian migratory shorebirds face.
- Shorebirds face many other threats including pollution, climate change and over-fishing of their prey but habitat loss is the key driver of decline.
- The WCP has four main objectives:
 - o Important habitats for migratory shorebirds throughout the EAAF are protected;
 - o Wetland habitats in Australia, on which migratory shorebirds depend, are protected and conserved;
 - o Human threats to migratory shorebirds in Australia are minimised or, where possible, eliminated; and
 - o Knowledge gaps in migratory shorebird ecology in Australia are identified and addressed to inform decision makers, land managers and the public.
- The WCP identifies that increased habitat protection and restoration is the most important long-term conservation action that can be taken to ensure the survival of shorebirds.
- Efforts to conserve migratory shorebirds in one country can only be effective with cooperation and complementary actions in all countries that shorebirds visit.
- It is estimated that since European settlement approximately 50 per cent of Australia's non-tidal wetlands have been converted to other uses.
- In some regions such as the Swan Coastal Plain of Western Australia 75 per cent of wetlands have been filled or drained and in south-east South Australia 89 per cent have been lost.

BirdLife Australia hosted the Shorebirds Summit which brought together international representatives, shorebird experts, conservation organisations, community groups, Indigenous Land and Sea management groups and the Australian Government to address alarming declines in shorebird populations. The Federal Minister for the Environment, the Hon Greg Hunt MP, addressed Australian Shorebirds Summit participants and launched the Australian Government's *Wildlife Conservation Plan for Migratory Shorebirds*.

Samantha Vine, Head of Conservation at BirdLife Australia said: "We have teams of volunteers, and scientists around the country who have been sounding the alarm for years about plummeting numbers. Their data have shown that over the past three decades species like the Great Knot has nearly disappeared in many regions, suffering a 77.8 percent decline. Once common species like the Eastern Curlew and Curlew Sandpiper are now Critically Endangered. Numbers of



L-R: Paul Sullivan, CEO of BirdLife Australia; Greg Hunt, Minister for the Environment; Samantha Vine, Conservation Officer at BirdLife Australia; and Gregory Andrews, Threatened Species Commissioner

Curlew Sandpipers have been dropping by ten percent a year, and up to eighty percent have been lost since the 1980s.

"Industrial and coastal development of habitat is the major contributor to these declines. We need to stop the loss of important shorebird habitat, so we urgently need better accounting mechanisms to ensure this is happening.

"BirdLife Australia convened the Shorebird Summit to ensure our response to the shorebird crisis is coordinated. We hope to inspire Australia to take a leadership role and work closely with the Australian community and international partners to halt this extinction crisis," said Ms Vine.

In support of the WCP

In 2007, a female Bar-Tailed Godwit was fitted with a satellite tracking device, so scientists could follow her migration. On 17th March she took off from the tidal flat in New Zealand where she had spent the summer. Six days later she touched down in China to rest and feed, having flown 10,300 km. She took off again on the 2nd of May and flew right across the northern Pacific for 6,500 km to Alaska, where she laid eggs and raised her young.

What she did next amazed every migration scientist on the planet. She took off on 30th August, and flew straight across the Pacific back to New Zealand in a single flight of 12,000 km without stopping, without landing. She had completed one of the longest migration flights ever recorded.

These incredible journeys take our shorebirds across international borders. Every country along the migration routes of these birds must play their part in saving them. And save them we must. Our scientific analysis, funded in part by the Commonwealth Government, has shown that 90% of migratory shorebird species in Australia are in rapid decline.

Some of the results of our work literally moved me to

In support of the Wildlife Conservation Plan for Migratory Shorebirds cont.

tears. Populations of the Eastern Curlew and Curlew Sandpiper have crashed by more than 80% over the last 20-30 years. The Commonwealth Government has acted quickly on this evidence to list both species as Critically Endangered in Australia. The first step in helping them recover.

Why are these birds in such big trouble? Well, because they travel such long distances, migratory birds need safe havens to rest and feed all along the way. If one site they depend on is lost, they might not be able to complete their journey. Right here in Australia, our coastlines are crowded places. Australians love the beach, and so do shorebirds! Disturbance from dogs, people and cars on beaches impacts the ability of birds to recover from their long journeys.

Working in partnership with the state government in Queensland, the results of scientific analysis are encouraging. Careful zoning of coastal protected areas can mean that 90% of recreational activity can continue, while 97% of shorebirds are well protected, even along the busy coastlines of south-east Queensland. Hunting is commonplace around the Flyway, with thousands of birds still being illegally killed every year. Australia has banned the hunting of migratory shorebirds, and helping other nations to address this problem is crucial.

The biggest single threat to our shorebirds is loss of habitat along the coastlines of China and Korea. This Yellow Sea region is the crucial re-fuelling stop for many of our birds as they migrate to the Arctic and back. Our work has shown that 67% of the habitat for Australia's shorebirds when they pass through China and Korea has been lost in the past 50 years. This is mainly a result of coastal reclamation and declines in river sediment loads. Australian shorebirds that depend most on China and Korea while on migration, are declining the fastest.

But there is hope. Australia has signed agreements with Japan, China and Korea, and participates in multilateral initiatives of various kinds. Yet the birds have continued to slide toward extinction while these agreements have been in force. Clearly we need to do much more to make them work.

How might our beleaguered migratory shorebirds fare over the coming decades? One possibility is a depressingly bleak future. One in which habitat loss and other threats continue at their current pace, lead many species to the brink of extinction, and beyond. But there's another possible future. One in which shorebird populations recover from this crash, and once again grace our coastlines in impressive and inspiring numbers. A future in which Australia has worked hard:

- protecting and managing the key habitats we have left,
- preventing further loss of important sites,
- properly mitigating or offsetting impact, where developments must go ahead,
- learning new technologies to restore lost habitat, and
- working with other countries so they can achieve similar results.

Today marks a watershed, a moment where we decide which of these futures we wish to see. Let's take full responsibility for conserving migratory shorebirds within our borders. And let's see Australia persuading, helping, yes if necessary pestering, other countries to do likewise. I'm delighted to see the Commonwealth Government moving decisively on this issue. This sends a clear message to every country in this Flyway – Australia is serious about saving our migratory birds.

Richard Fuller
University of Queensland

In support of the Australian Shorebirds Summit

At the Shorebird Summit, Bruce McKinlay, from the NZ Department of Conservation, gave the keynote presentation. Some points from his address follow:

- I appreciate the opportunity to address you but do identify myself as a "Johnny come lately" in a project that has been going for many years. The Department of Conservation has only picked up a commitment to the East Asian-Australasian Flyway Partnership (EAAFP) since 2012 and I have only been in the role of representing New Zealand at the EAAFP since 2013.
- So this is only my snap shot on the overall story of understanding the migration of shorebirds from Australia and New Zealand and I acknowledge, to paraphrase Isaac Newton, that I stand on the "Shoulders of Giants".
- An example of this is the EAAFP Yellow Sea Task Force where I am the current convenor of this group for the EAAFP. My predecessor Doug Watkins has had a long and illustrious record of providing leadership across many sites and cultures for many years. How we build upon the

record and lift the taskforce to a higher level of engagement is a current priority of mine.

- There is always a tension between how much certainty do you have to have in understanding a biological system before acting. Working from index counts, banding then flagging and now geolocators and GPS tags, the outlines of the Flyway are well enough known that we have to be prepared to act.
- The combining of Australian Wader Study Counts with counts by Ornithological Society of NZ (OSNZ) members in New Zealand has allowed for an analysis that really does identify the imperative to act. This analysis by Richard Fuller and his team needed to be completed in a research facility. It really was not going to happen if it was a NZ or Australian analysis and it certainly was not going to happen if left to volunteers to do in their evenings.
- Further research will add more and more depth to this body of knowledge but it is time to act. The objectives in the Wildlife Conservation Plan

In support of the Australian Shorebirds Summit cont.

- for Migratory Shorebirds are built upon a mix of Observations, Science Treaty Obligations and Statutory imperative. They give you a context and framework for working at multiple levels and I applaud them and the plan.
- But a bit of a warning. I was approached a few months ago by a Kiwi who works as a statistician in Palau [located southeast of the Philippines]. He's being counting birds there and has found a high-tide roost which supports internationally important numbers of four threatened shorebird species. This one little addition to the jigsaw puzzle will change the boundaries of the flyway and add to the number of potential Government Partners in the Flyway.
 - So what have we been up to in New Zealand?
 - We are maintaining our network of counts to contribute data to the whole.
 - Research is being targeted to geolocator studies for birds from smaller roosts in distant parts of New Zealand.
 - We continue to develop resources for national, local Government and Civil Society to protect our estuaries.
 - We have engaged with New Zealand's biggest Corporate to build increased protection of freshwater resources.
 - We have worked together to be active at the East Asian-Australasian Flyway Partnership.
 - We have continued to engage with other parts of the Government to be part of a New Zealand Inc. approach to engaging with habitat conservation in East Asia.
 - In the background our Director-General of Conservation has been establishing close personal links with the Chinese ambassador to NZ.
 - Well is it working?
 - Engaging with the Ministry of Foreign Affairs and Trade has led to local on-the-ground support to set up meetings and to make the cold calls that are necessary.
 - Being able to present a NZ Government and NZ Civil Society joint perspective has led to Pukorokoro Miranda Naturalists Trust setting up a joint five-year survey programme within the Democratic Peoples Republic of Korea.
 - Having the New Zealand ambassador present at the 2014 Dandong Bird Festival led to meetings with the Vice Mayor of the City and engagement with Party Leadership at Dandong. This did lead to increased recognition of the importance of Yalu Jiang National Nature Reserve and may lead to a RAMSAR nomination. This may also lead to engagement with the owners of the port adjacent to the Yalu Jiang National Nature Reserve.
 - By having the Director-General of Conservation, representatives of the iwi Ngati Paoa, from the Hauraki Region and Pukorokoro Miranda Naturalists Trust engage with Government officials we were able to consistently share our perspectives on why we value the migration of the birds and how it binds our countries together.
 - By having a Director-General present we were able to gain access to equivalent levels of government in the Chinese State Forestry Administration, the State Oceanic Administration and the Ministry of Environmental Protection. We also were able to engage with Senior Officials from Hebei Provincial Forestry Agency.
 - We focused on the plight of the Red Knot, for which we relied on the data gathered by the Global Flyway Network. The Director-General, Pukorokoro Miranda Naturalists Trust and iwi told similar simple stories of New Zealand's role with these birds and the key role that China had in binding them to us and our desire to continue to share the ongoing story of migration.
 - We have recently hosted Vice Minister Chen at Miranda where a Memorandum of Arrangement was signed between the NZ Department of Conservation and the Chinese State Forestry Administration to provide for further cooperation.
 - And for the birds?
 - Nothing certain yet. But it's clear from messages that the Chinese people we talked to have asked for further work to be done on the Bohai Wan site. Vice Minister Chen also said something similar in his remarks when he visited Miranda.
 - Things might become clearer once the detail of the five-year plans is shared.
 - So what is the difference?
 - The three key organisations are mostly the same people (Pukorokoro Miranda Naturalists Trust, Ornithological Society of NZ, Department of Conservation representative to EAAFP), but each with their own organisational needs and drivers.
 - We have a short shopping list in that our focus is on Bar-tailed Godwits and Red Knots. But we are clear that our work has impact on a much wider range of species.
 - We clearly recognise where our respective organisational strengths lie. For example these is no way that DOC or its predecessors would have made the commitment that PMNT and OSNZ have to maintaining the series of counts that are now underpinning the management action.

In support of the Australian Shorebirds Summit cont.

- There is enough history and science to be a lot more targeted in a management response than would have been the case 10 years ago. We know what the threats are and where they are occurring.
- Maybe we are at a better scale to manage: NZ 2 species; Australia c.40 spp; NZ an oceanic blip; Australia a continent.
- New Zealand at all levels is committed to a strategy of engagement with China.
- We have been successful in organising Civil Society, iwi and Government to the same song-sheet.
- Knowing that Civil Society and iwi bring independence: Partnerships are still required.
- Efforts to conserve migratory shorebirds in one country can only be effective with cooperation and complementary actions in all countries that shorebirds visit.
- The successful implementation of the Wildlife Conservation Plan for Migratory Shorebirds 2015-2020 will in my opinion benefit from an analysis of who can best utilise their key skills for maximum advantage. Where does Civil Society work best? Where does Science and where does Government? How can we include the perspectives and energy of Indigenous people?
- In the New Zealand experience, assuming that we can all do everything equally well leads to frustration.
- In conclusion, I hope these remarks have highlighted that, in my opinion, to be successful in working in a complex or chaotic multi-lateral space, we need to understand our roles; the strengths that we bring to the table; the timeliness of when those strengths are best brought to the table; and an understanding that we need each other.

Bruce McKinlay
NZ Department of Conservation

Agreement protects migratory shorebirds at Chinese stopover sites



Department of Conservation Director-General, Lou Sanson and Vice-Minister Chen Fengxue, the Chinese Minister responsible for the State Forestry Administration, signed a Memorandum of Agreement last Friday at the Pukorokoro Miranda Shorebird Centre (Photo John Boynton/Fairfax NZ)

Two species of shorebirds will now be better protected as they tackle 12,000km migration journeys. Department of Conservation Director-General, Lou Sanson and Vice-Minister Chen Fengxue, the Chinese Minister responsible for the State Forestry Administration signed a Memorandum of Agreement (MOA) on Friday 18 March 2016 at the Pukorokoro Miranda Shorebird Centre to protect migratory shorebirds and their habitats.

The agreement will help protect two wetland sites in China where Red Knot and Bar-tailed Godwits refuel on their way from New Zealand to the northern breeding grounds -Yalu Jiang Nature Reserve and Luannan on Bohai Bay.

Populations for the Red Knot are declining at 5 per cent, with the godwits falling at 2 per cent. Red Knots breed in Siberia and the godwits breed in Alaska. In the last 20 years the number of Red Knot visiting New



Photo by John Boynton/Fairfax NZ

Fengxue said it was important for New Zealand and China to save dwindling bird populations. "It is humbling to see these small birds that fly non-stop between our two countries. They form a bridge between New Zealand and China. They connect us as people. We will work together to keep the bridge open," he said.

The agreement had come together after a year of intense work with the Chinese government, Sanson said. "It shows you with diplomacy what you can do with conservation."

Pukorokoro Miranda Shorebird Centre manager, Keith Woodley said it was vital to preserve the two sites. "Godwit and Red Knot populations are declining. To protect these birds we must protect their habitats, both here in New Zealand as well as in East Asia where they stopover during migration," he said. "We'd like to thank the New Zealand and Chinese governments for the steps they have taken today to protect migratory shorebirds. It will keep the birds coming."

John Boynton

Review of shorebird population estimates

Members of AWSG and Shorebirds 2020 have been busy working as part of the project team delivering revision of the flyway population estimates for 37 migratory shorebirds regularly visiting Australia. This involved a lengthy process of identifying lapsed or missing datasets and acquiring them to be integrated into the national database ready for extraction and analysis. Contemporary count data from Shorebirds 2020, the Asian Waterbird Census and New Zealand shorebird counts have been included. A specific workshop on the project was conducted at BirdLife Australia Head Office from 5 - 7 April 2016.

The Australian Government has provided rather modest funding and a very short time-frame for

project completion. The new population estimates will inform international and national criteria used by the Australian Government in its implementation of the EPBC Act.

The project is being led by Birgita Hanson (previous editor of *Stilt*) and is being supported by Richard Fuller (University of Queensland), Danny Rogers (chair of AWSG Research Committee), Dan Weller (Shorebirds 2020 Project Manager) and Doug Watkins (incoming Chair of AWSG).

Phil Straw
AWSG Vice Chairman

Using the data that we collect – Botany Bay, NSW

The NSW Wader Study Group continues to conduct its long-term monthly surveys in Botany Bay in conjunction with NSW National Parks and Wildlife Service (NPWS), which have now been going for 16 years. Counts include shorebirds at Boat Harbour and the southern half of Botany Bay.

Declining numbers of shorebirds have been noted over the years over most sites but none have been as marked as those in Botany Bay associated with the Towra Point Ramsar site. This has been more to do with the loss of roost sites than feeding habitat. A 50% decline in Bar-tailed Godwits in the bay during the 2013/14 season was a rude awakening. The numbers have partially recovered through natural changes to currents and wave action, temporarily depositing sand back on Spit Island. However, the long-term future of the Ramsar site and consequently that of shorebirds in Botany Bay is in serious doubt. This has been largely due to the absence of any significant funding for the site managers for any management of shorebird habitat.

Although our obligations to the Ramsar convention sit with the Commonwealth Government the management of Ramsar sites is the responsibility of state governments. We are all acutely aware of the drastic cutting of funding and resources to the NSW NPWS under the current government, at a time when many shorebird species are in steep decline.

As recently as 1993 Botany Bay accommodated 1% of the world population of Eastern Curlew, making it a site of international importance. Three other species occurred at nationally important numbers (0.1% of the Flyway population). None of these species reach these criteria today (see Table below). The most numerous species in Botany Bay, the Bar-tailed Godwit, has declined on a similar scale from counts of 800–1000 down to around 400 in recent years, though they

virtually disappeared from the bay during the 2013/14 season when roosting habitat availability was at its lowest.

Recent impacts include the loss of the second most important roost site in the bay at Quibray Bay due to rampant weed infestation of this Ramsar site. Currently the most important shorebird roost site and one of the state's most important Little Tern colonies at Spit Island is rapidly eroding away because of changes in wave action and tidal currents.

Amazingly Spit Island had retained its relative size over the past 20 or so years (despite moving in a westerly direction a distance of 650 metres from its origin at Towra Spit!). However, the island is now rapidly diminishing in size and is predicted to disintegrate over the next couple of years or so unless remedial action is taken very soon.

Fortunately the Greater Sydney Local Land Services (a state government department) has engaged Avifauna Research & Services to prepare a Shorebird Habitat Restoration Action Plan to look at restoration options for the more important roost sites in the bay. We are hoping funding will be available to cover the relatively inexpensive restoration and management of key shorebird roost sites in the near future.

Proposed actions include the weed clearing and landscaping of Quibray Beach, the building of an additional island roost in conjunction with Sutherland Shire Council and looking at options for stabilising Spit Island.

Data to support this Action Plan come largely from the NSW Wader Study Group counting program that has been operating since the 1990s. This is an impressive example of citizen science generating long-term data of great value!

Species	Population in 1993	National significance	International significance	Population today
Eastern Curlew	250	190	210	110
Pacific Golden Plover*	210	90	900	20
Lesser Sand Plover*	204	200	270	0-2
Ruddy Turnstone*	220	140	280	20

Phil Straw
NSW Wader Study Group

Note * Includes Boat Harbour

Buguey Wetlands, Cagayan, Philippines - a shorebird haven

The coastlines and wetlands of the Philippines host a number of different species of migratory water birds at different times over the course of a year. However, these birds are not popular with the general public and they are one of the least studied and monitored groups of birds in the Philippines. We know that migratory water birds are under threat from a number of pressures in different parts of the world, so monitoring of Philippine landing sites may contribute to better understanding of these birds and ultimately their protection.

Haribon Foundation, the BirdLife partner in the Philippines, has been monitoring these feathered migrants since 2013. With the Arcadia-BirdLife Conservation Partnership Fund, Haribon's birdwatching and monitoring data and that of the Asian Waterbird Census were pooled and used to identify sites to monitor threatened migratory birds in the Philippines. Three focal species were identified for monitoring: the critically endangered Spoon-billed Sandpiper *Calidris pygmaea*, Chinese Crested Tern *Thalasseus bernsteini*, and the endangered Black-faced Spoonbill *Platalea minor*.

One of the identified sites for monitoring is the Buguey Wetlands Important Bird Area (IBA-PH012), a complex area of coastal lagoons, intertidal mudflats, freshwater marshes and mangrove swamps. Located in the northern tip of the island of Luzon, this IBA is one of their first and last stopovers for migratory birds in the Philippines, to and from their breeding areas during the migratory season. In previous years, there was a high probability of observing migratory and other important species at this site. For example, in the late 1980s, thousands of endemic Philippine Ducks *Anas luzonica* were recorded in Buguey and over a thousand other migratory shorebirds. However, in 2004, a study by Van Weerd showed that no ducks and far fewer shorebirds were observed at the site. With very few studies about migratory birds in the site and little or no management plans implemented in this IBA, avian diversity might be at stake as well as the habitat itself.

In October and November of 2015, a team from Haribon Foundation and the local office of the Department of Environment and Natural Resources (DENR) with support from the local government, went to Buguey Lagoon and Linao Swamp to monitor and to look for the three threatened migratory birds in the wetland complex.



Monitoring team - Photo Haribon Foundation



Of the 67 species that were observed in the wetland complex 41 were migratory species. Approximately five to six thousand birds were observed in different sites within the wetlands. Unfortunately none of the three focal species was observed during the survey. Notable species observed in the site were the Eastern Curlew *Numenius madagascariensis* (En), Chinese Egret *Egretta eulophotes* (Vu), and the Philippine Duck *Anas luzonica* (Vu). Three near-threatened migratory species were also observed; the Eurasian Curlew *Numenius arquata*, Bar-tailed Godwit *Limosa lapponica*, and Red-necked Stint *Calidris ruficollis*. A rare Philippine migrant was also observed, the Pied Avocet *Recurvirostra avoseta* which probably has fewer than 10 recorded sightings in the Philippines.



Chinese Egret (Vu) - Photo Haribon Foundation

In spite of the site's recognition as an IBA, very few conservation efforts have been implemented. The wetland has no official protection and management in place from the local government and several threats to the habitat and the birds continue to be observed in the wetland complex. Black-sand mining, to gather magnetite, is now a major threat in spite of the local laws against it. Conversion of some parts of the lagoon to fish and shrimp pens is still being practised. This alters the natural attributes of the lagoon and, ultimately, may reduce the feeding areas of migratory birds in the area. Improper waste management was also observed in many sites within the wetland complex. The municipality of Buguey with the DENR in Aparri agreed to formulate a management plan for Buguey Lagoon in general. However, special consideration for migratory birds has to be included in the plan. Data

Buguey Wetlands, Cagayan, Philippines - a shorebird haven cont.

from this survey has been shared with local authorities for use in crafting the management plan.

Since 2013, Haribon Foundation has been active in organizing awareness-raising activities on the importance and significance of migratory birds. The "Welcome to the Birds" event is celebrated across the BirdLife International-Asia Partnership to signal the onset of the migratory season. The purpose is to celebrate, recognize and mobilize support for the conservation of migratory birds. In addition, Haribon has assisted in the formulation of action plans for migratory species in the species extinction plan of the third Philippine Biodiversity Strategy and Action Plan (PBSAP); assisted in formulating targets for the conservation of globally threatened migratory species; and promoted participation of local stakeholders in the gathering of data for IBAs.

As part of the project, schools and universities within and outside Metro Manila were visited and introduced to bird migration and its importance through the "Teaching Tour" and a Kite Fest was conducted to celebrate and welcome migratory birds in the Philippines. School organizations and other groups actively participated in the event and Arcadia-BirdLife priority species were promoted. Weekend birdwatching activities were also organized, inviting students from different schools and universities for them to appreciate the birds by observing them in their natural environment.

In May 2016, Haribon will conduct another monitoring survey in Buguey Wetlands with hopes of seeing the focal species. Other migrants will still be noted, especially the threatened ones mentioned above. We will continue to partner with the local government and DENR which makes the survey much easier with their local knowledge about the sites, language, and more observers during the monitoring. It is also beneficial to these local partners because personnel from local partners were taught how to identify these birds, how to monitor them, how to recognize the habitats suitable for different species and also about the general importance of migratory species. Data from this survey, which will be carried out until the end of the migratory season, will complete the full season's migratory data in Buguey Wetlands which will be useful for future monitoring activities in the site. Buguey Wetlands will be continuously monitored during the next migratory season and exploration of other sites in the north-eastern and north-western coasts of Luzon will also be conducted for future monitoring. Conservation and protection of these sites are urgently needed as the populations of these threatened species are rapidly decreasing. Through critical habitat establishment, wetland management planning, awareness raising, and further studies, we can help save these feathered friends.

Josiah David G. Quimpo
Wildlife Researcher
Haribon Foundation, Philippines



From top: Curlews and people; Monitoring; Black-winged Stilt; Mixed shorebird flock on Buguey Wetlands - Photos Haribon Foundation



Ruddy Turnstone Banding at King Island, Tasmania

The Team

Led by Robyn Atkinson, the team comprised Grahame and Margaret Batey, Margaret Bennett, Penny Johns, Steve Johnson, Simeon Lisovski, Wilhelm Lisovski, Ila Marks, Eric Miller, Heidi Miller, Rob Patrick and David Wilbraham.

Population count

A total of 597 Ruddy Turnstones, the lowest count yet made in the February/March/April period, was counted at the usual locations along the whole of the west coast of King Island during 10 - 17 February 2016. This is the tenth year of counts since they commenced in March 2007.

The lower figure for 2016 is consistent with the extremely low number of juveniles produced in the 2015 arctic breeding season. If the usual proportion of juveniles had been present (11%) then this would have increased the population to around 660. This would then have been almost the same as the revised figure of 670 for February 2015.

It would appear that there is still a continuing decline in the numbers of Ruddy Turnstones taking place, although the rate of decline may now not be quite as fast as it was five or more years ago.

Catching

As in February 2015, catching was again difficult. Because the Turnstones haven't really started trying to gain weight prior to migration they were not feeding avidly, being prepared to stay sleeping on offshore rocks for long periods. However, the patience of the team prevailed on four occasions when catches totalling 75 Turnstones were made. As usual there was a high proportion of retraps - 64% of the Turnstones caught.

Percentage Juveniles

The arctic summer of 2015 was clearly a disastrous breeding season for Ruddy Turnstones. Only one juvenile was caught in 75 birds (1.3%). In four of the ten consecutive years of data, there has been a total or almost total breeding failure for the Turnstone population which spends the non-breeding season on King Island. These years are: 2006, 2008, 2012 and now 2015. It seems that Ruddy Turnstone are particularly prone to having very bad breeding years - approximately once every three years.

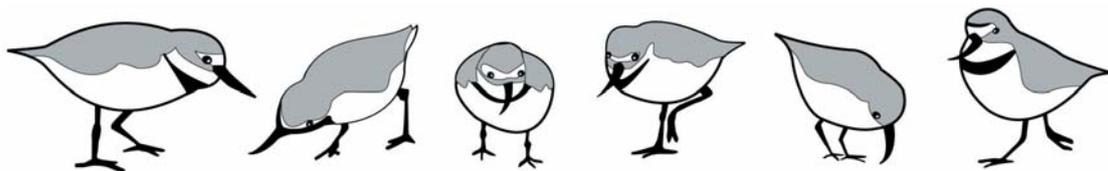
Geolocators

The team just managed to catch enough Ruddy Turnstones to deploy all of the 60 geolocators. Four geolocators that had been put on previously were retrieved and all have been downloaded to give satisfactory migration tracks.

Deakin University Studies

No marked differences were found in the geocator tracks of Ruddy Turnstones which had been treated with anti-intestinal parasite medication in February 2015. However it will need the data we can retrieve from geolocators deployed this year before we can be certain of the results of this experiment. The objective is to see whether freeing Ruddy Turnstone from intestinal parasites when they are putting on weight before and during migration leads to any increase in the efficiency of the northward migration or in an increased survival in birds.

Penny Johns & Clive Minton Victorian Wader Study Group



Australasian Shorebird Conference Auckland New Zealand 1-2 October 2016

hosted by **Pukorokoro Miranda Naturalists' Trust**
at the
UNITEC Institute of Technology in Auckland

There will be two days of presentations covering a wide range of subjects relating to shorebird biology and ecology in New Zealand, Australia and the East Asian-Australasian Flyway. This will be followed by field trips to a variety of good shorebird sites around Auckland on Monday 3 October 2016.

Anyone interested in presenting a paper or poster at the conference should contact Phil Battley P.Battley@massey.ac.nz. [If you are interested in sponsorship please contact us at the email below.](#)

Keep up-to-date and register online at: www.miranda-shorebird.org.nz/asc2016

Adrian Riegen
ASC 2016 Committee Convenor email: shorebirdconference2016@gmail.com

Recollections of a NW Australia Expedition (somewhere near Broome)

It is sometime before the dawn and I'm lying half-awake in a pool of my own sweat waiting for the get-up alarm. I am still trying to sort out the best way to get a good night's sleep in a tent in February in north-west Australia. The evening had "cooled" to below thirty but where was that sea-breeze we enjoyed out on the beach yesterday afternoon? We are at the mercy of a wet season build-up and no wet in sight. Welcome to Anna Plains!

I am a volunteer in this place, about as far from the east coast as you can possibly get without swimming, to participate in the 2016 running of the legendary North Western Australia Expedition. The aim is to catch all manner of shorebirds from Eighty Mile Beach and Roebuck Bay and release the birds after taking various measurements and fitting leg flags to each.

A mighty team of 30 keen shorebird-folk have gathered for this effort and it is quickly evident that I am in the midst of a great bunch of talented people. At least half of the team are seasoned bird-banders (from a variety of locations) and at least half of the team are visitors from overseas. All are passionate about shorebirds and their conservation; after three weeks with this mob I will be completely in awe of many of these people and the work they will pursue when they all go home.

Sweating gradually becomes a part of the normal way of life here in this corner of the world. On any occasion where some work is involved (just lifting gear into the truck for instance) the effort will be enough to turn your previously dry shirt into a saturated mess hanging off your shoulders. Between bouts of exercise there is every chance that you will dry out again especially if you're down on the beach and the sea-breeze has sprung up. So each day is punctuated with bursts of energy and periods of recuperation.

It goes like this. Pack the vehicles ready for the day's work (sweat like mad), drive to the beach and then to some predetermined spot that looks good to set cannon nets (dry again), set the nets and the processing shelter (sweat like mad), drive away from the set nets and wait for the tide (dry again).

At some point in time after masses of birds have been "twinkled" along the beach and the rising tide has walked some into the catching area the word "fire" is heard over the radios and all hell breaks loose. Frantic

driving to the catching area is followed by running to the nets, various shouted instructions regarding where to stand and what to remove from the net (e.g. "fifteen Great Knot!") then finally transporting birds in carrying boxes to the shade. You realise then that once again you are sweating like mad and in need of more water.

More sedate times await now as we form banding teams and get allotted our various banding duties. This work requires everyone to be basically seated in the shade while birds are processed, interesting moults discussed and accurate records produced. Physical exertion gives way to focussed attention to detail.

Time also to appreciate some of the extraordinary beauty of these shorebirds and to contemplate the lives they lead. What amazing and resilient creatures they are; what uncertain futures they must face in this rapidly changing world.

Later that night we assemble for the debrief and once again it is declared that the catch has been a resounding success. Of course there are some niggling areas of the operation that can be done better and tomorrow we will strive for perfection. From the outset this team quickly found its feet as many willing participants took up the various personal challenges to make it all work while leaders, well-versed in the pit-falls of these operations, kept a tight rein on proceedings.

Well before the end of the expedition it became apparent that this year's effort was going to surpass all previous efforts and extra bonus points would be awarded if some Grey Plovers were captured and fitted with satellite transmitters. You just need to believe me that this was done with a minimum of fuss, some excellent local knowledge and OK, perhaps some luck. After three weeks all the leaders were well satisfied with the results and all participants were happy that they had contributed to shorebird knowledge.

I tell people that I went to Broome but don't ask me what Broome is like; my lasting memories will be of Eighty Mile Beach, Roebuck Bay, amazing people and even more amazing shorebirds.

Tom Clarke

Tighes Hill (east coast of Australia)



The class of 2016 included people from a great variety of places; the common denominator was most certainly shorebirds.

Satellite tracking of Great Knot migration routes

It is that exciting time of year again (for shorebird researchers) as northward migration gets into full-swing. Global Flyway Network (GFN) has a cohort of Great Knots and Bar-tailed Godwits with Platform Transmitter Terminals (PTT) attached to them with harnesses. The first Great Knots with PTTs have taken off on northward migration from Roebuck Bay.

These birds were tagged in October 2015 by the GFN/AWSG banding team in Roebuck Bay, Broome, north west Australia for PhD student Ginny Chan (University of Groningen). Ginny's research is investigating the migratory behaviour of birds in a rapidly changing world. The majority of the world's Great Knots spend

the non-breeding season in northern Australia with most of those in north west Australia. They migrate through the East Asian-Australasian Flyway to and from their Siberian breeding grounds. During these trips, they stop to feed and rest at intertidal sites in Asia, mostly in the Yellow Sea region of China and the Korea's. These stopover sites are essential for the survival and successful breeding of the knots. Unfortunately, in recent years huge areas of intertidal mudflats used by Great Knots and other shorebirds have been destroyed for industrial use and many birds have been displaced. This research aims to understand how a migratory species reacts after losing a traditional stopover site.

Grey Plover Satellite Transmitters Update

Broome birds

Five Grey Plovers were fitted with satellite transmitters by the Australasian Wader Studies Group (AWSG) North West Australia Expedition in February 2016. Unfortunately, for reasons unknown, one transmitter failed after the first transmission leaving only four birds with active transmitters.

The four birds carrying active transmitters were named Ecosure (engraved leg flag LLA), Mymi (LLH), Nad (LLJ) and Charlie (LLK) in response to requests from some of the major financial sponsors.

Unfortunately, two of the four transmitters have now ceased to send signals. After reaching China, Ecosure (LLA) ceased transmitting and Mymi (LLH) last sent a signal on 23 April at the South China Sea, just 250km away from the China coast. At that point she had flown for 5 days since she had left Broome on 18 April and had covered 4,200km at an average speed of approximately 36 kph.

It could be that Mymi was adversely affected by the strong depression which was at the south China coast at the time her signals disappeared. But the cause of failure could well have been the same mysterious problem which affected most of our satellite transmitters on



The migration routes of Ecosure (white), Mymi (red), Nad (blue) and Charlie (orange)

Ecosure (LLA) was the first to leave Broome on 6 April 2016, arriving in China on 11 April 2016 after a non-stop flight of 4,700 km in around four-and-a-half days. Its average flight speed of around 44kph was similar to that recorded (by geolocators) on other species of waders on this leg of their northern migration suggesting that the bird probably experienced satisfactory wind conditions throughout its flight.

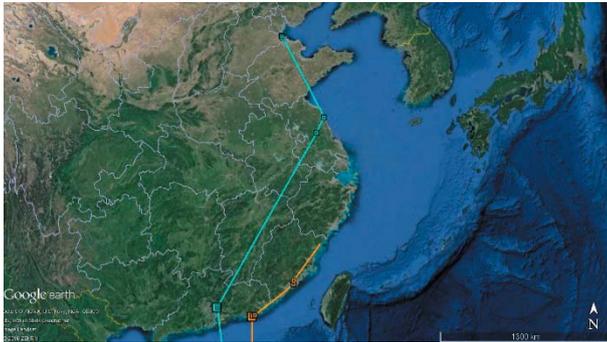
Little Curlew last year and also Ecosure (LLA) the previous week. One theory is that at the end of a long non-stop flight, birds become so thin that the harness holding the satellite transmitter on the bird's back becomes too loose, allowing the transmitter to fall off.

We will continue to hope that there is some other cause (e.g. shortage of solar power) and that these two transmitters start to send signals again in the near future.

The signals from Nad (LLJ) and Charlie (LLK) show very different migration tactics. These two birds departed Broome on about the same date but are now more than 1,300km apart on the China coast. After spending 3 days at an inland area, Nad returned to the coast in southern Bohai Bay in Hebei Province. Besides using the mudflat area, it is also utilising some aquaculture ponds at the coast, presumably as high-tide roosting area. While Nad has already travelled another 1,800km in China, Charlie (LLK) has only made one third of the distance in the same period of time. It is progressing slowly along the coast of Guangdong and Fujian Province. Let's hope that Nad

Grey Plover Satellite Transmitters Update cont.

and Charlie (and their transmitters) survive and tell us what we want to know most of all - where our Grey Plover actually breed and what route they use to get there from the Yellow Sea.



Nad's and Charlie's movement in Mainland China

You can follow these birds on the Birdlife Australia website:

<http://birdlife.org.au/campaigns/the-marvel-of-migration>

South Australia birds

Two satellite transmitters were deployed on Grey Plovers at Thompsons Beach, 50km north of Adelaide, in November 2015. These were put on by Friends of Shorebirds South East (FoSSE), in collaboration with the Victorian Wader Study Group (VWSG). These two birds have been regularly tracked in subsequent weeks as they fed on the extensive mud flats on the shore and occasionally adjourned to adjacent saltmarsh areas, mainly for night-time high-tide roosting. They were occasionally seen and photographed in this period (see photo).

The first of these birds (CYA) set off on northward migration much earlier than expected, on 14 March 2016. (Last year the two Grey Plover carrying satellite transmitters did not depart from Thompsons Beach until 21 April 2015.) It flew non-stop to Taiwan travelling 6,800km in 5 days (see map).

The second bird (CYB) departed 10 days later, on 24 March 2016, and flew non-stop 7,200km to the China coast in five-and-a-half days. The approximate travel speeds over the ground/sea of these two birds were 57 and 55kph respectively. After an 11 day and 5 day 'rest' respectively, both birds have subsequently moved on to locations further up the Chinese coast, with one bird now being on the shores of the Yellow Sea on the southern side of Bohai Bay and the other being just north of Shanghai (see map).



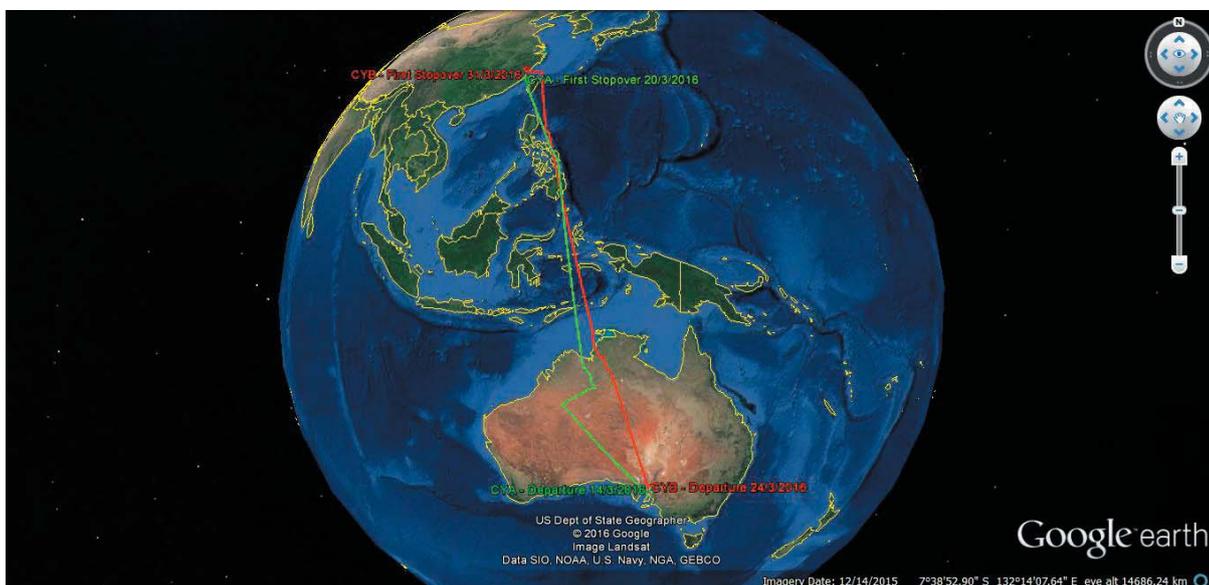
Onward movement of Grey Plovers CYA and CYB along the Chinese coast into the Yellow Sea

Questions

Interestingly, almost all Grey Plover that come to Australia are females, so presumably their male counterparts stay further north than here for the non-breeding season. As these birds weigh about 200 - 250g, a 5g transmitter is well within accepted weight ratios for equipping birds with tracking devices.

It is really exciting that we now have on migration Grey Plovers carrying satellite transmitters put on at two different sites in Australia, 2,800km apart.

The birds from the more southerly non-breeding area have set off on northward migration first - because they have much further to travel to the presumed



Migration routes of two Grey Plovers from Thompsons Beach, South Australia to the Taiwan/Chinese coast

Grey Plover Satellite Transmitters Update cont.

breeding grounds in northern Siberia (or Alaska?)? It will be interesting to see what other differences emerge between the two populations or whether their migration routes and timing gradually merge. Also will they breed in the same, or different, areas? And, will there be similar temporal differences in their southward migration?

Hopefully the answers will gradually emerge over coming weeks and months. But do be prepared for periods of 'no news' when birds are stationary at stopover locations or on their high Arctic breeding grounds. Also be prepared for 'losses' – there are plenty of predators looking for a meal from vulnerable migrants and in the barren Arctic tundras. We are also dependent on the vagaries of electronic technology, built to a micro lightweight scale, plus our own skills at constructing a harness mechanism to hold the unit on the birds' back in a position where the rechargeable solar batteries can operate successfully.

Thanks

The AWSG and FoSSE/ VWSG are extremely grateful to the generous people and organisations who have provided the funds for this project. Each satellite transmitter costs around \$5,000 and satellite download costs of up to \$2,500 can be incurred for each unit (depending on the life of the transmitter). The major funding for the transmitters deployed in northwest Australia by the AWSG derived from a crowd-funding project organised by BirdLife Australia earlier this year. Further financial contributions came from the annual northwest Australia expeditions themselves and from another individual major donor.

The South Australia project was mainly funded through generous contributions from the Adelaide and Mount Lofty Ranges Natural Resources Management Board and the Australian Government-funded Sapphire Coast icon project. These projects would not have been possible without the fieldwork efforts of the AWSG NWA 2016 Expedition and members of FoSSE/ VWSG.

Clive Minton, Ken Gosbell, Chris Hassell, Maureen Christie, Katherine Leung, Grace Maglio, Inka Veltheim

Threats to Shorebirds from Beach-Wrack Fishery

In South Australia beach-cast marine algae is deemed a 'fishery' which is within the ambit of Primary Industry and Regions SA (PIRSA). In order for the operator, Australian Kelp Products, to get an export licence, PIRSA had to obtain the approval of the Federal Department of Environment (DoE) and prove that the fishery would be managed in a sustainable manner that does not pose any threat to species covered under the Environment Protection and Biodiversity Conservation Act.

In June 2015, after various levels of public consultation, the Federal Environment Minister gave approval for 100% of wrack to be taken from 50% of the coastline. Varying levels of protection were given to the three 'Internationally Important Bird Areas' identified in the TAKE zones for the period **1 September to 31 March**.

Friends of Shorebirds SE decided to lodge an appeal to the Administrative Appeals Tribunal within the no-cost jurisdiction. A panel of 'technical experts' (Alison Russell-French, Doug Watkins and Ken Gosbell from AWSG) were recruited to assist us. The appeal was focused on the Minister's undertaking **to protect migratory shorebirds 'until they depart in March/April'**. However, data from the VWSG geolocator project showed Ruddy Turnstone departing late in April and Sanderling into May. In addition information from their banding and flagging program showed steady weight gain for both species throughout March and April.

Prior to a scheduled 4-day hearing, the Administrative Appeals Tribunal convened a meeting of parties in March 2016 during which evidence was tabled and a constructive discussion took place. As a result a Consent Decision was signed between Friends of Shorebirds South East (FoSSE) and the Federal Minister for the Environment, with Australian Kelp Products Pty Ltd (AKP) and the Minister for Agriculture, Food and Fisheries (South Australia) signing as 'other parties'

redesigned and conditions simplified. Part of Rivoli Bay is now completely closed to harvest and there is now only one type of 'seasonal closure' which runs from 1st September to 15th May. During this time AKP can harvest in what were 'seasonal closure' areas on 8 days per month. Within these areas harvesting will be by hand (assisted by a mechanical winch). Gear/operators will be restricted to two 4-wheel-drive utilities each with a trailer which can carry up to 3.5 tonne. Each vehicle will be limited to 3 people. PIRSA considers that this gear restriction will effectively limit the annual size of the harvest. It is the stated intention of AKP to only take fresh kelp. There is to be no harvesting 100 metres either side of breeding Hooded Plover throughout the entire licence area. A poster, prepared for presentation to various conferences, has been amended to outline the new conditions. It can be viewed in the publications section of the VWSG website www.vwsg.org.au

At the close of the Tribunal proceedings, all parties expressed a desire to have much closer ties in the future. This will be put to the test - current DoE approval for the export licence expires in 2018. And AKP have an application for an exploratory licence to harvest from Rivoli Bay through to the Victorian border.

It was significant at the Tribunal conciliation that it was acknowledged that FoSSE were the only group who had tabled scientific data. This once more demonstrates how our success hinges on the contribution of the volunteers who have worked so hard over many years to gather this data, and to the team who worked so effectively to convince the authorities to change the rules. The original Assessment of the fishery put to public comment was dated 31 March 2014. The Consent Decision is dated 24 March 2016. A long haul but well worth the effort. Thankyou all.

Maureen Christie

Friends of Shorebirds SE

Bohai Updates – 22 April and 1 May 2016

It is that time of the year when migratory shorebirds migrate from north west Australia (NWA) (and many other places!) to and through East Asia on their journeys to their breeding grounds. And so this means Global Flyway Network (GFN) swing into action and follow them (or at least through the Luannan Coast, northern Bohai Bay China). GFN and its funders are serious about studying this area and assisting with conservation efforts to gain Nature Reserve status for the intertidal flats and salt ponds. This is the eighth year that GFN have been here. Our major funders over the years have been BirdLife Netherlands (2007-2012), WWF Netherlands (2010-2014, 2016) and Spinoza Premium of Netherlands Organisation Prize for Scientific Research to Theunis Piersma (2014-2016). We also receive financial and much logistical support during field work from Beijing Normal University, principally from Professor Zhang Zhengwang, and PhD students Leiming and Dew Bingrun. In previous years Yang Hong-Yan was a huge help.

As most of you will know our main work here is the resighting of marked birds from NWA but we record every flag or band that passes before our telescopes and as of 1 May 2016 we have recorded 1,117 marked birds from 24 banding sites on 11 species. Red Knot lead the way with 669 sightings.

We always get 'interesting' birds that we get alerted to when we look at their resighting history and already this year is no different.

Red Knot 1BRYR is one such bird. He (DNA sexed) has 40 resightings in his 'Life History' so I shall summarise, not list them all!

Banded in Roebuck Bay, NW Australia as a 1st-year bird in July 2008.

Later that year seen in Roebuck Bay, then moved 200km southwest to 80 Mile Beach (October 2008). Next sightings were in Auckland, New Zealand (2009, 2010).

Seen numerous times every year in Bohai Bay (2011 to 2016).

Seen in New Zealand (Austral summer 2012, 2013, 2014, 2015).

But (and here's the interesting bit) it has been recorded on southward migration back to New Zealand via Roebuck Bay and 80 Mile Beach in NW Australia (2013) and via New South Wales (2015).

We think this is an unusual route for birds to get back to New Zealand. We certainly have very few records of our marked birds taking this route.

And not only is it a fine resighting history, we have 2 images of the bird from New Zealand! One from March 2010 and one from January 2012, thanks to Ian Southey.



Red Knot 1BRYR in New Zealand
Photo by Ian Southey

And an interesting **Great Knot**, banded in Roebuck Bay as an adult on 29/08/2010 - seen regularly in Roebuck Bay every year since banding.

Recorded in Bohai Bay in 2012 and 2015.

Seen and photographed at Futuan River Mouth, Rizhao, Shandong Province on 05/04/2016 (430km south east of our Luannan Coast study site).

We recorded this bird on our first day here in the field on 12/04/2016, 7 days after the Futuan River sighting. This is a normal movement for Great Knots migrating from northern Australia. They usually land in southern China and then make one or two short stops as they head for the northern Yellow Sea sites: Luannan coast, Shuangtaihekou National Nature Reserve (near Panjin and Yingkou), and Yalu Jiang National Nature Reserve (near Dandong).



Great Knot banded in North West Australia in 2010.
Photographed at Futuan River mouth, Shandong Province on 5 April 2016 by Zong Feng Li

Spotlight on Species: Marsh Sandpiper

As we drive to the Luannan coast mudflats in the dawn light, we pass through the salt ponds. Two of these ponds, that are adjacent to the road, sometimes have thousands of birds roosting or feeding in them. This spectacle relies purely on the water levels. Deep water, and a few Pied Avocets and Black-tailed Godwits might be there. Low water level with a bit of the pond floor on view, and thousands of shorebirds will be there in the early morning light. One of the most abundant birds using these ponds is the Marsh Sandpiper *Tringa stagnatilis*, a beautiful delicate shorebird with a very fine bill, long yellowish legs, a white underside that is finely streaked on the upper-breast, and grey upperparts with beautiful patterning in breeding plumage. In North West Australia it is commonly recorded from September to April, but rarely in big numbers. It favours freshwater wetlands, but will happily use the coastal habitat when the inland lakes are dry.



One of the thousands of Marsh Sandpipers at Nanpu.
Photo by Adrian Boyle

Bohai Updates – 22 April and 1 May 2016 cont.

Here in Bohai, Marshies (as we refer to them), occur in big numbers, and this year we have had a count of 7,510 in just the few ponds mentioned above. The biggest count we have recorded here was an estimate of over 10,000 on 26/04/2012. These numbers are absolute minimums for the area, as it is impossible to count the whole salt ponds. The total area is enormous with literally hundreds of ponds. Not all of the ponds are suitable for shorebirds to use, but many are. Small numbers of shorebirds feed on the edges of the ponds, but we only see the ones that we drive alongside. The ponds are, very roughly, 20km by 10km in size and there are many more aquaculture ponds in the area. So the Marshies we see are only a fraction of what is probably using the site. This is reflected in the EAAF estimate for this species. It is between 100,000 and 1,000,000! A difficult species to monitor as it doesn't gather in large roosting aggregations or massive flocks feeding on intertidal mudflats. Marshies arrive here in large numbers between 16 and 21 April and all but a handful have gone by 10 to 16 May.

The only marked Marshies we have seen here, have been from the freshwater lakes near Broome. They are not commonly caught at banding sites in the EAAF.

A conservation concern for Marshies, is that they get caught in a certain type of fishing net much more than any other species does. Here at our Luannan site over the years, we have found dozens of dead Marshies in nets, but almost no other species. This may have something to do with their foraging methods? Dozens doesn't sound much, but there must be literally millions of these nets used around the Yellow Sea.



*Marsh Sandpiper caught in a fishing net.
Photo by Matt Slaymaker*

As of 1 May we are still not getting that many colour-banded (CB) birds from NWA. But what is noticeable is that all the first sightings we have of CB NWA Red Knot, are birds that 'live' at 80 Mile Beach and so far this year we only have one that is a Roebuck Bay bird. This is a small sample of re-sightings, but it is quite striking. It would seem odd that birds spending the non-breeding season within 200km of each other, would leave those sites at markedly different times.

In 2010 we were noticing a lot of metal bands on Curlew Sandpipers - but with no flags. When Adrian photographed one and we were able to read the band from the images, it indicated these birds were from India. India is officially outside the EAAF and in the Central Asian Flyway, but of course birds don't give a damn for our human-imposed boundaries! We encouraged the shorebird banders in India to start using flags, and they first started putting them on in 2014. We had a few sightings last year and one Curlew Sandpiper we could ID to an individual (M44). Already this season we have identified three Curlew Sandpipers and one Asian Dowitcher, from two different banding sites in India. Yet another country's birds that depend on the very important Luannan coastline.



Asian Dowitcher B08 banded in Chilika Lake India in December 2014, seen in Nanpu in April 2016. Photo by Adrian Boyle

Chris Hassell and Adrian Boyle

Global Flyway Network
22 April 2016 and 1 May 2016

Source: www.globalflywaynetwork.com.au/bohai-bay/bohai-bay-fieldwork-journal/

BirdLife Australia Shorebird Conservation Map

BirdLife Australia has developed Australia's first interactive Migratory Shorebird Conservation Map, allowing you to highlight conservation successes and challenges in your local area. See <http://map.birdlife.org.au/>.

The purpose of this map is to develop a clearer picture of the state of migratory shorebird habitat across Australia by tracking and visually representing the cumulative threats facing shorebirds as well as the collective impact of conservation actions taken by volunteers around the country.

We invite you to add to this map by entering information about what's happening at shorebird sites near you and welcome your feedback at anytime to help us improve it. We believe this to be an important advocacy tool in demonstrating just how much important habitat is being lost to port developments, housing and industry in Australia each year. But it will also put a spotlight on communities taking action to protect the wetlands and shorebirds they love.

Margaret Quixley

Conservation, Campaigns & Supporter Engagement Strategist, BirdLife Australia

Emu Austral Ornithology Volume 116 Issue 2, 2016 - Shorebirds

Shorebirds along the Yellow Sea coast of China face an uncertain future – a review of threats

David S. Melville, Ying Chen and Zhijun Ma

Millions of shorebirds occur along China's Yellow Sea coast, especially when migrating. Massive land claim for industry, aquaculture and housing has already greatly reduced areas available to birds, and the remaining areas are degraded by activities such as aquaculture and harvesting, pollution and invasion by cord grass. There is an urgent need to curb land claim projects and develop an integrated coastal management strategy.

<http://www.publish.csiro.au/paper/MU15045.htm>

Behavioural responses of migratory shorebirds to disturbance at a high-tide roost

Amanda Lilleyman, Donald C. Franklin, Judit K. Szabo and Michael J. Lawes

We measured the behavioural responses of roosting migratory shorebirds to anthropogenic disturbances. Energy budget models suggested that 10 alarm flights per day increased daily energy expenditure, which could reduce fat reserves to levels below the threshold that can be replenished by normal intake rates. This could have a negative effect on survival or reproductive success.

<http://www.publish.csiro.au/paper/MU14070.htm>

Continental-scale decreases in shorebird populations in Australia

Robert S. Clemens, Danny I. Rogers, Birgita D. Hansen, Ken Gosbell, Clive D. T. Minton, Phil Straw, Mike Bamford, Eric J. Woehler, David A. Milton, Michael A. Weston, Bill Venables, Dan Weller, Chris Hassell, Bill Rutherford, Kimberly Onton, Ashley Herrod, Colin E. Studds, Chi-Yeung Choi, Kiran L. Dhanjal-Adams, Nicholas J. Murray, Gregory A. Skilleter and Richard A. Fuller

We have documented severe decreases in the numbers of most migratory shorebird species that visit Australia. Varying continental patterns of decrease between species are consistent with the idea that Australia's migratory shorebirds are being affected most by threats outside Australia. Conservation actions are needed urgently overseas, but also across Australia's inland wetlands and some local coastal wetlands.

<http://www.publish.csiro.au/paper/MU15056.htm>

Reclamation of tidal flats and shorebird declines in Saemangeum and elsewhere in the Republic of Korea

Nial Moores, Danny I. Rogers, Ken Rogers and Philip M. Hansbro

Prior to reclamation, Saemangeum supported several hundred thousand shorebirds. Shorebird numbers at the site are now 0.15% of their former levels. There were no sustained increases in shorebird numbers at any other sites in the Republic of Korea during the study period (2006–2014), indicating that birds displaced by reclamation were unable to relocate successfully to alternate staging sites and probably died.

<http://www.publish.csiro.au/paper/MU16006.htm>

Declining adult survival of New Zealand Bar-tailed Godwits during 2005–2012 despite apparent population stability

Jesse R. Conklin, Tamar Lok, David S. Melville, Adrian C. Riegen, Rob Schuckard, Theunis Piersma and Phil F. Battley

Using long-term data on resightings of colour-banded godwits in New Zealand, we discovered that adult survival rates dropped from >90% per year to approximately 84% during 2005–2012. Although the population has appeared stable in recent years, we predict a population decline of 5–6% per year, should this lower survival rate persist.

<http://www.publish.csiro.au/paper/MU15058.htm>

Fuelling and moult in Red Knots before northward departure: a visual evaluation of differences between ages, sexes and subspecies

Mo A. Verhoeven, Joop van Eerbeek, Chris J. Hassell and Theunis Piersma

Two subspecies of Red Knot co-occur in NW Australia. Although their breeding areas appear from under the snow at different times, the birds depart from Australis at the same time. If the two subspecies do show differences in the time of arrival on the breeding grounds, we predict that they will show substantial differences in the time they take for refuelling in the Yellow Sea.

<http://www.publish.csiro.au/paper/MU15035.htm>

Movement patterns of Sanderling (*Calidris alba*) in the East Asian–Australasian Flyway and a comparison of methods for identification of crucial areas for conservation

Simeon Lisovski, Ken Gosbell, Maureen Christie, Bethany J. Hoye, Marcel Klaassen, Iain D. Stewart, Alice J. Taysom and Clive Minton

Insights gained from the individual migration routes of 13 Sanderlings highlight inherent biases in using only count and resighting data to identify important feeding and resting sites along the EAAF. These findings suggest that data on individual movements may be crucial to effective conservation planning for shorebirds of the EAAF.

<http://www.publish.csiro.au/paper/MU15042.htm>

Phenology of southward migration of shorebirds in the East Asian–Australasian Flyway and inferences about stopover strategies

Chi-Yeung Choi, Ken Rogers, Xiaojing Gan, Robert S. Clemens, Qing-Quan Bai, Amanda Lilleyman, Ann Lindsey, David A. Milton, Phil Straw, Yat-tung Yu, Phil F. Battley, Richard A. Fuller and Danny I. Rogers

Understanding southward migration strategies is critical to shorebird conservation. Differing patterns suggest that larger species in the EAAF depend on a small number of staging sites, whereas smaller species migrate in shorter steps and require additional staging sites. Conservation of small shorebird species requires a more complete accounting of unknown and understudied staging sites.

<http://www.publish.csiro.au/paper/MU16003.htm>

Temporal patterns of migratory shorebird communities at a stop-over site along the East Asian–Australasian Flyway

Qianyan Zhou, Wenjie Xue, Kun Tan, Qiang Ma, Xin Jin, Wei Wu, Chendong Tang and Zhijun Ma

Migratory birds optimise their timing of activities to maximise their fitness. Using banding data at Chongming Dongtan, we analysed the pattern of turnover within shorebird communities during spring and autumn migration. We propose that the breeding latitude has strong effects on the timing of migration, both among and within species.

<http://www.publish.csiro.au/paper/MU14094.htm>

A chain is as strong as its weakest link: assessing the consequences of habitat loss and degradation in a long-distance migratory shorebird

Yaara Aharon-Rotman, Silke Bauer and Marcel Klaassen

Using a stochastic dynamic programming migration model, we manipulated the quality of stopover sites along the migration route of Ruddy Turnstone to assess the effect of habitat degradation scenarios on migration behaviour, survival and reproductive success. Our results show that changes on the wintering (major non-breeding) ground in South Australia had the highest negative effect on reproductive success and survival.

<http://www.publish.csiro.au/paper/MU15029.htm>

The distribution and protection of intertidal habitats in Australia

Kiran L. Dhanjal-Adams, Jeffrey O. Hanson, Nicholas J. Murray, Stuart R. Phinn, Vladimir R. Wingate, Karen Mustin, Jasmine R. Lee, James R. Allan, Jessica L. Cappadonna, Colin E. Studds, Robert S. Clemens, Chris M. Roelfsema and Richard A. Fuller

Using new satellite remote sensing techniques, researchers from the University of Queensland have produced the first map of intertidal habitats for Australia. Up to 80% are protected in Victoria but only 6% in the Northern Territory. It is undeniable that marine and terrestrial protected area managers need to continue coordinating their efforts to ensure intertidal habitats are managed properly for the shorebirds they support.

<http://www.publish.csiro.au/paper/MU15046.htm>

Conservation without borders – solutions to declines of migratory shorebirds in the East Asian–Australasian Flyway

Judit K. Szabo, Chi-Yeung Choi, Robert S. Clemens and Birgita Hansen

Competing demands on wetlands, compounded by differing economic priorities, jurisdictions and attitudes towards wildlife make shorebird conservation a challenge. In this paper we discuss socio-political approaches that can help to implement conservation actions. Stronger engagement of citizens and governments in habitat protection and shorebird monitoring; international collaboration, knowledge sharing, capacity-building and support for local action of both citizens and government officials to increase awareness in communities and governments of shorebird issues; and stronger commitment from national governments and international actions among Flyway partners are critical.

<http://www.publish.csiro.au/paper/MU15133.htm>