Newsletter for the Asia Pacific Flyways & Australian Shorebirds 2020 Project

No. 38 January 2016

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Latham's Snipe caught at urban wetlands in Port Fairy, Victoria and fitted with geolocators to track their movements (see article page 15). Photo Richard Chamberlain

#### **Editorial**

The recent Conservation Initiative between BirdLife International and the Republic of South Korea is another step forward in protecting shorebird habitat around the Yellow Sea. Global Flyway Network is also active in political circles, helping to support the New Zealand efforts at both international and local levels. The possibility of using satellite-tagged godwits in a real-time "follow-the-godwits' website was raised as an effective means of communication with the public.

At a local level, positive change has occurred in Myanmar where former hunters are now engaged in surveying shorebirds – their expertise critical to finding shorebird sites and helping protect the Spoon-billed Sandpiper.

As Piersma et al. (2015) stated in their paper on survival rates of migrating shorebirds, "We live during times in which humans have ever greater effects on the biota of the Earth." But we also live in an age of greater effective communication – where it is possible to showcase (and hopefully change) human behaviours that adversely impact on shorebirds.

#### Liz Crawford, Editor

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

Compiled and published by the Australasian Wader Studies Group www.awsg.org.au





# Geum Estuary, Republic of Korea Conservation Initiative



Governor of Seocheon County, Mr Pakrae Noh and Patricia Zurita, Chief Executive of BirdLife International after signing the MOU. Photo BirdLife International

BirdLife International and the Government of Seocheon County have signed a new Memorandum of Understanding on the conservation of the Geum Estuary in the Republic of Korea.

The MOU was signed by Mr Pakrae Noh, the Governor of Seocheon County, and Patricia Zurita, BirdLife's Chief Executive, at the BirdLife office in Cambridge, UK on 9 November 2015.

Through the MOU, BirdLife and Seocheon County have agreed to work together to safeguard the biodiversity of the Geum Estuary. The county government has pursued enlightened policies based around nature-based sustainable development. The BirdLife Partnership will support this through the provision of technical expertise on migratory bird conservation.

The Geum Estuary is now the most important wetland in the Republic of Korea for migrating shorebirds, following the reclamation of the extensive mudflats at nearby Saemangeum. It supports internationally important numbers of 16 shorebird species, including the Critically Endangered Spoon-billed Sandpiper.

"We are delighted to sign this agreement with Seocheon County Government to work collaboratively for the conservation and sustainable development of the Geum Estuary," said Patricia Zurita. "Protecting this site and properly managing the coastal wetlands in the Yellow Sea is vital to maintain the East Asian-Australasian Flyway alive. Shorebirds like the Great Knot and Far Eastern Curlew depend on healthy tidal mudflats to recharge and continue their voyage".

"We are grateful to have the support of [such] a great partner as BirdLife, an organisation that recognises the importance and value of Yubu-

do," said Mr Pakrae Noh. "We look forward to further collaboration with BirdLife in protecting biodiversity and especially the migratory birds that need Geum Estuary. We will strive to strengthen eco-tourism in Seocheon County, with the further support of BirdLife's expertise".

The Geum Estuary is of outstanding importance for Great Knot and Far Eastern Curlew. These species have both been upgraded from Vulnerable to Endangered on the 2015 Red List because of the rapid loss of the intertidal wetlands in the Yellow Sea region of East Asia which they rely on to refuel on their long migrations from the breeding grounds in Eastern Russia to South-East Asia and Australasia.

In addition to its rich wetlands and biodiversity, Seocheon County has a distinctive local cuisine, in particular excellent seafood and the best rice wine in Korea, and a rural village lifestyle. BirdLife is working with the government to develop natureand culture-based tourism in the county.

Spike Millington, Chief Executive of the East Asian-Australasian Flyway Partnership said: "I congratulate the Government of Seocheon County and BirdLife International for signing this MOU to extend their cooperation at this internationally important site, which offers a different perspective on development than the rapid infrastructure expansion model typically associated with the Republic of Korea".

During their visit to the UK, the mayor and his colleagues from Seocheon County will visit RSPB's Titchwell and Rainham Marshes Nature Reserves, where staff from the RSPB (BirdLife in the UK) will showcase the restoration and management of the wetlands, and the benefits of the reserve to visitors and the local community.

# China's vanishing coastal wetlands are nearing critical red line

**BEIJING**—Along China's coastline, rapid development has transformed marshes and mudflats into ports and urban sprawl; a line of concrete seawalls and sandbags now stretches longer than China's Great Wall. The decline of wetlands is nearing a critical threshold below which the losses could inflict severe and lasting harm on ecosystems—driving numerous migratory bird species to the brink of extinction and jeopardizing nearly 20% of the world's fisheries, warns a new report from Chinese and US scientists.

Recognizing the vital role that wetlands play in ecosystems management and flood control, on 25 April China's central government drew a line in the mud, decreeing that no fewer than 53.33 million hectares of wetlands must be conserved. However, the new report forecasts that if current and planned coastal reclamation continue unabated, by 2020 the government's red line "will be broken."

Without "legislative power to stop reclamation,

crossing the 'red line' is just a matter of time," warns Jing Li, founder of the Shanghai-based nonprofit Saving the Spoon-Billed Sandpiper in China, named after a critically endangered species that depends upon China's coastal mudflats. Already half of China's coastal wetlands have disappeared over the past 50 years, enclosed by seawalls or overrun by ports and other development, according to the analysis, released here Monday (19 October 2015) by China's State Forestry Administration (SFA), the Chinese Academy of Science's Institute of Geographic Sciences and Natural Resources Research, and the Paulson Institute, a nonprofit based in Chicago. Drawing on original research and published studies, the report also found that 70% of China's mangrove forests and 80% of near-shore coral reefs have vanished in the past half-century.

The findings underscore a central tension in conservation in China: reconciling the directives of the central government, which increasingly strives to balance development and environmental protection, with the fervor of local officials for economic growth. "Huge economic returns from reclamation have prompted local governments to 'bypass' regulations issued by the central government," the report explains. "Sea reclamation is deemed as the quickest and cheapest way to increase land supply in China's eastern coastal areas."

Competing policies can also undermine conservation. Coming into play is China's need to safeguard its food supply by maintaining a minimum area of land—120 million hectares of



Road building in salt ponds in Bohai Bay. Photo Bob Loos

arable land—for growing crops. "Ironically the crossing of the 'red line' on wetlands probably results from trying to achieve the 'red line' on agricultural land," says Spike Millington, chief executive of the South Korea-based East Asian-Australasian Flyway Partnership (EAAFP), "since any agricultural land taken over for development has to be compensated by an equivalent area of newly created 'agricultural' land elsewhere."

EAAFP is tracking the link between disappearing wetlands in China and the Koreas and the plummeting numbers of migratory birds in Asia, including more than 50 endangered or threatened species. The global population of the iconic Spoon-billed Sandpiper, for instance, has plummeted to only about 220 breeding pairs in 2010, down from an estimated 2000 to 2800 breeding pairs in the 1970s, mostly because of coastal habitat loss.

For China to achieve its national wetlands conservation target, local guidance for implementation must become much more specific—and meaningfully enforced, Li says. "The SFA has very limited political influence for reclamation, unfortunately," she says. The agency "can only provide consultancy advice in terms of wildlife protection."

If rumored development goes forward in one area of intact mudflats her group is closely monitoring, in Rudong County near Shanghai, it could "ring the death knell for that species," Millington says. "We don't have the luxury of time for these sites."

Christina Larson 23 October 2015

Posted in Asia/Pacific, Environment Science| DOI: 10.1126/science.aad4759 Source: http://news.sciencemag.org/ asiapacific/2015/10/china-s-vanishing-coastalwetlands-are-nearing-critical-red-line

# Global Flyway Network meets New Zealand's Minister of Conservation

New Zealand's Minister of Conservation, the Honourable Maggie Barry, invited, through the Pukorokoro-Miranda Shorebird Centre, Theunis Piersma, representing Global Flyway Network, to a meeting on 8 December 2015. The hourlong meeting held in the Parliament building in Wellington was also attended by Mr Scott Simpson, Member of Parliament for Coromandel and Chair of the Local Government and Environment Select Committee, and Mr Brent Beaven, Private Secretary to Hon. Maggie Barry.

On the table were the considerable conservation problems faced by the two marathon shorebird migrants for which New Zealand is the main nonbreeding destination, the Red Knot Calidris canutus and Bar-tailed Godwit Limosa Iapponica baueri, and the ways that synergies between interests and activities of the New Zealand government and the international consortium of shorebird workers represented by Global Flyway Network (with Piersma in the role of 'scientific cheer-leader', and the Pukorokoro-Miranda Shorebird Centre and Massey University Palmerston North as the local partners) could help address the issues.

Ms Barry emphasized her commitment to both the diplomatic route taken to help the Chinese government achieve protection status for key staging areas in the Yellow Sea, with a focus on the Luannan coast in Hebei province, China, and the conservation of key intertidal areas in New Zealand. Theunis Piersma shared his enthusiasm about this commitment of the New Zealand government at national and local level (with Mr Simpson's presence marking this for the Firth of Thames area), and confirmed the great importance of the Luannan coast especially for the Red Knots from New Zealand. He also shared experiences from the recent visit of the King of the Netherlands to Chongming Dongtan near Shanghai and his plea for coastal wetland conservation (indicating the opportunity for New Zealand and the Netherlands to share their efforts with China) and elaborated on the recent work by Global Flyway Network (now entirely funded from Dutch and Chinese sources) on the

ongoing satellite tracking of Bar-tailed Godwits and the great opportunities of this technique for relevant remote observation and outreach to the general public.

Minister Barry's question as to what the New Zealand government could do to help elicited an animated discussion on the needs and opportunities for renewed tracking using colourmarking and satellite-based techniques (of both Bar-tailed Godwits and Red Knots), the possibilities to do this work in an international context (with the Pukorokoro-Miranda Shorebird Centre and Massey University as local partners) with shared governmental and private financial support. Piersma offered help on all fronts and also discussed the possibility of implementing a real-time 'follow-the-godwits' website modelled on the very successful King of the Meadows website developed in The Netherlands for the following of sat-tagged Black-tailed Godwits.

The meeting ended with a review of the cultural cartography of Red Knot migration by Janet Essley and Lee Tibbitts (produced for and by Global Flyway Network), which piqued the interest of Ms Barry who is also Minister for Arts, Culture and Heritage.



Mr Scott Simpson, the Hon, Maggie Barry and Theunis Piersma looking at Janet Essley's and Lee Tibbitts' cultural cartography of Red Knot migrations, produced for and by Global Flyway Network.

# **WWF Shorebird Report**

With support from the Yellow Sea Ecoregion Taskforce and the Shorebird Working Group of the East Asian–Australasian Flyway Partnership (EAAFP), WWF-Hong Kong released a Collaborative Work Programme for the conservation of EAAF shorebirds on 17 August 2015. More information on this is available in a news article posted on the **EAAF Partnership** website. The Collaborative Work Programme

can be downloaded from this link. Other project documents (e.g. Stakeholder Workshop Report, Shorebird Prioritization Report, etc.) can be accessed from the <a href="https://www.www.eman.com/www-hong-website">www-hong-website</a>. Doug Watkins, AWC Advisor has led the preparation of the document.

Based on information from Bena Smith, Mai Po Manager, WWF-Hong Kong

Source: Asian Waterbird Census Newsletter December 2015

# BirdLife Australia's Shorebirds Program - February to May 2016

Shorebirds are marvels of global migration. But they are in trouble, serious trouble – Australian scientists have been sounding the alarm for some time. Protecting our shorebirds and their habitats in Australia and East Asia is a shared responsibility – of governments and communities, in Australia and globally.

From February to May this year, BirdLife Australia, with support from AWSG, is running a whole-of-organisation public engagement program focusing on migratory shorebirds.

The Shorebirds public engagement program aims to increase awareness about migratory shorebirds, encourage people to take positive action and add their voice so that these developments positively support ongoing efforts, culminating in a National Day of Action on World Migratory Bird Day (Saturday 14 May 2016), when we are inviting local groups and interested stakeholders to run a range of locally run activities across the country.

There is so much set to happen in the Shorebirds arena in 2016 - release of the Australian Government's **Migratory Shorebirds Wildlife Conservation Plan** [planned for World Wetlands Day, 2 February 2016]; a review and update of the **Flyway Migratory Shorebirds Populations Estimate** re-calibrating the benchmark for identifying populations atrisk; potential for species listings under the EPBC Act; and importantly the Australian Government showing much needed international leadership in bilateral negotiations

with East Asian partner countries with which we have treaties and agreements. If managed well, these developments can support ongoing efforts of BirdLife Australia, AWSG and other stakeholders to turn things around for Shorebirds.

From February you will see:

- a new Shorebirds focused landing page on our website, directing people to actions they can take to support Shorebirds;
- promotional stickers and other collateral available for you to distribute to help build awareness;
- e-blasts going to supporters and members encouraging them to take action for Shorebirds;
- email sign-offs and social media focusing on Shorebird actions and stories;
- a few short but sharp media campaigns to obtain exposure.

As members of AWSG and part of the BirdLife Australia network, we'd love you to be a part of that effort. We'll keep in touch with you in the coming weeks via BirdLife Australia's e-news and *Tattler*, letting you know what's happening and how you can support this important public engagement program.

#### **Diana Gibson**

Head of Membership Development and Communications, BirdLife Australia Email: diana.gibson@birdlife.org.au

# Celebrating World Wetlands Day - 2 February 2016

#### **Wetland Shorebirds Workshop:**

9:45 am – 3 pm Tuesday 2 February (World Wetlands Day) 2016 Hunter Wetlands Centre, 412 Sandgate Rd, Shortland, Newcastle

This workshop is jointly delivered by WetlandCare Australia, the Australian Wetlands Network, Hunter Wetlands Centre and Office of Environment and Heritage with support from Hunter Local Land Services and the NSW Environmental Trust.

Please register by 28 January 2016 on line at: https://www.eventbrite.ie/e/world-wetlands-day-shorebirds-of-the-hunter-estuary-tickets-19702429497 or Liz Crane 02 4927 3121 liz.crane@environment.nsw.gov.au

#### **Sessions include:**

The Ramsar Convention and international policy for shorebird conservation

Louise Duff, WetlandCare Australia

Shorebirds overview, migration and habitat rehabilitation

Chelsea Hankin, Niche Environment and Heritage

Identification skills development

Chris Herbert, Hunter Bird Observers Club

Launch of the Wetlands Knowledge Group Stuart Blanch, Hunter Wetlands Centre



# Australasian Shorebird Conference Auckland New Zealand 1-2 October 2016

Pūkorokoro Miranda Naturalists' Trust is hosting the 10th Australasian Shorebird Conference to be held at UNITEC Institute of Technology in Auckland on 1 - 2 October 2016.

There will be two days of presentations covering a wide range of subjects relating to shorebird biology and ecology in New Zealand and the East Asian-Australasian Flyway. Anyone interested in presenting a paper or poster at the conference should contact Phil Battley P.Battley@massey.ac.nz. This will be followed by field trips to a variety of good shorebird sites around Auckland on Monday 3 October 2016. More details regarding registration etc. will appear early in 2016. If you are interested in sponsorship please contact us at the email below.

#### **Adrian Riegen**

ASC 2016 Committee Convenor riegen@xtra.co.nz

# Faure Island, Shark Bay, Western Australia

Faure Island is listed internationally by BirdLife International and BirdLife Australia as an Important Bird Area (IBA). Located east of Point Peron in Shark Bay, Faure Island was leased to the Australian Wildlife Conservancy (AWC) in 1999 with the aim of contributing to conservation of Australia's biodiversity through establishing viable populations of threatened mammals and initiating research to increase the effectiveness of threatened species management in arid Australia. The AWC lease does not include the intertidal habitat of the majority of the bird species. However, the current management of the terrestrial environment could be having a positive impact on this habitat. The island was previously leased from 1873, initially for pearling interests and then for angora goats and sheep. When AWC took over the lease, the island was de-stocked and 40 or so feral cats were eradicated by researchers from the Department of Parks and Wildlife (Algar et al. 2010). BirdLife Western Australia first surveyed the Faure bird population in 2008, followed by surveys in 2009, 2010, 2012, 2013 and 2014.

Shorebirds congregate to roost on either the north-west or north-east side of the island, flocking to the roosts from the extensive mud flats off shore. The total shorebird abundance in 2014 (11,494) was slightly less than in 2013 (12,005) but comparable with the last three surveys. The significant roosting areas were all adjacent to the important foraging habitats of intertidal flats, shallow lagoons and mangroves. Thirty-six shorebird species were recorded during the 2014 survey of which 17 were trans-equatorial migratory species.

The abundance of Red-necked Stint (6716) was greater than the 1% population threshold (3250) for this species, confirming that Faure Island is an internationally important site for this species (based on Criterion 6 of the Ramsar Convention). In addition, Lesser Sand Plover (682), Bar-tailed Godwit (1099) and Grey-tailed Tattler (251) met the population criterion for staging (based on the movement of 0.25% of a population through a site during migration (Bamford *et al.* 2008)).

The undisturbed shoreline of Faure Island provides a rare opportunity to eliminate human impact as a variable when estimating numbers of shorebirds over time. These repeated surveys are confirming that the tidal flats surrounding Faure Island, some with seagrass beds, provide nutritional support for more than 10,000 shorebirds, indicating the richness of this foraging ground.

#### References

Algar, D., Angus, G. J., Brazell, R. I., Gilbert, C., and Withnell, G. B. (2010). Eradication of feral cats on Faure Island, Western Australia. *Journal of the Royal Society of Western Australia* 93, 133–140.

Bamford, M., Watkins, K., Bancroft, W., Tischler, G. and Wahl, J. (2008). 'Migratory Shorebirds of the East Asian-Australasian Flyway: Population Estimates and Internationally Important Sites'. (Wetlands International, Oceania: Canberra).

#### **Suzanne Mather**

Adapted from Mather, S. (2015). Monitoring bird populations on Faure Island, October 2014. *In* Western Australian Bird Notes, Quarterly Newsletter of the Western Australian Branch of BirdLife Australia, No.155, September 2015.

Further information is available from: http://birdlife.org.au/locations/birdlife-western-australia/ publications-wa

# Ruddy Turnstone studies on King Island, Tasmania

This was the 9th consecutive November trip to King Island as part of our long-term studies of Ruddy Turnstones. The primary objective was to retrieve geolocators, with secondary objectives of carrying out the usual population census and obtaining an estimate of the 2015 breeding success (via the percentage of juveniles in catches).

#### **Population Count**

The total number of birds counted (631) is below the unusually high figure of 754 for November 2014 and above the exceptionally low figure of 546 in November 2013 (when at least some birds in the Whistler area must have been missed). The figure is close to the total recorded in March 2014 and March 2013, and a little lower than the adjusted figure (i.e. gaps filled in) for February 2015. It appears that the rapid decline in the Turnstone population noted during the earlier years of our visits (2007-2012) may have now slowed.

#### **Catches**

Five cannon net catches were made during the visit. Simple catch figures belie the effort needed to make the Turnstone catches. At all three sites where geolocators were retrieved, for example, we needed to reset the nets several times before we managed to find a location to which the birds would come. Much perseverance and patience was required with many birds sitting for hours out on inaccessible rocks and being unable to be twinkled in the usual way. With relatively low energy demands at this time of year birds seem to need to feed for only two to three hours a day, with preference being shown for the first half of the morning. It took nearly two and a half days to make the last catch, at Central Manuka on 3 December, with the birds finally coming into the catching area at 9:55am, just five minute before the deadline for packing up (to get the plane back to Melbourne). However the long wait (commenced at 6:00am) for this 'Cinderella catch' was worth it as we added further to our total of retrieved geolocators.

#### **Geolocators**

Altogether we retrieved a record 20 geolocators, 17 deployed in February 2015 and three from March 2014. Our previous best total for a visit was 11. All 18 new geolocators which we took to King Island on this visit were redeployed on birds from which geolocators were removed. The objective of this replacement procedure is to try to obtain multiple records of an individual's migration paths to see how one year compares with another. It has already been successful in giving us quite a few individuals with two years of migratory paths recorded and, in a few cases, with three years of data. We were thus especially delighted when Ken Gosbell downloaded the first of our geolocators, after our return to Melbourne, and found that it gave two complete migratory paths (2014 and 2015) AND that the geolocator retrieved from this same bird in 2014 also contained two migration paths (2012 and 2013). We thus now have FOUR consecutive, complete annual migratory paths for this individual. And, as it is now carrying another geolocator, there is hope for more!

#### **Percentage Juveniles**

There were only two juveniles in the total of 120 Ruddy Turnstones caught. This suggests that 2015 was an exceptionally poor breeding year for Turnstones in the Arctic. This is in line with information provided to us by the Russians and also early catch data on other species. Turnstones seem to be particularly prone to having occasional years with almost complete breeding failures. In the previous nine years for which we have percentage juvenile data from King Island there were three such breeding failures, corresponding to the 2006, 2008 and 2012 Arctic breeding seasons (all with percentage juveniles less than 1.2%). In most other years breeding success was fairly constant (ranging between 13.4 and 17.9 % juveniles). The only exception was the bonanza figure of 30.6% juveniles following the 2014 Arctic summer.

It is not clear why Turnstones should exhibit such extreme variation in breeding success. A similar pattern is also shown by the Sanderling. These species both breed in the very high Arctic and it may be that when poor weather occurs there during the breeding season it is so bad that virtually no eggs/chicks can survive.

### Flag Sightings

Two Ruddy Turnstones carrying the South Australian leg flag combination were seen and a third one was caught. There seems to be quite a bit of interchange between these two Turnstone populations, with King Island birds particularly calling into the southeast coast of South Australia during migration times.

#### **Deakin University Avian Disease Studies**

Comprehensive blood and faecal samples were obtained on all Turnstones by Simeon Lisovski and his field assistant Jay Hutchinson from Deakin University. It is encouraging that of the 17 geolocators put on in February 2015 and retrieved during this visit, there were almost equal numbers (9:8 respectively) which had been placed on birds which were treated with the anti-helminth medicine compared with those put onto untreated controls. The migration data downloaded from the geolocators will now be examined in detail to see whether there are any migration differences in these two groups of birds. The hypothesis is that the treated birds may have been able to gain weight before and during migration more successfully than untreated birds and hence may have been able to make a more efficient migration.

#### Acknowledgements

Local residents Margaret Bennett, Jenny Marshall and Graham and Margaret Batey provide ongoing assistance to the VWSG team. The Tasmanian Parks and Wildlife Services lend equipment and Searoad Ferry conveys catching and processing equipment and vehicle. Tasmanian Wildlife Authorities and Australian Bird and Bat Banding Scheme provide approvals and permits. Deakin University financed the geolocators.

#### **Clive Minton**

Victorian Wader Studies Group

# 2015 Breeding Success - Preliminary information

The core of the Victorian Wader Studies Group summer fieldwork program is the sampling of wader flocks of a range of species throughout Victoria to obtain an estimate of annual breeding success via the percentage of juvenile birds in catches. Over recent weeks we have accumulated a reasonable sample of four of our study species.

In all species the percentage of juveniles is very much less than the long-term average. This is particularly so for Curlew Sandpiper (1.8% juveniles) and Ruddy Turnstone (2.6% juveniles) which both experienced almost complete breeding failures in the Arctic Summer of 2015.

This poor performance is in line with advanced information from Pavel Tomkovich in Russia which also suggested that the 2015 breeding season appears to have been poor across a wide range of the Siberian and Russian Arctic.

In coming weeks we will be trying to obtain samples of our three other main study species in Southeast Australia (Bar-tailed Godwit, Red Knot and Sanderling), as well as augmenting the samples of the other species. The expedition to North Western Australia in February will be aiming to obtain similar data on wader populations which spend their non-breeding season in that region.

% Juveniles - Southeast Australia 2015/16						
Species	Total	Juvenile	% Juvenile			
Red-necked Stint	1091	100	9.2%*			
Curlew Sandpiper	170	3	1.8%			
Sharp-tailed Sandpiper	394	32	8.1%			
Ruddy Turnstone	190	5	2.6%			

<sup>\*6.3%</sup> if catch with heavy twinkling is omitted

#### **Clive Minton**

# Recent longevity records of waders in Roebuck Bay, NW Australia

The longer banding studies are conducted the higher the chance of finding very old birds in the population. However, it is always a thrill to retrap birds that are considerably older than some of the people helping at a catch, or a bird that was living in Roebuck Bay well before I arrived here 18 years ago. And now that we have birds individually marked with inscribed colour flags and colour-band combinations that can be resighted in the field without having to catch them, the chances of finding old birds have increased greatly.

During catches and from resighting work, for Australasian Wader Studies Group and Global Flyway Network projects, in the latter months of 2013 we recorded, among the thousands of resightings we make in Roebuck Bay, ten Bartailed Godwits with ages ranging from 18+ to 26+, three Great Knots aged 18+, 23 and 24+ and one Black-tailed Godwit aged 18+ (**Table 1**). I have also included a Red Knot that was last seen in 2012 but which at 22+ is a remarkable age for a small bird that migrates some 21,000 km each year and has to cope with diminishing habitat in its Yellow Sea staging areas.

The ageing protocol we use for Northern Hemisphere-breeding waders in Australia assumes that they were all hatched on 1 August. During their first year of life, they are aged as

'1'; then on 1 August the year after hatching they become '2' and so on. Therefore a bird that is 24 is in its 24th year of life, but if we do not know the year in which it was hatched, we age it, for example, as 20+ which means that it is in at least the 20th year of its life but it could be a lot older. Based on the state of a bird's moult at the time of capture and depending on the time of year and the particular species, we can age birds as 1, 2, 2+ and 3+. Then, if we retrap the bird or see it alive in the field and read its engraved leg flag, we can work out its age or at least its minimum age.

Some of the birds mentioned in **Table 1** have been resighted over 70 times, including overseas, and some have been caught up to four times. These data confirm that many migratory shorebirds show high site-fidelity. These records are just a snapshot of recent results; they are not a comprehensive review of the huge AWSG and GFN datasets (which include an even older, 28-year-old Bar-tailed Godwit).

This information would not be available without the fantastic contributions of a large number of volunteers from Broome, other parts of Australia and overseas. Members of the Broome shorebird community are particularly thanked for all the resighting work they undertake.

# Recent longevity records of waders in Roebuck Bay, NW Australia cont.

**Table 1.** Recent longevity records of waders banded, recaptured and/or resighted in Roebuck Bay, NW Australia

Band (individual mark)	Banding / recapture date	Age at banding/ recapture	Last resighting date	Age at last resighting
Bar-tailed Godwit				
072-61342 (4LRLR)	27 Oct 1998 / 26 Oct 2013	3+ / 18+	23 Dec 2013	18+
072-56541 (4RYBL)	5 Mar 1996 / 26 Oct 2013	2 / 20	19 Dec 2013	20
072-55746 (4LYBL)	4 Mar 1996 / 19 Oct 2013	2+ / 20+	23 Dec 2013	20+
072-32602 (4RRBY)	27 May 1993 / 26 Oct 2013	2+ /		23+
071-86463 (BB)	2 Apr 1990 / 1 Dec 2005	1 / 16	16 Oct 2013	24
071-87196	10 Sep 1992 / 19 Oct 2013	3+ / 24+	5 Dec 2013	24+
072-09313 (ERK)	1 Oct 1992 / 1 Apr 2011	3+ / 21+	8 Aug 2013	24+
071-86907 (3YBBR)	9 Apr 1990 / 22 Oct 2010	2+ / 23+	3 Dec 2013	26+
071-86928 (EAY)	9 Apr 1990 / 11 Mar 2011	2+ / 23+	27 Sep 2013	26+
071-85969 (HW)	27 Mar 1990 / 27 Aug 2006	2+ / 19+	3 Dec 2013	26+
Black-tailed Godwit				
072-78230 (1RBLL)	27 Oct 1998 / 8 Nov 2013	3+ / 18+	24 Dec 2013	18+
<b>Great Knot</b>				
062-43719 (4YYBY)	29 Aug 1998 / 28 Aug 2011	3+ / 16+	15 Dec 2013	18+
061-90330 (XXL)	13 Oct 1992 / 12 Mar 2013	2 / 22	17 Dec 2013	23
061-72422 (AHA)	2 Sep 1992 / 11 Mar 2011	3+ / 21+	18 Oct 2013	24+
Red Knot				ı
051-56125 (1M)	12 Oct 1992 / 29 Aug 1998	3+ / 9+	15 Jan 2012	22+

#### **Chris Hassell** (turnstone@wn.com.au)

Source: *Notes and News* compiled by Silke Nebel (**silke.nebel@gmx.com**) and György Szimuly (gyorgy. szimuly@me.com)

# Wood Sandpiper

A Wood Sandpiper originally banded and flagged at Lake Eda near Broome 8 years ago has been resighted there recently. It has been seen at Lake Eda almost every year. Does anyone in the Flyway know of a banded Wood Sandpiper more than 8 years old?

# **Chris Hassell and Clive Minton**

Email: mintons@ozemail.com.au



A volunteer checks the feathers on the wing of a Great Knot, caught at 80 Mile Beach. Photo Lucie Bell ABC Rural

# Scientists find birds have personalities which could be key to their survival



Bird researcher Ying Chi Chan is investigating the personalities of wading birds such as this Great Knot. Photo Ben Collins ABC Kimberley

Scientists studying threatened migratory shorebirds have found they have a range of personality types which could help them adapt to rapid industrialisation. A flock of birds may look like identical birds all doing the same thing, but take a closer look and you will see that some birds are outgoing and adventurous, while others prefer the quiet life following the leader.

That is what Ying-Chi Chan of the Netherlands' University of Groningen found when she started experiments on the personalities of threatened wading or shore birds. "People call them animal personalities, and it comes from psychological studies of people that have different personalities and whether these different personalities do better than others," Ms Chan told Jacqueline Wright on ABC Kimberley Local Radio. "And so, that translates into animals like birds and mammals, and a lot of studies on fish as well."

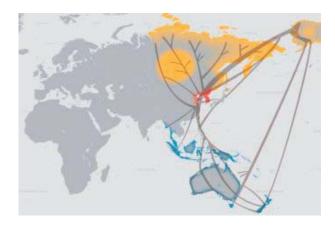
Biologists have long established that variation within a species allows them to better adapt to changes in their environment. Traditionally, that variation has most commonly been thought of in terms of physical characteristics such as size and strength. But Ms Chan's research is exploring the different behaviours found within birds, including the Great Knot and the Bar-tailed Godwit. Both species feed in Australia over summer before flying to Siberia to breed in the northern hemisphere summer.

Ms Chan's colleague, US Geological Survey wildlife biologist Lee Tibbetts, said previous satellite tracking of migratory wading birds had shown how good they were at finding the same destinations across thousands of kilometres year after year. "Some species only stop at three places in their entire year," Ms Chan said. "In between those, they fly for a week [and] over 10,000 kilometres to get there."

But the personality research is trying to measure how well birds can alter their incredible journeys when their habitats are destroyed. "A lot of coastal mudflats where these birds fuel up during their migration are being reclaimed for all sorts of developments," Ms Chan said. "The birds have much fewer habitats so we're asking, 'Can they still survive, can they still make it to their breeding grounds?""

#### **FOLLOWING THEIR LEADERS**

In order to survive coastal industrialisation, shore birds will need adventurous individual birds to find undisturbed habitat and lead their more timid relatives there.



Shorebirds use flyways between Australia, Siberia and Alaska via China's Yellow Sea coast

By placing captured birds in a tent divided into different areas, Ms Chan can measure how adventurous or explorative their personalities are. The birds are then released with solar-powered satellite trackers strapped to their backs so Ms Chan can see if the personality differences she has measured translate into different behaviour in the real world.

"We have found variation in exploration behaviour in the Great Knots in the experiments here, and we also tried to link it to the change in staging where they go in China," Ms Chan said. "We are looking into whether some individuals are more explorative and more curious, and when they see a degraded habitat they may be quicker to look for a new one."

While different personality types have been measured, the satellite data showing whether the outgoing waders can lead the way to survival is still being collected. "So now we have some good information about where they are staging and the duration, and then next year we can see if there are some changes," Ms Chan said.

While it may seem that evolution favours the brave and adventurous personalities, Ms Chan said that when times were good, the meek would thrive. "In an environment with stable resources, the non-explorers may be doing better," she said.

### Ben Collins

**ABC Kimberley** 

Source: http://www.abc.net.au/news/2015-10-25/scientists-find-birds-have-personalities-which-could-be-key/6878008

# Spoon-billed Sandpiper surveys in the Gulf of Mottama, Myanmar



At the end of December 2015, I was fortunate to have the opportunity to travel to Myanmar (Burma). This visit was essentially a birthday holiday with two close friends, but I managed to weave in a week of shorebirding in the Gulf of Mottama (Gulf of Martaban). On a regular basis throughout the year, members of the Biodiversity and Nature Conservation Association (BANCA) head down to the gulf and out onto fishing boats to spend several days monitoring key wader areas. These visits have two objectives, the first being to conduct wader counts and the second to search for the enigmatic Spoon-billed Sandpiper *Calidris pygmaes*.

Spoon-billed Sandpipers need no introduction to *Tattler* readers, being one of the rarest yet most remarkable waders in the world. However, some readers may not be aware that Myanmar holds around 50% of the global population of spoonies (which is ~400 in total) during their non-breeding season. Whilst habitat loss is a well-recognised and widespread threat impacting waders generally, hunting has posed significant threats to spoonies. Through the efforts of volunteers from foreign countries working with Burmese conservationists, and helping train other Burmese people in wader identification and counting, there has a been an amazing turn around in hunting impacts.

I joined a team of 12 people on three fishing boats that departed the BANCA property near Kyaikto, south and east of Yangon (previously the capital Rangoon). We spent five nights out on these little 10x2m wooden fishing boats – it certainly was getting back to basics, sleeping on the floor of the boat and the mudflats serving as the toilet! But it was an amazing way to experience the gulf and share the simple experiences of life on a Burmese estuary.

Fresh fish was caught each day and prepared by chef, who cooked everything in a wok on a ceramic charcoal-fired stove on the floor of the boat. Two of our very capable boat drivers, Aung Min and Myint Aung, were themselves previously hunters who have joined BANCA and the teams to count and conserve waterbirds, and to help train and convert others to the cause. Their expertise was so important to finding the birds and understanding how the locals interact with the avifauna.

Each morning we conducted wader surveys as the tide dropped. Boats were rafted up and anchored at these times, with tarps erected

to provide some shade during the hot hours of midday, when the tide is out and the boats are sitting on the mud. Once surveys were done, we would return to the boats where we could rest or read until the afternoon, when the tide once again returned. The tidal range in the gulf is around 7m, and the estuary experiences a phenomenon called the 'tidal bore'. I have experienced several locations with large tidal ranges (e.g. Broome and parts of the English coast, where the tides are 10m), but never have I seen anything like the tidal bore. It is essentially a wave, like a small surf wave usually up to a foot high, that rolls up through the estuary bringing with it the rising tide. It never loses momentum and never loses energy, but just keeps travelling up the estuary as far as it can go until the mud is inundated. Quite spectacular.

There was a great variety of waders (and other waterbirds) to be seen during the trip and on surveys. Kentish Plover was the most common species in flocks of foraging waders, closely followed by Red-necked Stint, Lesser Sand Plover, Little Ringed Plover and Common Redshank. There were also many Broad-billed Sandpipers, Curlew Sandpipers, Black-tailed Godwit, Common Greenshank, Whimbrel and a scattering of Eurasian Curlew, Pacific Golden Plover, Grey Plover and Common Sandpipers. Other waders to be seen during the trip were Terek Sandpiper, Green Sandpiper, Marsh Sandpiper and Sanderling.

Every day we split into two or three teams. The third morning of surveys, I was in a team with Thili and Aung Myin and we heard the shout go up from a nearby team – a spoonie had been spotted! We tried to rush across the soft mud as best as one can, when you are going in up to

# Spoon-billed Sandpiper surveys in the Gulf of Mottama, Myanmar cont.

your calf and slipping all over the place! But alas! By the time we got there the flock had flown and the spoonie was gone. We decided to stay in that location overnight and try again to find it the next day. And we were successful! It was my last morning before I went back to Yangon and civilisation, so I was very excited when I heard the shout again that the spoonie had been spotted. We all gathered around the scopes and enjoyed the sight of a spoonie vigorously foraging by swishing its bill from side-to-side through the shallow muddy water. This habit, and its greater white-ness compared to the plovers, marked it as a different bird. These mudflats are characteristic habitat for spoonies, being very flat with soft fine clayey sediments, many pools of shallow water and adjacent higher areas of scattered low estuarine grass. We spent lots of time trying to get photos through the scopes and generally enjoying seeing this amazing animal. And then Lo! Our driver Aung Min found a second spoonie not far from the first. Both birds were hanging out in groups of Kentish Plovers and stints. Everyone was very excited. When we returned to the boat, we all had a mid-morning celebratory beer!

Other species of interest seen were 18 Painted Storks, all 4 species of Egret (Cattle, Little, Intermediate and Great) in one flock, Northern Pintail, lots of large and impressive Grey Herons, thousands of Brown-headed Gulls and Whitewinged Black Terns, with some Whiskered mixed in, and a Short-toed Snake Eagle. It was certainly a fabulous birding and wader experience.

I finished my trip in Myanmar with a visit to the BANCA head office, to meet with Pyae Phyo Aung, who arranged for me to join the surveys, and the chairman U Saw Tun Khaing. We discussed at length the surveys, their strengths and weaknesses, the survey approaches used in Australia and elsewhere and ways that the conservation and shorebird efforts could continue to be expanded. BANCA has been successful in receiving funding from the Japanese government to help with their community engagement and conservation efforts. They are awaiting news of another funding application which, if successful, will help fund the construction of an education and visitors centre at the Kyaikto property.

I would like to take the opportunity to thank Pyae Phyo and my host on board the boats, Tin Aung Tun, who helped with translation and explanations throughout the six days of surveys. And I would also like to thank Thili Sandae Zaw, with whom I shared my sleeping quarters and who helped me get more savvy about surveys and boating with no toilets! And lastly, thanks to the team for being so helpful and friendly and always full of laughs and jokes: Toe Chin Hmu Paing, Htet Phyo Naung, Min Thein Htet, Aung Myin Tun, and our boat drivers Aung Min and Myint Aung.

#### **Birgita Hansen**

# Japan monitoring report

The Ministry of the Environment, Japan (MOE-J) has been conducting long-term monitoring of important ecosystems since 2003, called "Monitoring Sites of Important Ecosystems" or "Monitoring Sites 1000" in short. The aim is to continuously track changes in various ecosystems in Japan, at fixed points in more than 1000 sites nationwide over a long period of time (targeting 100 years).

The Monitoring Site 1000 Shorebirds Survey collects count data on shorebirds, using them as indicators of tidal flat ecosystem health, since shorebirds feed on benthos (annelid, shellfish, crustacean and others) and microorganisms. Surveys are conducted at 141 sites three times a year, Spring (April and May), Autumn (August and September), and Winter (December to February).

The Summary Report on Shorebirds Surveys includes data between 2000 and 2012/13 (9

years). It describes the number of species and the number of individuals in each species at each site, and national trends. It also evaluates each site according to Ramsar Convention criteria and updates population estimates for each species that is on the Red List.

According to the report, the total number of individuals of all shorebird species decreased in Spring and Autumn seasons between 2004 and 2012. Among threatened species, the number of individuals of Spoon-billed Sandpiper and Nordmann's Greenshank have been continuously decreasing, approaching extinction. Numbers of Kentish Plover, Eastern Curlew, and Spotted Redshank also decreased. In addition to existing Ramsar Sites in Japan, 25 more sites met the Ramsar Criterion 6 (a wetland which regularly supports 1% of the individuals in a population of one species or subspecies of waterbird).

Source: Asian Waterbird Census Newsletter December 2015

# Why incubating oystercatchers dice with death at Lauderdale, Tasmania









Right: Pied Oystercatchers roosting on road at Lauderdale. Photo Phil Straw

During recent years, a pair of Australian Pied Oystercatchers has bred in Lauderdale opposite the BP garage adjacent to the South Arm peninsula road. Their nest site was precariously located on a patch of bare ground with a mere two metres between the road and the bay foreshore. At peak, in excess of 500 vehicles passed the birds each hour as they incubated their eggs over a four-week period. At high tides, they brood their young at the same spot during a seven-week period until the young can fly. Clearly these birds were at high risk and the inevitable happened on 24 October 2015, when the female was seen dead adjacent to the nest by a passing motorist, one of many who keep an eye out for these birds.

For much of October this year the oystercatchers had been incubating their clutch which would have been close to hatching at the time of the adult's death. Subsequent investigation found the nest empty and a Forest Raven devouring the corpse of the dead oystercatcher. Fortunately the mandibles were still sufficiently intact to determine that it was a female.

The obvious question is why Pied Oystercatchers are so "stupid" as to nest in such a dangerous location. In fact oystercatchers are extremely intelligent and adopt strategies to maximise their probability of breeding success. The goal of an adult oystercatcher is to successfully reproduce itself during its lifetime. For this to be achieved, it must have a nest site where it is secure from predators and an adjacent area where it can feed its young during their prolonged period of dependence. Unfortunately in the South Arm area, we have left these birds with very few situations where these two requirements are satisfied. By nesting adjacent to the road at the edge of a mudflat, and where there was no footpath, the birds were free from human disturbance and last year successfully raised two young.

Contrast the breeding success of this pair to Australian Pied Oystercatchers breeding at

nearby Gorringes Beach, Mortimer Bay where only one of five pairs managed to raise young last year and this was only achieved by moving their young around a headland to a privately-owned beach. At Gorringes Beach, adult oystercatchers incubating at the high-tide mark are constantly disturbed while incubating and their flightless chicks were regularly hunted on the mud flats by unrestrained dogs whose owners were oblivious of the consequences of their dog's behaviour.

So rolling the dice with death pays off for oystercatchers nesting adjacent to the road at Lauderdale in terms of reproductive success. The risk of death during an adult lifetime is more than offset by the increased ability to produce young successfully before they die. At Lauderdale, the level of recreational pressure from people and their dogs is very low, food is plentiful and survival of young is high. Sadly the opposite is true of Gorringes Beach, Mortimer Bay.

At Lauderdale life goes on and the male will probably seek a new partner from the pool of willing candidates queuing for a breeding opportunity. Real estate for breeding is at a premium in the area, and although pairs seldom divorce, replacement of lost partners is rapid. Watch the vacant lot at the roadside; it could even happen this year!

On reflection, it is a sad legacy these majestic birds have been dealt by a community that afforded them iconic status during the "Save Ralphs Bay" campaign. Is it not time these birds were afforded more effective protection in the areas where they breed?

#### **Mike Newman**

Member, BirdLife Tasmania

Source: Yellow Throat No. 84 November 2015, Newsletter of BirdLife Tasmania

# Oriental Pratincoles at Lake Moondarra, Mt Isa, Queensland





Left: Oriental Pratincole at Lake Moondarra, near Mt Isa, Queensland. Right: Pratincoles in flight. Photos Rex Whitehead

Lake Moondarra is an artificial lake formed by damming the Leichhardt River approximately 20 kilometres north of Mt Isa. It provides water for the city and associated mines.

Twenty-eight Oriental Pratincoles were first seen at Lake Moondarra on 11 December 2015, in overcast weather with some showers. Fine weather the following day brought the photographer back but the birds had flown. However, two days later on 14 December 2015, an estimated 400 to 500 birds were back at the lake. The large flock was observed again on 16 December but at a different location.

On 18 December 2015 only five Oriental Pratincoles were observed at the Lake. The same number (and probably the same birds) were observed on 22 December 2015. One of these was limping, obviously, from an injured foot, or leg. By early January 2016 all the migratory shorebirds had left the lake as rain had raised the lake level by about 2.5m, covering the mudflats where the shorebirds had been feeding.

Since September 2015, 13 different species of migratory shorebirds have been observed at Lake Moondarra.

#### Rex Whitehead and Bob Forsyth

Little Tern Street Parade

# "Tern Up" Sawtell

A collaborative community Art and Education project was held in Sawtell, northern NSW during November 2015 to bring awareness to the Little Tern colony which nests and breeds on Sawtell Spit in Bongil Bongil National Park. The project was organised by Emma Aspden, Joanne Elliott and Christiana Ferreira with grants from BirdLife Northern NSW, Coffs Harbour Council and support from others. The object was to promote awareness, appreciation and knowledge about the Little Tern and its habitat.

Information sessions and guided walks as well as school, pre-school and community workshops were held before the opening of an exhibition of over 100 paintings, drawings, sculptures, ceramics and photographs at Sawtell Art Gallery. The celebrations included a street parade, music, poetry and performance sessions and a family picnic which were enthusiastically supported by the community with print media, television and radio covering the event.

This event has played an important role in bringing attention to the need to protect this endangered species and other shorebirds and reduce threats to their environment. It is proposed to make it an annual festival to celebrate the Little Terns "re-tern" to Sawtell.

#### **Anne Evans**

Publications Officer, BirdLife Northern NSW



Above: Emma Aspden teaching children about Little Terns at the Sawtell Art Gallery Below: Bystanders and locals enjoying the Welcome Back Photos Christiana Ferreira



# Latham's Snipe use of urban versus non-urban wetland habitat in Victoria

Powling Street wetlands in Port Fairy (south-west Victoria) is one of the most important sites for Latham's Snipe *Gallinago hardwickii* in south-eastern Australia. The site has had records of up to 430 birds, with regular counts showing a non-breeding population size of between 50 and 300 birds. As the Federal criterion for designating an important site for snipe is 18 birds, these counts represent a highly significant population.

This population is threatened by a housing development currently under construction on the ephemeral portion of the wetland complex. During the development approval process, the proponents argued that snipe displaced by housing and disturbance would simply go somewhere else. Whilst previous surveys suggest that snipe do occur in other locations, there is no evidence to suggest that they did in fact have other suitable sites to use. This argument will be well familiar to many wader enthusiasts, and is a constant source of frustration for wader conservation efforts as we know that birds generally do not go elsewhere as other suitable habitat is often lacking.

In order to strengthen our understanding of the importance of urban wetlands like Powling Street, I and my colleagues in the South Beach Wetlands and Landcare Group (SBWLG) in Port Fairy, who have been monitoring the snipe there for 15 years, decided to investigate the relative use of different wetland types in the Port Fairy region. The objective for doing so was to determine the extent to which snipe rely on urban wetlands like Powling Street compared to other 'alternative' habitat. As birds depart the wetland at night to forage in wetlands, paddocks and drains in the surrounding landscape, surveys had to be restricted to the daytime when they are roosting.

During the spring-summer season in 2014-2015, we ran a series of monthly surveys using teams of volunteers. In spring 2015, we repeated these surveys in September and November. A range of wetland habitats either known to hold snipe, or containing habitat likely to support snipe, were simultaneously surveyed on a single day. Surveys were conducted by walking a transect through the wetland and counting birds as they flushed from the vegetation.

We counted up to 15 wetlands on each survey day. Seven of these wetlands occurred within township areas or in the township fringe (designated 'urban' wetlands) and the remainder occurred out in agricultural and nature reserve areas (designated 'rural').

Over 95% of the snipe counted were in urban wetlands (**Table 1**). Only five records, over four different months, were obtained from rural wetlands, and these were only from Killarney swamp (a coastal dune

swamp) and Yambuk Nature Conservation Reserve. The lowest count of snipe at Powling Street wetlands was in December 2014 (23 birds) and the highest was in October 2014 (133 birds). Urban wetlands in Peterborough also held substantial numbers of snipe, with a single small wetland (<0.25 ha) having over 100 birds during the November 2014 count.

It was clear from the study that urban wetlands are very important for snipe during the day. What was also clear was that climate (weather) had a strong influence on bird numbers, with far fewer snipe being encountered during the 2015 spring when the landscape was much drier than in the previous year. What we don't know is where the birds go during the night, and the relative importance of other wetland or 'wet' habitats in the region for night-time foraging.

In order to try to improve our knowledge about how snipe move throughout their non-breeding season and on migration, we have initiated a geolocator datalogging project on the population in Port Fairy. Birds were caught using mist nets erected over the wetland and over grassy areas adjacent to the wetland. Since catching started in mid-spring, we have caught a total of 14 birds to which geolocators were all fitted. Thirteen birds were adults and in active moult, and the last bird caught in January 2016 was a juvenile, with no wing moult. Standard biometric data was collected from each bird and a small blood ssample taken for future genetic analyses. All birds were fitted with orange engraved leg flags (bearing the alphanumeric combinations T0-T9 and U0-U3). Geolocators were mounted on plain orange leg flags attached to the upper left leg. Whilst re-sighting probabilities are expected to be low, we still encourage people to check their snipe carefully, especially during those rare times when they can be seen moving around during the day. Even a single re-sighting will be very valuable.

I would like to acknowledge all the hard work on this project and over the years by SBWLG. A special thanks to all the volunteers who participated in surveys and have helped with catches. I would like to thank my collaborators Jodie Honan and Don Stewart in SBWLG. I'd also like to thank my colleagues Richard Chamberlain and David Wilson, and thanks also to Simeon Lisovski who has loaned the team equipment for catching. Thanks also to Clive, Ken and Danny for support and advice in setting up the tracking project.

This project is partially funded by the Australia Japan Foundation through the Department of Foreign Affairs and Trade. You can follow the project at

https://lathamssnipeproject.wordpress.com/ or on Twitter @geethansen @djdwilson.

#### **Birgita Hansen**

**Table 1.** Total counts of Latham's Snipe, summed over all wetlands counted in each wetland type, in the Port Fairy region over the 2014-2015 and 2015-2016 spring-summer seasons.

Wetland type	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Sept 2015	Nov 2015
Urban	330	348	144	184	120	147	166
Rural	1	0	5	4	0	0	2
Total	331	348	149	188	120	147	168

See front page for photo of Latham's Snipe with geolocators and engraved leg flags.

# Seeking EAAF banding records and re-sight observations of Beringian Dunlin

Information on banding efforts and re-sightings of the four subspecies of Dunlin (*Calidris alpina actites*, *C. a. arcticola*, *C. a. kistchinski* and *C. a. sakhalina*) that breed in Russia or Alaska, and migrate through or winter in the East Asian-Australasian Flyway, are needed for a migratory connectivity study. The goal of this project is to identify subspecies-specific migratory patterns, site fidelity, and location of key migration and wintering areas. This work will be complemented with an independent geolocation study on some of the same subspecies, and an analysis of migratory carry-over effects on the reproductive performance of *C. a.* 

arcticola. Ultimately, this work will provide a greater understanding for the vulnerability of the different subspecies to current and future land developments within the EAAF. This work is the first phase of a proposed Master's thesis to explore facultative links between intertidal reclamation and population stability in Dunlin. Anybody interested in providing data and/or collaborating is encouraged to contact Ben Lagasse (Master's student, contact: ben.lagasse@yahoo.com) or Rick Lanctot (EAAF Shorebird Working Group Chair, contact: richard\_lanctot@fws.gov).

#### **Ben Lagasse**

# Research paper: Simultaneous declines in summer survival of three shorebird species signal a flyway at risk

#### **Summary**

- 1. There is increasing concern about the world's animal migrations. With many land-use and climatological changes occurring simultaneously, pinning down the causes of large-scale conservation problems requires sophisticated and data-intensive approaches.
- 2. Declining shorebird numbers along the East Asian–Australasian Flyway, in combination with data on habitat loss along the Yellow Sea (where these birds refuel during long-distance migrations), indicate a flyway under threat.
- 3. If habitat loss at staging areas indeed leads to flyway-wide bird losses, we would predict that: (i) decreases in survival only occur during the season that birds use the Yellow Sea, and (ii) decreases in survival occur in migrants that share a reliance on the vanishing intertidal flats along the Yellow Sea, even if ecologically distinct and using different breeding grounds.
- 4. Monitored from 2006–2013, we analysed *seasonal* apparent survival patterns of three shorebird species with non-overlapping Arctic breeding areas and considerable differences in foraging ecology, but a shared use of both north-west Australian non-breeding grounds and the Yellow Sea coasts to refuel during northward and southward migrations (red knot *Calidris canutus piersmai*, great knot *Calidris tenuirostris*, bar-tailed godwit *Limosa lapponica menzbieri*). Distinguishing two three-month non-breeding periods and a six-month migration and breeding period, and analysing survival of the three species and the three seasons in a single model, we statistically evaluated differences at both the species and season levels.
- 5. Whereas apparent survival remained high in northwest Australia, during the time away from the nonbreeding grounds survival in all three species began to decline in 2011, having lost 20 percentage points by 2012. By 2012 *annual* apparent survival had become as low as 0.71 in bar-tailed godwits, 0.68 in great knots and 0.67 in red knots. In a separate analysis for red knots, no mortality occurred during the migration from Australia to China. In the summers of low summer survival, weather conditions were benign in the Arctic breeding areas.

- 6. We argue that rapid seashore habitat loss in the Yellow Sea is the most likely explanation of reduced summer survival, with dire (but uncertain) forecasts for the future of these flyway populations. This interpretation is consistent with recent findings of declining shorebird numbers at seemingly intact southern non-breeding sites.
- 7. Policy implications. Due to established economic interests, governments are usually reluctant to act for conservation, unless unambiguous evidence for particular cause–effect chains is apparent. This study adds to an increasing body of evidence that habitat loss along the Yellow Sea shores explains the widespread declines in shorebird numbers along the East Asian–Australasian Flyway and threatens the long-term prospects of several long-distance migrating species. To halt further losses, the clearance of coastal intertidal habitat must stop now.

Theunis Piersma, Tamar Lok, Ying Chen, Chris J. Hassell, Hong-Yan Yang, Adrian Boyle, Matt Slaymaker, Ying-Chi Chan, David S. Melville, Zheng-Wang Zhang and Zhijun Ma

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Wetlands International has recently launched its Strategic Intent for 2015 – 2025, providing an overview of its vision for the coming decade. There are five work streams: **Healthy Wetland Nature**, **Vibrant Coasts and Deltas**, **Blue Lifelines in the Desert**, **Replenished Water Stores from Mountains to Sea**, and **Peatland Treasures Safeguarded and Restored**. The International Waterbird Census and Waterbird Population Estimates remains a priority activity of the Healthy Wetland Nature work stream.