

BOHAI UPDATE #6 JUNE 6th 2017

And so here we are at update 6 and the end of another GFN field season on the Luannan Coast, birds, flags, bands, Ambassadors, good food, good people and smog. The full report for the season will be out in the coming months and will go into more detail on the issues we have briefly covered during our updates. Thanks for reading and we hope you have found our updates interesting and even entertaining on occasions.

During our season's work here we join with Beijing Normal and Fudan University students to conduct counts of the birds using the Luannan Coast. This is a challenge! Much like conducting shorebird counts in any site with large inter-tidal mudflats and big tides. Here at Luannan additional factors are the unpredictable nature of birds roosting habits and the enormous complex of ponds available to them for both roosting and feeding. It is all but impossible to cover all available habitats during a single count. We do count the tidal flats but are unable to cover all the ponds, we only cover the ponds immediately adjacent to, and that we can see, from the seawall. This May we added the Hangu Wind Farm site to the count area for the last 2 counts of the season. It is very clear from our flag and band resighting's that birds have been regularly moving between our main site Nanpu and Hangu. The midpoints of Nanpu and Hangu are 30km apart but we were recording marked birds at one site the day after seeing them at the other. This highlights the need to count all areas at the same time to avoid double counting.



GFN study sites 2017

We count shorebirds for various reasons. To identifying which species use each site, how important each site is relative to a certain species and to get an indication of when peak numbers are present. Another issue to contend with is that the peak numbers of certain species may not occur on the count day! This issue is alleviated by the fact that we are in the field every day and making estimates and counts of various species and recording them in our daily bird log. This and our knowledge gained over the years means we know what numbers of which species deserve more attention from us. It is then that we will take the opportunity to make careful counts. Species that were of particular note this year were Asian Dowitcher. On the count day of 15/05/2017 the count teams recorded 864 but a week earlier on 08/05/2017 GFN had counted 1,754, just at the Hangu Wind Farm site. Dunlin was another species that had its peak numbers outside of a count date. We had been remarking on the lower than usual numbers of this species on the mudflats until on 07/05/2017 when Theunis was out on the mud and he had 35,000

surrounding him and Adrian had another 5,000 2 km away. This estimate of 40,000 Dunlin was recorded in the bird log and contrasts with the count day total of 15/05/201 when 18,475 Dunlin were counted.

We have rarely had big numbers of Red Knot this season on the mudflats. In previous years the peak numbers have been much higher, e.g. 34,200 (29/05/2013). This year our peak number was 14,577 on the count day of 15/05/2017. Red Knots are inconsistent in their use of the area, particularly late in the season. In the early morning on the count day of 27/5/2017 we recorded 2,794 across all 4 sites but just 3 days later on the afternoon of 30/05/2017 Adrian counted 6,500 on the Nanpu mudflats and Chris had 4,300 in one 'prison pond' and there was 'lots' (at least 2,000) in another pond, a minimum of 12,800. Note the dates and counts, 34,200 on 29/05/2013 and 12,800 on 30/05/2017.

We are not really sure why the Red Knot count was so very different between the count day and 3 days later. Had there been a sudden arrival of Red Knot or just redistribution from the ponds? This has been the time of year in previous seasons when we have had a great deal of new colourband sightings indicating that Red Knots from NWA are still coming into the area for a short stay.

Questions that come to our minds are, did the Red Knots never visit here this season in big numbers as they were using alternative sites further south in the Yellow Sea? Or were they just distributed along the edges of ponds that we could not see or access? Some of these questions could be answered, to a degree, with satellite and GSM technology. GSM technology utilise the mobile phone network and gives 'up to the minute' information when a bird is in range of a tower. This would help us track birds at a local level. However the tags are still too large for Red Knots. Our satellite tagging of Red Knots this year and in previous years has started to show us that some of the population of Red Knot from NWA stop off along the east and north coasts of Borneo, Vietnam and southern China during northward migration. However the technology and attachment of the tags to birds has still not enabled GFN to get any full migration tracks.

General birding has been very quiet since our last update. Just like the Red Knots that have headed north so have all the other birds and walking around our local park only reveals sparrows and doves. It is great being here for the full migration season and watching how different species come and go on their long journeys from southern wintering grounds to further north to breed.



A Whiskered Tern. One of the migrants that breeds locally in fresh water habitats. A Boyle

The introduced and highly invasive Smooth Cordgrass *Spartina alterniflora* continues to increase its spread across the tidal flats. It is now extensive at the 'Double Bridge', Nanpu, West Heinze and Hangu sites. It is getting a strong hold at our Zuidong site but at this stage appears to be absent at our Beipu site. This is an issue that will need to be high on the agenda if and when a nature reserve is established. There are many important inter-tidal habitats throughout the world that have been lost to or heavily impacted by the spread of this invasive plant. It is not only a negative for birds but also for the local fishing communities.



Spartina growth at Nanpu, from left to right, late-May 2015, 2016, 2017.

So far we have recorded 2,773 marked birds from 27 sites throughout this flyway on 15 different species. 680 of these are from the GFN colourbanding study comprising 295 individually recognisable birds. That is just 3 more than 4 days ago! Confirmation that the birds have left for their breeding grounds. Total bird species recorded stands now at 226 and all records have been submitted to the Ebird database to help understand bird distributions in China.

Chris, Adrian and Bob

06/06/2017