Tattler

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Newsletter for the Asia Pacific Flyways

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In this issue:

Tattler is the quarterly newsletter of the Australasian Wader Studies Group. Contributions are welcome and encouraged for all working with shorebirds and their habitats along the East Asian– Australasian Flyway. Please contact the editor for more information.

Editorial

I always find it extremely interesting reading expedition reports and usually find myself daydreaming about what it would be like to be there and to share not only in the excitement but also in the knowledge of the importance, internationally, nationally and locally, of the many projects that are being undertaken to which the expeditions contribute.

It is also interesting to see the progress made with geolocators on certain species is being used to identify migration strategies and routes on other species. I am especially interested in finding out about the migration of the Greater Sand Plovers as it always amazes me the difference between breeding and non-breeding habitats in shorebirds (and I would love to visit Mongolia!).

This will be my last edition of *Tattler* as editor as I am off to juggle parenthood and a full time job. Thanks for reading!

NW Australia Wader and Tern Expedition Report

The 2011 visit to north-west Australia (19th Feb—12th Mar) was considered by participants to be the 'best ever' NWA Expedition. This description has often been used in the past, justifiably, but in 2011 the happiness and enjoyment of the team, its cohesiveness and efficiency and the catching results achieved were uniformly excellent. This was particularly notable given that half of the 30 participants had never previously taken part in a NWA Expedition and that the quite frequent rain in the first two weeks, and later the heat/humidity, made working conditions at times rather difficult.

Each annual Expedition turns out to be different from the previous one, with new challenges from the birds, the weather and the overall logistics of having a large team living and working in the field continuously for three weeks. It was with some reservations that we moved the 2010/11 Expedition to the February/March period (because several key people were unavailable in the usual November/December period). However, although we had one cyclone pass close by (only Category 1!), and another threatened, we only had one significant rainstorm at an inconvenient time when we were catching in the field. Slightly to our surprise, temperatures were much cooler than in November, partly because of the cloud cover but also because it was a particularly cool season this year in north-west Australia. Equally, fears that our catching and collection of data might not be so good proved groundless, with the birds being more settled and easier to catch, except on the extremely high tides at the beginning of our visit. The predicted lack of early catching success on these tides at Broome, due to birds leaving the beaches to roost on pools behind the mangroves, proved correct and as a consequence the team moved from Roebuck Bay to 80 Mile Beach a day earlier than originally planned.

Main Achievements

Catching

The roosting pattern of waders on the north shores of Roebuck Bay, Broome, followed a markedly

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different pattern to that encountered on previous visits. Almost all the birds were gathered into two huge 5-10,000+ flocks at the extreme eastern and western ends (Boiler Point and Quarry Beach). The numerous beaches between these two locations had no birds roosting on them until the last day or two of the visit.

The catching program commenced rather unsuccessfully. The first catch was a consolation catch of just nine Pied Oystercatchers on Quarry Beach, when all the grey waders vacated the area completely, of their own volition, just after the tide edge reached the beach. An attempt at Boiler Point the next day was completely unsuccessful, with most birds departing inland to roost at the slightest provocation during twinkling. The team then moved to 80 Mile Beach.

A catch was made on each of the 10 field days at 80 Mile Beach, including on the exceptionally high tide on the first day which forced us to drive the cars from the beach up onto the dunes at the peak of the tide! The previous day, on which we moved our base from Broome Bird Observatory to Anna Plains Station, had been predicted as the fourth highest tide of the year but its height and effects were enhanced by the huge on-shore swell following the passage of an off-shore cyclone. Much of the outer dune along the beach was eroded by the three-metre crashing waves, leaving a two- or three-metre sand cliff along large parts of the beach.

For the first time the small-mesh three-cannon nets were used (instead of the four-cannon large-mesh nets) throughout our period at 80 Mile Beach. These enabled us to set the nets below the predicted level of high tide because we could empty them so quickly. We were thus able to take advantage of the camouflage provided by the sponges, bracket coral, shells and other rubbish washed up as tide lines in the aftermath of the cyclone. The small-mesh nets also have the advantage of still going out fully even when completely camouflaged with sand or shell grit. Thus, for almost the first time at 80 Mile Beach, waders were not aware of, or wary of, the net area. Also, because we were set below high tide, we were never stranded high and dry as has occurred at times in the past when a predicted tide level has not been reached.

NWA 2011 Expedition - Wader and Tern Catch Details

SPECIES	Catch Totals				
	New	*Retrap*	*Total*	*Juvs*	*% Juv*
Bar-tailed Godwit	335	30	365	78	*21*
Black-tailed Godwit	0	1	1	0	
Broad-billed Sandpiper	24	5	29	17	*59*
Bush Stone Curlew	2	0	2	2	
Curlew Sandpiper	63	19	82	20	*24*
Great Knot	978	188	1166	279	*24*
Greater Sand Plover	440	146	586	100	*17*
Grey Plover	4	0	4	1	
Grey-tailed Tattler	122	8	130	41	*32*
Lesser Sand Plover	4	0	4	2	
Pied Oystercatcher	6	3	9	0	
Red Knot	197	13	210	34	*16*
Red-necked Stint	315	117	432	80	*19*
Ruddy Turnstone	3	1	4	1	
Sanderling	3	0	3	1	
Terek Sandpiper	149	2	151	38	*25*
Whimbrel	1	0	1	0	
TOTAL WADERS	**2646**	**533**	**3179**		
Gull-billed Tern	6	0	6	0	
Crested Tern	5	0	5	1	
Lesser Crested Tern	3	0	3	0	
Little Tern	20	1	21	2	
White-winged Black Tern	276	0	276	12	*4*
TOTAL TERNS	**310**	**1**	**311**		
TOTAL	**2956**	**534**	**3490**		

Catching success at Broome was much better during the last week of the Expedition although, again unusually, catching failed on two days. Once this was due to inadequate recce information and the second time it was because of the untimely arrival of a high circling Frigatebird. However the four catches which were made were all quite large and the species content was excellent.

As usual we didn't always catch what we were

targeting on a particular day. On the first occasion we tried to catch White-winged Black Terns at 80 Mile Beach we instead finished up with our best catch of Terek Sandpiper and Grey-tailed Tattler! Fortunately Maureen managed to retrieve the departing KBS film crew who hadn't wanted to film terns but who were desperate to film Terek Sandpiper being banded and measured. At Broome, on the last day, we resisted pressures from the KNN film crew and blood sample avian disease researcher Sora Estrella to catch Bar-tailed Godwit and Great Knot in favour of targeting Grey-tailed Tattler and other medium-sized waders. What did we catch? Great Knot (265) and Bar-tailed Godwit (56) took over the netting area and dominated the 491 birds caught!

Some of the specific highlights of the catching program are given below.

- The total number of birds caught (3490) in 15 cannon-net catches gave a slightly higher than normal average catch size of 233. Ten of the catches were in the most comfortable to handle and worthwhile size range of 100 - 400 birds. The smallest catch was eight and the largest 531 (closely followed by another of 491).
- Great Knot (1166) topped the list of birds caught. Great Knot seemed to be more numerous than in recent years probably because they had such excellent breeding success in 2009, followed by another good year in 2010. The 586 Greater Sand Plovers were accumulated via a number of catches but there was one large catch of 267 – extracted from the net and placed in previously set up keeping cages already with fully erected shadecloth cover. No overheating problems were experienced with Greater Sand Plover, or any other species, at any time due to the precautions taken to keep birds cool during the short period they were in the net and by getting shade erected over keeping cages very quickly.

  A pleasing total was 210 Red Knot. In other recent years the Expedition has struggled to obtain adequate samples of this species. The higher and more widespread population, especially at 80 Mile Beach, may be the result of the excellent breeding success experienced in 2009.

  In contrast Red-necked Stint and Curlew Sandpiper were much less numerous than usual, particularly on 80 Mile Beach. Perhaps they had gone inland to feed at the vast array of ephemeral wetlands now present in Central Australia? A reasonable total (432) was eventually obtained for Red-necked Stint but only 82 Curlew Sandpipers could be accumulated even though they appeared to have had another successful breeding year in 2010.

  A nice total of 28 Broad-billed Sandpipers was caught, all at Roebuck Bay.

- The most unexpected component of the catches was 276 White-winged Black Terns, in a total catch of 491 birds on 80 Mile Beach. A total of 40,000 White-winged Black Terns had been counted roosting on about a 10km section of beach centred around 40km south of the Anna Plains beach entrance. Only 89 White-winged Black Terns have previously been banded in Australia. Two hundred and thirty-one have previously been banded in China mostly caught as a by-catch during wader banding. It is likely therefore that this catch of 276 is the largest ever made of this species anywhere in the world. A separate short paper will be prepared analysing the biometric and moult data.

  White-winged Black Terns breed across a wide range of the Northern Hemisphere, between 35 and 55 degrees north, from northern Italy in the west to Sakhalin Island in eastern Siberia. There do not appear to be any previous long-distance recoveries and the extent of the southward

% Juveniles in N.W. Australia Cannon-net Catches 20 February – 11 March, 2011

SPECIES	Total Catch	% Juv.	Average % Juv 98/99 to 09/10	Assessment of 2011 breeding success
Great Knot	1166	24	12.5	Very good
Bar-tailed Godwit	365	21	9.8	Excellent
Red Knot	210	16	19.9	Average
Curlew Sandpiper	82	24	18.9	Good
Red-necked Stint	432	19	21.4	Average
Grey-tailed Tattler	130	32	20.2	Very good
Terek Sandpiper	151	25	14.4	Very good
Greater Sand Plover	586	17	24.5	Poor

migration in the East Asian/Australasian Flyway may not have been fully recognised previously. Let us hope these birds produce a flag-sighting on their migrations through Asia in the future.

John Stoate, the owner of Anna Plains Station, very kindly took us on two major reccies to the areas of Anna Plains Station adjacent to the parts of 80 Mile Beach where the White-winged Black Terns were found roosting. These revealed huge concentrations of birds feeding on the wing on grasshoppers over certain areas of the grassy plains. This year the grass was longer than at any time in recent decades due to the regular rain which has occurred throughout January and February, totalling more than twice the average annual rainfall. The vast quantities of grasshoppers and small locusts present had not yet progressed to the flying stage but were so thick that low-flying terns easily flushed them into the air for capture.

This year's discoveries now add a fourth species, White-winged Black Tern, to the list of those where a significant proportion of the East Asian/ Australasian Flyway population may at times be present at, and dependent on, the grasslands at Anna Plains Station. The other species are Oriental Plover, Oriental Pratincole and Little Curlew. Because of the high vegetation this year these species were only present in low numbers (20 Oriental Plover, 800 Oriental Pratincole, 100 Little Curlew). Populations were presumably at inland locations or other more suitable habitats in northern Australia.

- Overall 1925 birds were caught during the period at 80 Mile Beach. This is higher than any of the previous four years and is possibly the highest total ever during one of the three-week Expeditions. This total included two about-to-fledge Bush Stone-curlew chicks, caught at night near the airfield.

Retraps and Controls

A record total of 11 foreign-banded waders were captured. From China there were eight Great Knot, one Red Knot and one Bar-tailed Godwit. There was also a Great Knot from Korea and this had previously been recaptured twice in north-west Australia because it was already carrying an Australian band as well. It had originally been banded in Korea in 1997. This high proportion of Chinese-banded birds is a reflection of the hugely successful wader banding which has been carried out at Chongming Dao, Bohai and other locations along the Chinese coast in recent years.

Retrap rates (31%) were again good at Roebuck Bay, with 487 in 1565 birds caught.

There were again some very old individuals in the 532 recaptures of previously banded birds made during the Expedition. Bar-tailed Godwit, Great Knot and (perhaps surprisingly) Greater Sand Plover always seem to dominate our longevity tables. Individuals occasionally reach a minimum age of 20 years. In all species where we have a fair number of retraps birds we are regularly recorded reaching an age of 15-20 years. This year a Bar-tailed Godwit and a Great Knot which were at least 23 years old were retrapped. The record for NWA is a 29 year-old Bar-tailed Godwit.

It is interesting that five of the Great Knot recaptured on 6 March had been originally banded in the same catch on 29 August 1998. This was the "famous" catch of 2042 birds at Camp Site Beach which contained 1001 Great Knot (our highest ever catch for this species).

Proportion of Juveniles

It appears to have been a second successive season of above average breeding success for the wader populations which spend the non-breeding season in north-west Australia (see Table). This year the best overall performance in relation to the norm (average of the last 12 years) was for Bar-tailed Godwit (21% juveniles, compared with a 9.8% average). This confirms the field observations of Chris Hassell and others of unprecedented numbers of juvenile Bar-tailed Godwits arriving in Roebuck Bay in October 2010.

Importantly it was another good breeding season for Great Knot (24% juveniles, following the 44% of the previous year and compared with the 12.5% long-term average).

The only species with apparent poor breeding success was Greater Sand Plover (17% juveniles compared with a 24.5% average).

Wader populations should be significantly helped by these two successive good breeding seasons in the Arctic in 2009 and 2010. Unfortunately one must now expect a relatively poor breeding outcome from 2011's breeding efforts!

Geolocators

Twenty-nine geolocators were put onto Greater Sand Plovers at Roebuck Bay during the last week of the Expedition. In addition, two Greater Sand Plovers were caught carrying geolocators put on in March 2010 (one BAS Mk.12 model and one Swiss Ornithological Institute unit). This brings to eight the number so far retrieved from the 30 applied in March 2010. Twenty-two of these have been seen back in Roebuck Bay subsequent to their northward migration, so just over a third of these have so far been retrieved. Unfortunately the technical performance of the geolocators has been very poor. So far, all the BAS Mk.12 geolocators had lost battery power after six weeks and therefore only the journey to the breeding grounds was recorded. All the SOI units failed completely because of corrosion.

The units put on this year were 19 BAS Mk.10B geolocators and 10 experimental Migwad 1

geolocators. The BAS Mk.10B units are more robust and better protected than the previous Mk.12 units and will hopefully enable the full migration routes and range of breeding destinations of the Greater Sand Plovers to be determined. The new Migwad 1 geolocators are rather smaller than the BAS Mk.10 units and have been provided free for testing by a new (U.K.) supplier.

A small team of people will visit Broome from 9-20 September 2011 to help the local Broome team retrieve some of these geolocators from Greater Sand Plovers, as happened in September 2010.

Flag sightings

A great many sightings of waders leg-flagged elsewhere (either overseas or in other Australian locations) were made during the expedition. The highlight was a Red Knot flagged on its breeding grounds in Chukotha, in the far northeast of Siberia. This is direct confirmation that some individuals of the *rogersi* subspecies spend the non-breeding season in northwest Australia (the majority go to eastern Australia and New Zealand).

Many sightings were also made of birds individually marked with engraved leg flags or colour band combinations. Quite a few of these involved birds originally marked at Roebuck Bay, Broome, that had subsequently moved to 80 Mile Beach. In some species - especially Red Knot – such movements are more frequent than they were previously thought to be.

Other Matters

Participants

The 2011 team contained 19 participants from Australia and 11 from overseas. In addition the two Broome Bird Observatory wardens took part in several catches, both at Broome and at 80 Mile Beach. This year a rather larger proportion of the team (50%) were young (less than 40!). It was extremely pleasing to see how extraordinarily well this mixed nationality group blended together and learned from each other and from the overall Expedition experience.

Acknowledgements

As always an Expedition depends on the help and assistance and generosity of a wide range of people.

Key amongst these are Broome Bird Observatory (and its Wardens, Glenn Ewers and Sarah Katz) and the owners of Anna Plains Station (John, David and Helen Stoate) who provided the essential bases and accommodation for the Expedition over its three week duration. At Anna Plains we were not able to use the usual house (a new employee and his family now live there) but instead used a range of accommodation in and around John Stoate's own house. This proved extremely suitable, facilitating even greater team harmony – and much more frequent than usual dips in the adjacent swimming pool! We thank them also for the freedom to roam at will over the 450,000 ha. station which abuts a 100km length of 80 Mile Beach.

Thanks are also due to the Broome Port and Harbour Authority (Vic Justice) and to Nyamba BuruYawuru Ltd for permission to catch on the shores between the port and Broome town.

As usual the financial viability of the Expedition was greatly assisted by many people providing their personal vehicles for use during the Expedition (Maureen Christie, Prue Wright, Chris Hassell, Maurice O'Connor, John Renowden, Joop van Eerbeek/Mo Verhoeven, Frank O'Connor). The W.A. Department of Conservation also very generously loaned a vehicle and trailer and provided $5000 to cover the Australian costs of the participant from mainland China and to help with other Expedition costs. Chris Hassell, George Swann, AQIS and BBO kindly loaned trailers too.

Finally huge thanks are due to the whole team for its incredibly hard work throughout the full three-week period. **Everyone** contributed enormously but we have to single out for particular mention Chris Hassell for leading all the fieldwork activities, Maureen Christie and Helen MacArthur for organising and supervising the menus, food purchases and catering, and to Adrian Boyle for his incredibly energetic assistance of everyone and everything during the banding and processing operations.

Clive Minton, Roz Jessop, Chris Hassell, Maureen Christie.

NEXT EXPEDITION

Did you read the above report and imagine yourself being a part of all the excitement! I know my mind wandered to the shores of Roebuck Bay and their birds. Remember it is not what you do in life but the experiences you have doing it that makes it exciting. So why not join the next expedition.

Having had a most successful expedition in February/March this year, team leaders have decided that the next expedition will be at the same time next year. Dates are Saturday 18th Feb to Saturday 11th Mar 2012. As with this year's expedition, a team of 28 people throughout the three week period is ideal. Please put your hand up provisionally NOW if you are in anyway interested in participating in next years visit. We strongly encourage people to come for the full three week period rather than just for a part.

Contact Clive (mintons@ozemail.com.au) or Roz (rjessop@penguins.org.au) for more information.

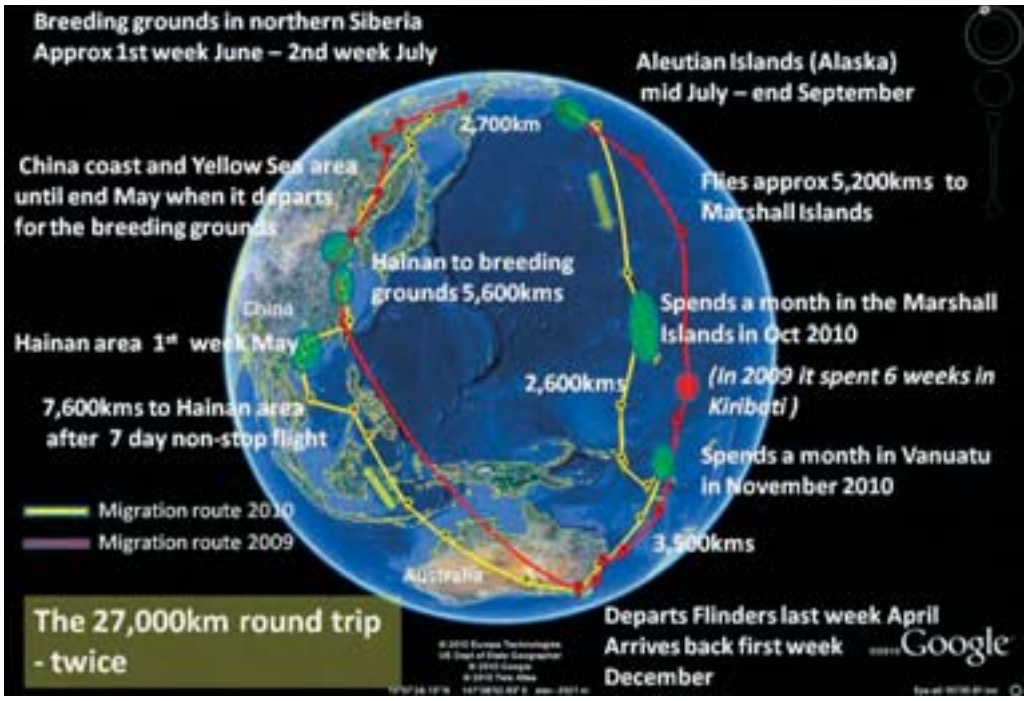
Ruddy Hell: Turnstone Flies 27,000 kms – Twice !!

Wader researchers from the Victorian Wader Study Group, Australia, have just recaptured a Ruddy Turnstone which has completed a 27,000 km round trip migration for the second time.

This is the first time a wader has been tracked with a geolocator on its complete migration in successive years.

The bird had a one gram light sensor data logger (geolocator) attached to its leg. This device recorded where the bird was each morning and evening. In each year the device was attached to the bird in mid April on a beach at Flinders, Victoria, in southeast Australia.

Ruddy Turnstones are a small wader weighing less than 100 grams and spend the (austral) summer months on many of the beaches around Australia. They are one of the family of waders that migrate huge distances to Siberia in Russia to breed.



Researchers have used these data logging devices over the last two years to find out the key stopover locations which are so important for the birds to refuel on their long journey.

Members of the study group include Dr Clive Minton, Ken Gosbell, Penny Johns and Prof Marcel Klaassen (of Deakin University).

"This is a fantastic result for our study group, which is also supported by a fantastic group of volunteers," Dr Minton said.

"The data retrieved so far shows that the birds generally start their northward migration with an initial nonstop flight of around 7,600km in six days to Taiwan or adjacent regions.

"There they refuel on the tidal flats before moving north to the Yellow Sea and northern China. They then make a flight of over 5,000kms to the breeding grounds in northern Siberia, arriving in the first week of June.

"One of the interesting findings is that after breeding, the return journey shows considerable variation, no two birds following the same route. Some return through Asia while an amazing alternate route has been demonstrated by these new results.

"This is a trans-Pacific route where the bird moves east to the Aleutian Islands off southwest Alaska before making the huge journey across the Pacific, stopping only once or twice before reaching Australia in early December."

The first record of this flight was in 2009 when the bird spent nearly two months in the Aleutians before setting off southward over the Pacific Ocean and making a nonstop flight of 7,800kms to Kiribati (formerly Gilbert Islands), where it stayed for six weeks before making the 5,000km trip back to Flinders, Victoria. In 2010 the same bird undertook a similar incredible journey, this time stopping off in the Marshall Islands and Vanuatu in the Pacific before returning to Australia.

Turnstones live up to 20 years and such a bird following this 27,000 km trans-Pacific route would have flown over 500,000 kilometres in its lifetime.

Scientists from the Australasian Wader Studies Group of Birds Australia and Deakin University are still puzzling over why individual Ruddy Turnstones from the same breeding and non- breeding population should use such widely differing routes for their annual migrations. The study shows the importance of key regions within the flyway. Scientists are concerned about the ability of these and similar birds to cope with the massive habitat changes occurring as a result of large reclamation and urban development projects.

Birds Australia

International Workshop on Waterbird Monitoring in Asia Tokyo 21 – 24 February 2011

I represented AWSG/Birds Australia at the Workshop to discuss the future of the Asian Waterbird Census (AWC) program. The meeting was sponsored by Birdlife International (BLI) in close cooperation with Wetlands International (WI). Following the workshop, Doug Watkins (WI) and I met with BLI to flesh out some of the actions AWSG and Birds Australia can take.

Objectives
The meeting aimed to discuss how BLI and WI can together more strongly promote waterbird and site monitoring to EAAF Partners. The adoption at MoP5 in Cambodia (Dec 2010) of a proposal for an assessment of the condition of Flyway Network sites (and an additional 100 sites) provides a sound basis to do this within the Partnership. In addition the AWC needs to be strengthened and focused to generate better information on the population trends of sites of International Importance (including Network Sites) together with information on the habitat condition and threats.

The following notes cover the key outcomes:

Outcome 1 Monitoring of Flyway Network Sites (plus 100)
This action, arising from the recent MoP5 meeting, was seen as an opportunity to trial some of the methodology discussed as well as providing a snapshot of the condition of these critical sites. The following was agreed:

- A list of the 99 Network sites was compiled and responsibility for assessment allocated between BLI and WI.
- Assessments to be undertaken with the cooperation of site managers and ultimately submitted to the Partnership through the relevant government Partner.
- Assessments would utilise AWC data or other national/site data where available. Condition/ threat assessment would utilise the BLI format developed for IBA assessment.
- The 'other' 100 sites would be chosen by BLI/ WI in conjunction with local NGO's etc. These would be separately assessed but using the same methodology as for the 99 Network Sites.
- The target date for this exercise is the end of 2011 in order that it would be presented to the next MoP in early 2012.

Outcome 2 Future of the AWC
In order to fulfil the objectives set out on Day 1 the following guidelines/actions were agreed.

- An AWC coordinator was required for the EAAF instead of the one coordinator covering this flyway plus the central Asian flyway.
- The AWC outcomes need to include:
  - ◊ Establishing population estimates which would be the basis for 1% assessments for Important Sites. This will require improved monitoring and consistent methodology.
  - ◊ Identifying Important Sites. Greater emphasis needs to be placed on these sites by the AWC.
  - ◊ Establishing population trends for key species. Promote analysis of site and national trends.
  - ◊ Undertaking status assessment of Sites of International Importance (National and Flyway).
  - ◊ Using AWC for awareness raising, community involvement, capacity building etc.
  - ◊ Utilising a database that is user friendly capable of remote data input. Feasibility of using WI model to be looked at.
- BLI and WI to work cooperatively to secure funding for the next 3 – 5 years. A concept document to be prepared by WI to be used in seeking funding sources. Potential sources of funds include: national governments, US grant institutions, corporates, offsets for environmental impact etc.

Role of AWSG/ Birds Australia
There are several roles and actions that AWSG and Birds Australia can undertake to support this program. Some of these can be summarised as:

- Continuing the *Shorebirds 2020* program and the *MYSMA* program in order to provide the best possible population abundance and trend information at site and national levels. This program is now well respected in the flyway and is a leader together with the *Japan 1000* program in waterbird monitoring.
- *Shorebirds 2020* and AWSG to provide enhanced support to AWC in terms of training, capacity building as well as population figures for important sites.
- Strategies are needed to count Internationally Important sites in Australia currently not counted such as Gulf of Carpentaria and Northern Territory.
- Assist WI in the assessment of the 17 Network Sites together with the 5 additional sites to be selected.
- Make representations to government to obtain

long term funding for these activities recognising that there will need to be shared funding from other sources.

- Promote collaboration and communication between countries in the flyway in regard to population monitoring and site evaluation.

Australia is key to the success of flyway monitoring and its input to the Partnership. NGO's such as AWSG and Birds Australia in collaboration with the national government have a critical role in supporting this program.

Ken Gosbell

Broome Bird Observatory update

"It's pretty quiet out here in the Wet", we were told upon arriving here in January as the new wardens, "especially since the road is officially closed". Good, we thought to ourselves, that gives us plenty of time to get our heads around how to run a research centre, tourist venture, motel, camp-ground, education facility; as well as to get to know the 150 or so birds regularly found in the area. We'll be able to acclimatise too, we figured, having just come from a year in summer-less Melbourne. As the mid-February arrival date of the AWSG NWA expedition loomed, however, we realised we were in for a fiery baptism.

We soon doubled our numbers with the arrival of two Dutch researchers – Mo and Joop –during a cyclone a few days after us (having driven from Perth). Studying Red Knot under the supervision of Chris Hassell and Theunis Piersma, they've spent many any hour in the scorching sun reading leg flags. A few weeks our sleepy hollow became a bustling hub – AWSG had landed! Three hectic weeks, two enthusiastic Korean film crews, and plenty of mucky boggings later, it was over. With many of the expedition's members old hands, it wasn't nearly as difficult a we'd feared hosting so many people so early on in our wardenship. Not long after AWSG left, the GFN Red Knot satellite tagging crew arrived – there's never a dull moment at the BBO! Thankfully our Assistant Wardens – Margot and Ray – also turned up in March. Having been here last year, and both tireless enthusiastic workers, their arrival was a god-send.

More than anything, our time here thus far has been punctuated by natural events. A few days after arriving we awoke to swarms of migrating marsh crabs on the road and around the grounds. The first of many irruptions (triggered, no doubt, by subtle changes in the weather), a few days later they were all gone. The most recent event, heralding the start of the Dry, was squadrons of dragonflies making a daily migration to town from the mangroves. And now our long staying guests, the migratory shore birds are leaving – 1500 counted in two hours yesterday, 2000 the day before... Monitoring their movement during our daily Migration Watch session it's difficult not to translate their fervent cries into "Let's go, let's go!" Some flocks take-off, test the wind, and land again three or four times before finally taking the plunge. As late as midnight we've heard them over the Obs.

We've already run two very successful Wave the Waders Goodbye courses, both unfortunately under-patronised. That said, the enthusiasm of the participants well and truly made up for the depauperate numbers. Our two Birds of Broome Region course (25^{th}-30^{th} Sept and 10^{th}-15^{th} Oct) are rapidly filling up. In the first two weeks of May we are holding a working bee – free camping and access to some tours in exchange for a week's help on myriad projects – all welcome. Finally, we still need campground hosts for the month of June. Please contact us at bbo@birdsaustralia.org.au or on 08 9193 5600 or visit our website (www.broomebirdobservatory.com) for more information.

Glen Ewers and Sarah Katz - Wardens

Shorebird Symposia at the Cairns AOC

The next Australasian Ornithological Conference (AOC) will be held at the James Cook University Campus, Cairns (Queensland) from 28th September to 1st October 2011. This meeting is held every two years, and organised jointly by Birds Australia and the Ornithological Society of New Zealand. It is the premier ornithology conference in Australasia, typically attended by several hundred delegates including international participants. There should be lots of interesting talks and it's a great way to meet other ornithologists.

The theme of this years conference is "Ornithology in the Tropics", but presentations on other topics are also welcomed and there will be two symposia with a heavy shorebird content:

- Migration (convener, Phil Battley)
- Shorebird Monitoring and Conservation (convener, Danny Rogers)

If you are interested in contributing a paper to either of these symposia, please contact us. The deadline for abstracts is 1 July 2011. Further information on the AOC can be found on: http://www.jcu.edu.au/events/eventscns/JCUPRD1_068377.html

Red Knot Satellite Tracking Project

The movements of Red Knots in the East Asian – Australasian flyway have long been mysterious, and for many years researchers were unable to identify the migration routes of the large non-breeding populations of Australia and New Zealand. However, recent research led by Nicky Yong Han and the Global Flyway Network has shown Bohai Bay, in the north-western Yellow Sea, to be the missing link in our understanding of their northwards migration. In 2009, about half (maybe more) of the flyway population was found to stage on a 20 km stretch of coastline in Bohai Bay while on northward migration (Rogers et al. 2010; see http://www.publish.csiro.au/paper/MU10024). Unfortunately, this vital site is rapidly being lost to tidal flat reclamation projects. How will Red Knots respond to this threat? And will they be able to find alternative staging areas? These are questions that need to be answered if the remaining staging sites for Red Knots are to be adequately protected.

A satellite-tracking project would be an ideal way to address these questions, but such projects have previously only been possible on large species capable of carrying large transmitters. Excitingly, in the last two years 5g solar-powered satellite transmitters have been developed. Experiments with dummy units of this size on captives at the Royal Netherlands Institute of Sea Research have shown that these new satellite transmitters can be glued to the rumps of Red Knots, setting the stage for some urgently needed research.

Several organisations including the Global Flyway Network, the US Geological Survey, and the AWSG are collaborating on this project. The objective is to deploy satellite transmitters on Red Knots in north-western Australia in the late non-breeding season, and then follow their subsequent migration. It is an expensive project, requiring funds from several sources. Woodside Petroleum has provided a grant of $35,000 to Birds Australia and the AWSG to support the purchase of satellite transmitters.

The project is now underway, and satellite transmitters have just been deployed on Red Knots in Roebuck Bay. Updates on their progress will be provided in subsequent issues of Tattler.

Danny Rogers

Join us in celebrating World Migratory Bird Day 2011!

Flying thousands of kilometres each year, migratory birds have a unique perspective of the Earth. Unfortunately, this unrivalled view also enables them to notice the dramatic changes which are currently threatening many of our planet's ecosystems. Each year more and more of the sites migratory birds depend on during their journeys disappear. As these ecosystems change, there is no guarantee that the habitats migratory birds need along their migration path, will be there the next time they return.

The majority of these changes are caused by human use of land and have a direct impact on migratory bird populations, which are particularly sensitive to any interference to the sites they use throughout their migratory cycle. Many aspects of human land use are extremely damaging to the birds' habitats. For example, urbanisation and intensive agriculture can fragment and replace complex networks of habitats needed by the birds. Deforestation and mineral extraction can damage entire regions and land reclamation and biofuel production remove or degrade crucial wetlands and other habitats for many migratory bird species.

While human survival depends on these transformations of natural areas, a sustainable use of land is vital to reduce the impacts on our natural resources, such as water, soil, nutrients, plants and animals – including migratory birds.

This year's theme for World Migratory Bird Day is "Land use changes from a bird's-eye view". We want to raise awareness on the dramatic effects human land use has on migratory birds and the ecosystems upon which they depend.

Join others around the world and take part in World Migratory Bird Day on May 14-15, 2011 by organising or participating in birdwatching events, educational programmes, lectures, art exhibitions and other public events; however you decide to participate, your contribution will help make this campaign a success!

World Migratory Bird Day is a global, annual awareness campaign to promote the conservation of migratory birds and their habitats worldwide. It is organised by the African-Eurasian Migratory Waterbird Agreement (AEWA) and the Convention on Migratory Species (CMS) – two international wildlife treaties administered by the United Nations Environment Programme (UNEP).

Please share your activities with us and others around the world by registering your event or find more information on the WMBD website: www.worldmigratorybirdday.org.

New Conservation Officer for AWSG

Ann Lindsey has been a dedicated and effective representative of the AWSG on many conservation battles that are rarely rewarding. Ann has been doing this role for at least 6 years, but now feels that she can no longer keep doing this and her other local conservation work at the same time. In accepting Ann's resignation in February David Milton (AWSG Chairman) expressed his thanks on behalf of the group for her contribution and wished her lots of success with her dedication to ongoing work in the Hunter. The environment in the region certainly needs some help.

Over the years Ann did so much to support local conservation groups as well as national issues such as the Murray Darling Basin submission.

We are lucky that Joan Dawes (AWSG State Conservation Officer for NSW) agreed to take over the reins from Ann while on the run! Joan's first job was to write a submission to the WA Government expressing our concerns about the inadequate assessment of three major risks posed by the Liquefied Natural Gas processing plant on Australia's largest concentrations of migratory shorebirds. This includes threats posed by gas flares and lights attracting migrating birds at night, the potential for hydrocarbon spills and the impact of additional developments associated with construction of the LNG Processing Plant at James Price Point. Suggestions for minimising these impacts were also made.

Joan is a keen amateur ornithologist and has taken an active interest in shorebirds. Despite a busy lifestyle Joan took on the role as conservation officer for the NSW Wader Study Group and as AWSG Conservation Officer for NSW. She has very successfully handled some major conservation issues in NSW along with Ann Lindsey. Joan has been analysing shorebird count data and using these results to justify a proposal to re-assess the conservation status of shorebird species in NSW by the NSW Government.

Joan writes well having significant experience interacting with federal and state governments on the one hand and as an academic (MA, DPhil Oxford University) has written over 130 peer reviewed publications (she is a bio-chemist by profession). Joan recently retired as professor at the School of Medicine of the University of NSW, having been in Australia for 22 years.

I bumped into Joan when she was part of the Birds Australia team monitoring shorebirds at the Port Botany Expansion Project and she struck me as a very knowledgeable and level headed person, and quickly encouraged her to take on an active role with us in NSW.

Phil Straw, Vice Chairman

Visit to King Island by VWSG, 4 – 12 April 2011

This was the fifth successive annual March/April visit to King Island to continue the VWSG's long-term study of Ruddy Turnstone. All the principal objectives of this visit were met:

a) Sufficient Ruddy Turnstones (197) were caught to obtain enough recaptures (75) for survival rate analysis and to maintain a constant level of banded birds in the King Island Turnstone population.

b) The eight catches at seven different sites provided sufficient data for a good estimate of the 2010 breeding success. At 14.7% juveniles this was close to the previous year (14.2%) and indicated a welcome second consecutive year of good breeding success.

c) Six further geolocators put on in March 2010 were retrieved from Ruddy Turnstone and 22 new ones were deployed. Seven of these were fitted to individuals which had also carried geolocators in the previous year.

Population Count

As usual the first day was spent visiting all the main Ruddy Turnstone locations along the west coast of the island. This produced count data for comparison with earlier years as well as serving as an initial recce for subsequent catching activities.

When sites are compared the data shows a slow annual decline over recent years in the Turnstone population. However the 1985 data suggests that this may have been going on for a prolonged period as the 2011 count is less than half that of 26 years previously. This also mirrors the marked population declines detected over a 15 year period at Flinders on the central Victorian coast and some decline in the population on the coast of the south-east of South Australia.

With no perceived cause of this decline in Australia it is suspected that it is associated with changes in the available habitat at the Turnstones' migratory staging locations in Asia. Further investigations will be made, particularly at locations identified by banding and flagging, and more recently by geolocators, as the main places used as stopover sites.

Catching and Banding

a) Catches.

The total of Ruddy Turnstones caught (197) is slightly lower than that of previous years, mainly because we had two successive unsuccessful

catching days, an unprecedented occurrence. It would have been nice to blame this on the inclement weather which had arrived by then but it was more to do with less than perfect judgement on our part – net location, when to fire (bird in the hand is worth a lot more than two on the seashore!). There was also an element of bad luck e.g. when a lone raven flushed birds only seconds before we would have fired.

One good aspect of catching so late in the season was that birds were keen to feed in order to complete their pre-migratory fattening process. When disturbed they would only sit out on off-shore rocks for a relatively short period before flying to the shore to feed. In November 2010, when birds were under no time pressures, they would sometimes take more than three or four hours to come off some inaccessible rock in the sea to give us a chance of catching them on the shore.

b) Controls and retraps.

A good proportion of the birds caught were again retraps (38% vs. 42% and 44% in the previous two years). Most were at the same site where they had originally been banded but a small number were at different locations. These included a juvenile bird which moved about 15 km in two days. Two birds originally banded in South Australia were recaptured and a third one was seen. Each year we find a few examples of the small interchange which takes place between the King Island and the south-east of South Australia Turnstone populations.

c) Percentage Juveniles.

It was extremely pleasing that Ruddy Turnstones seem to have had another good breeding season in the Northern Hemisphere in June/July 2010. The proportion of juveniles (14.7%) was almost identical with that of the previous year (14.2%). It is interesting that in both years the figure for percentage juveniles in South Australia was rather higher than this (20-30%) suggesting perhaps that slightly fewer juveniles travel as far south as King Island.

d) Sexes.

In March/April it is possible to determine the sex of adult Turnstones by plumage differences. The males have much whiter heads (brown on the females) and much more of the chestnut brown (ruddy) colour on the wing coverts and back.

As usual there were some quite marked variations between locations, ranging from 32% to 74% males. But the overall sex ratio was again fairly equal (47.6% males). We probably now have enough data to look at whether the sex ratio at particular sites is consistent from year to year, indicating some preferential segregation of the sexes, or whether the variation is purely random.

Recoveries and flag-sightings away from King Island

There has been a plethora of further sightings, throughout the Flyway, of Ruddy Turnstones marked on King Island. On a great many of these the engraved flag code was also reported, enabling the individual bird to be identified. Taiwan continues to be the most frequented location for stopovers on both northward and southward migration, but there is increasing evidence that many birds also use the shores around the Yellow Sea as a second key area.

An updated analysis of movements of Ruddy Turnstones will be made during the next year.

Geolocators

A further six geolocators (three British Antarctic Survey, three Swiss Ornithological Institute) were retrieved in the Manuka area where they had been deployed in March 2010. This brings to 12 the number of geolocators now recovered from the 38 originally deployed on King Island. Several additional returned individuals with geolocators have been seen but have not yet been recaptured.

Unfortunately the SOI geolocators have not provided any useful data because of corrosion of their copper alloy terminals. The most recent BAS geolocators are still being downloaded and a separate report of the results of the geolocator work will be published later in the year. But some good results have already been obtained giving much more detail of the migration route and stopover strategy of Ruddy Turnstones as they travel from south-eastern Australia to their breeding grounds in northern Yakutia (Northern Siberia) via the Asian continent and off-shore islands.

A further 22 new geolocators were deployed on Ruddy Turnstone in the Manuka area. Seven of these were put onto birds which had previously carried geolocators.

The future

It is intended to continue the Ruddy Turnstone studies on King Island for as long as possible. We now have a good body of birds with a known history and a five-year set of data against which to compare further future changes.

The next visit will be by a small team in November 2011, with the primary aim of retrieving as many as possible of the 22 geolocators deployed at Manuka this April. There will then be the usual major visit in late March/early April 2012. Would those interested in participation please let me know, so that I can put their names on the team list?

Acknowledgements

Enormous thanks are due to everyone who made this recent visit possible and so successful. In particular Mavis Burgess, Angus Roberts, Margaret and Henry Bennett, Graeme and Margaret Batey, Don Robertson, Jenny Marshall, Shelley Davidson and Ann Pimento.

Clive Minton, Robyn Atkinson, Prue Wright

Red Knot Recovery

As you know, every day bring us in new flag sightings of our birds and, less frequently, recoveries through the bird banding office (when the metal band number is known).

We've just had information via Mikhail Soloviev and Pavel Tomkovich that an orange flagged Red-necked Stint, marked in Victoria, was seen last northern summer (June 2010) breeding at a location in northwestern Siberia further west than any previous record of a nesting Red-necked Stint. It was in the southwest Taimyr at 69 deg N, 92 deg E, a distance of 12,700 km from the Victoria central coast. Not surprisingly, this is a record distance moved be a marked Red-necked Stint.

Clive Minton

2010 Breeding Success

Data is currently being put together for this year's report on the 2010 breeding success of migrant waders which come to Australia from the northern hemisphere. Full details will be given in the next issue of Tattler.

Overall everything is good news! For the second consecutive year (unusually) most of the wader populations had good or even very good breeding success, as measured by the percentage of juvenile birds in catches in the November to mid March period. This result will primarily be because of low predation levels in the Arctic (it was expected to be a good lemming year in 2010 in the main breeding areas used by our waders) and because of favourable weather conditions (particularly at the time of hatching). Given the major declines in the populations of so many of our waders this second consecutive year of above average breeding success is particularly welcome and beneficial.

Clive Minton

Geolocators

Quite a few geolocators have been successfully retrieved from Ruddy Turnstone (in Victoria/ southeast Australia/King Island) and from Greater Sand Plovers at Broome. Further attempts to retrieve more are still being made and a final report on the season will be given in the next issue of Tattler.

The most exciting result from this year related to the Ruddy Turnstone bird which made a 27,000 km round trip migration in two consecutive years (see page 6 for the full article). In future we will be targeting turnstones which have already been successfully logged on one migration with our new applications of geolocators.

The results on Greater Sand Plovers were however disappointing. The geolocators only successfully recorded data for a six week period after they had been originally deployed at Broome in March 2010. So only the journey to the breeding grounds in northern China/Mongolia was recorded. It is not clear what caused this short battery life. 24 new geolocators, of two different models, were deployed in March this year and hopefully these will give better results.

Geolocators have also been put onto Eastern Curlew (24 at Inverloch, Victoria, in February) and on Sanderling (also 24, in the southeast of South Australia in late March). This is the first time geolocators have been used on these species. We now await the return of all the birds now carrying geolocators in September/ November this year.

Clive Minton