

## **GFN Northward Migration Season on the Luannan Coast, Bohai Bay 2015 Update number 3**

### **People are Great**

Time fly's when you are having fun and it's hard to believe that some of the team has been here scanning for over a month. The Red Knots have increased in number greatly since the last update and we have recently counted just over 47,500 of them as well as 16,700 Great Knots. The numbers of Great Knots using the Luannan Coast are a lot higher than in previous seasons. This could be an effect of the lack of food currently at Yalu Jiang National Nature Reserve 500kms to the ENE of here, on the China/North Korea border. Yalu Jiang has historically been a stronghold for Great Knots on northward migration. The news we are getting from shorebird colleagues is that numbers are much lower there this year, presumably due to the lack of suitable prey species for Great Knots.

We have had some rain on a few nights recently and this makes for good birding as the bad weather brings birds down to land until the weather clears for them to continue their migrations. As a result our species list for this season has jumped up to 181. The Nanpu sea wall has had hundreds of birds of numerous species in the reeds and low bushes. We walk many kilometres along the sea wall on most days to scan the knots and we occasionally sneak a look at the odd non-shorebird!

With the large numbers of knots arriving it means more flagged birds. To date we have seen at total of 1,989 sightings on 12 different species from 26 different banding sites. In regards to the birds marked in Broome and 80 Mile Beach NWA we have recorded 313 colourbands records and 461 flag records. This is total sightings not individual birds.

Usually by now in previous year's updates we would have been writing about the large numbers of birds feeding in the salt ponds. Unfortunately this year the water levels are too high to give optimum feeding conditions for the shorebirds. We have been told that the water levels are high this year 'to compensate for the loss of salt pond area due to other salt ponds being sold for development or, as mentioned in an earlier update, roads being built through them. So instead of the tens of thousands of birds in the ponds we are currently limited to hundreds.

As you may have read in last years Update number 6 another one of the many problems this area and the Yellow Sea mudflats in general face is the inexorable spread of introduced Smooth Cordgrass (*Spartina alterniflora*) taking over the mudflats. It grows thickly and renders mudflats completely unsuitable (in fact not even accessible) to shorebirds.

The control trial we conducted last year has gone very well. All the small patches that were sprayed have died. Some of the larger ones have had some regrowth where presumably the spray didn't penetrate through the previous year's dead leaves. There are still a few large patches that we didn't spray last season that need tackling. We had planned to spray early into the season but as the plant had not started to grow when we arrived we will try again in the coming weeks.

During a recent exploration of other small areas of mudflat further west of our main study site we saw a small bay that had a large area of *Spartina* on it. The thought that it was too cold here in the winter for *Spartina* to grow well and be a threat to the mudflat habitat was,

unfortunately, dispelled by what we saw there. This is too big an area for us to attempt to control and we just plan to try and keep our survey area as free from *Spartina* as is possible.

There is also an area of *Spartina* in Zuidong and a week ago we drove past and found some locals digging it up. Some of us got excited thinking that maybe the locals are trying to help eradicate this invasive species. However other more cynical ones (Chris) was horrified that it might be being moved to colonise other mudflat areas to stabilise areas for reclamation. It was neither. It seems it was being dug up to be planted in a wetland reserve nearby! Sometimes you just need a brick wall to bang your head against.

The small bay near Tianjin rapidly being covered with *Spartina*.



A Boyle

The *Spartina* ready to be taken to a nearby wetland to start its path of destruction



Bob Loos

Lee and Bob G scanning on the mud at Nanpu



A Boyle

In the past we have written about the shell fish harvesters working in our study area. They are small group of people approximately 8 that work during the middle of the tide out on the mudflats collecting shellfish. They do this by using a generator-driven harvesting machine that collects mud and then a high powered jet of water washes the mud away leaving the edible shellfish behind. It's a very profitable industry for the local operators and would be in to the future if it is being managed sustainably (this we do now know). The harvest is loaded on to boats that are anchored close to the working parties and brought in to the seawall. Here the shellfish are unloaded onto a large truck and taken to Beijing to be sold in restaurants. Recently we watched some boats being unloaded. The first three bags from each boat are weighed and then all the bags are put on to the truck. One bag weighs 30kg and we did some simple arithmetic and came up with a truck load carrying 32.4 tonnes of shellfish! It's amazing just how productive the mudflat can be for both the local economy and the migrant birds. The shellfish workers appear to be out every day and as shellfish don't keep well we presume this is what is taken out of the mud every 1-2 days during the shellfish 'season' which we think is spring and early summer. We want to try and talk to the local shell fishers as good healthy shorebird habitat, without industrial complexes built on it, is good for shorebirds and the local economy.



The question is; is it sustainable?



A Boyle



Bob Loos

A beautiful male Yellow-rumped Flycatcher



A Boyle

Reed Parrotbill. Common on a reclaimed but currently unused and overgrown area just inland from the Nanpu sea wall, where we scan the Red Knots in the mornings



A Boyle



A rarity for us here; Little Owl on the Nanpu Seawall



Bob Loos

## PEOPLE

Most of you reading these updates will be well aware that long periods of field work don't happen by chance. They happen because of lots of planning, lots of planning and

lots of planning (previous experience is a great help too) and skill and effort once the fieldwork begins. This effort is both voluntary and paid. So funding is critical to long term studies and fieldwork.

It is difficult to know where to start with the long list of regular and visiting shorebird biologists this year.

But let's start at the top.

Theunis Piersma who is the 'leader' of GFN was with us again, just for a few days, on the Luannan Coast. He was in China for longer than the few days for meetings and to catch up with his various PhD students. Theunis is the main fund raiser for all of the GFN studies in Australia (including my position) and the EAAF. This commitment to a flyway that is not his 'own' is typical of Theunis, he has a world view of shorebirds and ecology. It also highlights the immense importance and issues in the EAAF that someone with such standing in the shorebird world should put so much effort in to the EAAF. He would like to stay with us for

longer scanning through massive flocks of Red Knots but his other beloved shorebird, the Black-tailed Godwit is breeding in the meadows around his home in the Netherlands and he has a large long-term study on that species underway (of course he does!)

Now we go to 'no particular order'.

Lee Tibbitts is a shorebird biologist with the United States Geological Survey's Alaska Shorebird centre and works in close conjunction with GFN, in particularly on satellite telemetry studies with Black and Bar-tailed Godwits, Red and Great knot. We have had the pleasure of working with her 4 times in Roebuck Bay since our first meeting in 2008. This was Lee's first trip to China to see the spectacle of the birds but the rampant industrialisation of their mudflat habitat was an eye-opener for her (as it is for us all on encountering it firsthand for the first time).

Bob Gill is recently retired from the same office as Lee and is 'busier than ever'! Bob has done pretty much everything in shorebird work particularly on the Alaskan breeding grounds.

It was Bob's second visit to join GFN on the Luannan Coast and he was keen to see the changes since 2011. The destruction of the mudflats wasn't that much greater but over previously reclaimed flats and salt ponds now stood factories, high-rise apartment blocks (mostly empty) and massive highways. It was interesting to look at it through Bob's eyes from a 4-year time period, as we see it every year and it seems less dramatic that way! Bob has also been with GFN in Roebuck Bay for the Bar-tailed Godwit satellite telemetry studies in 2008. Bob is a thoroughly sensible bloke and can chat to Chris about sport and not just shorebirds!

Tony Habraken is something of a legend in New Zealand for his scanning prowess and dedication. The conditions here didn't prove as enjoyable as the crisp clean NZ air he usually works in. However from out of the smog he sighted many and varied colourbands and flags to add to our ever-growing data set. Tony has plenty of experience of working in these conditions having been in the Yellow Sea at Yalu Jiang, South Korea and was also a team member of the NZ shorebird ecologists that were invited to North Korea in 2009.

Professor Zhang Zhengwang, who is the supervisor of Leiming (current PhD) and was for Yang Hong Yan (Nicky). He joined us just for a day but he and Theunis had many productive talks about present and future studies as well as about the students that Beijing Normal and Groningen Universities are sharing. Prof Zhang always helps hugely with transport to get many and various people between Beijing and Nanpu Industrial City our 'home base'. Our programme here would not be possible without our association with BNU.

Leiming is our new 'go to guy'. This used to be Nicky's role. They both do and did it with a smile on their faces but we do sometimes wonder if they perhaps tear some of their hair out in private! As we do not speak any Chinese other 'thank you' and 'I don't understand' we

rely totally on Leiming to help us with many things on a daily basis. We really cannot emphasise enough how helpful he is. And while he is fielding our phone calls and sorting out this and that for us he is doing his PhD field work, catching birds, counting birds, collecting mud samples, collecting water samples and then sorting those samples etc.! He is one busy young man. His main study is on shorebird use of the salt pond habitat with the Curlew Sandpiper his main study species. This bird had decreased in numbers alarmingly in the EAAF and is currently being assessed by the Australian Government for 'upgrading' of its threatened status.

Kate is a Polish student and is Leiming's 'right-hand woman' and helps him with everything except sorting out our phone calls! Kate studied introduced mammals (Raccoon Dog, Pine Marten) in Poland for her master's degree and is now learning the joys (?) of shorebird research in the Yellow Sea.

And last but certainly not least we have a new 'full-time scanner' for this season as Matt Slaymaker could not be with us this year because he got a proper job. For those of you who know Matt- the wandering bird ringer-Slaymaker you may be as surprised as Ady and I were! Bob Loos is the GFN accountant and rather conveniently is an experienced scanner who has worked on shorebird studies extensively in The Netherlands, Mauritania, Norway and Iceland. It didn't take long for Bob to get in to the swing of things here. Shorebird studies the world over are determined by the tide and if that means getting up at 3:30 or 4AM because the tide is suitable, well that's what you do. The smoggy conditions are a bit different to what Bob is used to but like all of us this somewhat unpleasant part of being here is countered by some incredible views of shorebirds in full breeding plumage, sometimes very close. And standing on the seawall as the tide recedes and 50,000+ shorebirds fly from their roost sites and swoop down on to the mud is a site to behold. Bob is also a keen birder in general and lots of new birds keep popping up in front of his binoculars so that also helps with the early starts the pollution and having to cope with my and Ady's 'humour'!

So that is the people who have so far made up our Bohai Team 2015 and our shorebird studying friends. In a few days we get more volunteers and students, we might give them a mention in another update.



Left to right; Tony, Bob G, Ady, Lee, Chris, Theunis, Bob L



Leiming and Kate wait for Curlew Sandpipers to show up.



Bob Loos