GREAT SCANNING AT BEIPU

Our study site on the Luannan Coast is split in to a number of different areas for our recording purposes.
Mostly we write about 'Nanpu' (north Village). This stretch of mud and seawall gets most of our attention. Why? Simple, it gets most of the birds, probably as it has had the least reclamation work done on it and has been able to keep its ecological character more intact than Zuidong and Beipu (south Village). However, between May 21 and May 24 this season it was 'going off' (Australian saying meaning it was very good)! Over those five mornings of scanning, we read 328 individually marked Red Knot from NWA and of those 89 of those were 'new' - we had not recorded them before during this season. Great data and well worth those 3am alarms (have we mentioned those before)?!

The mudflats at Beipu are 4.5km long and approximately 4km wide at the lowest tide. The flats have undergone many changes since our first visit in 2009. When we first surveyed Beipu, we could only drive to the end of the seawall from the Nanpu / Beipu creek and the road was a 'dead-end'. Now with the reclamation of more mudflat area, there is a road that allows us to continue on and round to the area we call 'North Beipu'. The scanning we do at this site is on shrimp ponds where birds roost and feed. This site only seems to have birds there from about mid-May onwards. There is possibly no suitable food before then.

During our field work in 2009 and 2010 we were regularly scanning at Beipu with thousands, or tens of thousands of Red Knots frequenting the site. However, soon after our field work season finished in 2010, work started. This was the 'usual' method of many large industrial mud-pumping ships, pumping mud out of the mudflats and over the seawall in to the adjacent salt ponds. So it damages two shorebird habitats in the one process. The mud is extracted to a depth of 15m. This brings up anaerobic sediments. The heavy sediments settle and remain in the ponds while the finer sediment and water run back out of sluice gates placed in the seawall for this purpose. As the fine black water and sediments run back over the mudflats we think they smother it and cause and the benthos to 'suffocate'. This is what we saw happen at our southern-most study site of Zuidong. Luckily for the birds (and our studies!) there was a commercial dispute and the destruction stopped after a year and only about 25% of the Beipu stretch of mudflats had some pumping done on it. However, the run-off of the fine anaerobic sediments covered a far greater area and in 2011, 2012 and 2013 shorebirds were only found in very small numbers there. In 2014 occasionally we saw medium sized flocks there, but we did very little scanning at the site.

This year on May 20 this all changed rather dramatically. On May 20 we looked across onto the mudflats of Beipu from the Nanpu / Beipu Creek (as we always do but never really expect to see much) but there in the distance we saw thousands of Red Knots feeding on the mud.

Will they be there the next day? Would they turn up as soon as the tide recedes? Do we put all three scanners in this area and risk missing out on Nanpu (which we know will have birds)? We have learnt over the years at this study site that when something is just right for birds, in terms of tide, wind and light conditions on the coast, or water depth and wind in the ponds, it rarely lasts so it was decided to risk

all three scanners. A 3am alarm start so we would arrive just as the mud was exposed on an out- going tide. At the seawall we split up and positioned ourselves where we thought the birds would land. The wind was light and the sun was just lifting through the smog as the mud became exposed. Then came the birds and the gamble had paid off. The birds landed right in front of all three of the chosen positions and we 'cleaned up'. It was our biggest day for the season with no less than 84 different Broome colour-banded Red Knots being recorded that morning.

It has taken a few years for the Beipu mudflat to be suitable for birds again, but this season shows it can really be great. It would seem mudflat habitat can cope with small amounts of change and rehabilitate itself to a degree. However, it was only luck that saw the development at Beipu stop and if it had gone under concrete we wouldn't have this story to tell. However, as with all our sites there is still no protection for this area and each year we visit, we are unsure if this habitat will exist. Further north, adjacent to Beipu a 2sq km area of mudflat is currently being destroyed for aquaculture ponds.

As regular readers know our main target when we are here is to collect sightings of colour-banded birds from NWA, but we don't allow any flag or band to go past our telescopes un-recorded. It is too good an opportunity to collect data for other banding studies throughout the EAAF.

This was our best ever season for records from the GFN colour marking project in NWA, total sightings (1,221) and individuals (437), remarkable when these birds are caught and marked 6,400km away. One of the Red Knots we sighted is a minimum of 26 years old (26+). It was first caught and given a metal band in Roebuck Bay, Broome on October 10,1992 when it was already a minimum age of 3 (3+). It was then re-trapped on September 16, 2007, then a minimum age of 18 (18+) and given the colour-bands combination 1RLLB. It has been seen twice this season here on the Nanpu mudflats. This is the oldest Red Knot known to us in Australia.

And in addition to the colour-bands we have recorded 3,264 flags and bands for other projects!

It is now time for us to leave the Luannan Coast for another year. We hope to be back again next year (if funding can be found) to follow the fate of the enormous numbers of migratory shorebirds that flow through here each spring season.

NOT SHOREBIRDS

Every day during our field work season we keep a daily log of all birds seen and it is great to see the data on this building up. Most birds we record are migrants like the Red Knots and they are heading north to breed. This season we have recorded 208 species during our two month visit. Despite this being our seventh year we still are seeing species we have not recorded before. Take the White-shouldered Starling for example. This is a species that breeds in Vietnam south and south-east China and spends the winter in Taiwan and south-east Asia, but this individual had strayed well over 1,000km north to our survey site in Nanpu and is a first record for the Hebei province.

White-shouldered Starling © Adrian Boyle

Some of the other interesting sightings over the past few weeks have been Indian Cuckoo, Middendorff's Grasshopper-Warbler, Azure-winged Magpie and several sightings of the endangered Yellow-breasted Buntings. Moreover, on the mudflats we have seen Chinese Egret feeding amongst the thousands of shorebirds.

Chinese Egret, endangered species only recorded once or twice a season. © Adrian Boyle

Thanks to everyone who has assisted us this season. And particular thanks to Leiming who is a constant help to us day in and day out, thanks Leiming.