Meet our shorebirds on the slippery slope to extinction

May 2015

BirdLife Australia's Threatened Species Committee recommends uplisting the EPBC Act status of the following shorebirds, based on a detailed analysis of shorebird monitoring data collected by BirdLife volunteers around Australia over the last 30 years.

Eastern Curlew *Numenius madagascariensis*

Uplist from Vulnerable to Critically Endangered. This species has suffered an 81.7% population decline over the last three generations, with an annual rate of decline of 5.8%.

Figure 1 - Eastern Curlew, photo by Dean Ingwersen

The Eastern Curlew is the largest of the shorebirds that spends the non-breeding period in Australia. It can be easily recognised by its long, prominent, down-curved bill. It occurs on coasts, usually on tidal flats or in saltmarsh. They are particularly wary birds and usually the first to be flushed by human disturbance. This majestic bird uses its long bill to locate prey up to 20cm below the surface of the mudflat.

Through banding studies, satellite transmitters and a geolocator program, we know that this is one of the earliest of the migratory shorebirds to depart for the breeding grounds in Far East Russia. It leaves on its northward journey in early March, and returns in early August.

Geolocator studies have shown that this bird makes a non-stop, 7-day flight of 8,500 km from southern Victoria (Inverloch) to the northern Yellow Sea, where it must refuel to enable it to complete the journey and commence breeding.

The rapid population decline of this species is due to habitat loss, largely through land reclamation in the Yellow Sea. These declines are predicted to continue into the future as more of these developments occur.

Figure 2 - Curlew Sandpiper, photo by Dan Weller

Curlew Sandpiper *Calidris ferruginea*

Uplist from Endangered (Vulnerable) to Critically Endangered. This species has suffered an 80.5% population decline over the last three generations, with an annual rate of decline of 7.5%.

The Curlew Sandpiper congregates in large flocks, sometimes comprising thousands of birds, at sheltered intertidal mudflats and on the muddy margins of terrestrial wetlands. Mostly found in the far south-east and north-west

birdlife AUSTRALIA

of Australia, its breeding habitat is the lowland tundra of Siberia.

As with other shorebird species, Curlew Sandpiper is threatened by land reclamation projects in the Yellow Sea. A detailed analysis of New South Wales count data indicates that the average maximum Curlew Sandpiper population during 2001-10 decade 23 % less than that in 1981-90.

Great Knot *Calidris tenuirostris*

Uplist from Vulnerable to Endangered. This species has suffered a 77.8% population decline over the last three generations, with an annual rate of decline of 7.1%.

Figure 2 - Great Knot, photo by Duade Paton

The Great Knot is a medium sized shorebird that sometimes forms large flocks along intertidal mudflats and sandflats, where they feed on invertebrates. Feeding is particularly important in the lead-up to migration, with the energy gained vital for the long flight back to breeding grounds in Siberia.

It makes few stops - some birds may fly as much as 9,000 km between stopover sites in a single flight!

It has suffered massive population declines due to the reclamation and redevelopment of vital stopover grounds in East Asia. The reclamation of South Korea's Saemangeum wetland - which previously held up to 20-30% of the global population - led to the death of 90,000 individual birds.

Future proposed reclamation projects in the Yellow Sea may prove fatal for these great long-distance migrant.

Bar-tailed Godwit *Limosa menzbieri*

Uplist from Vulnerable to Endangered. This species has suffered a 79.1% population decline over the last three generations, with an annual rate of decline of 6.1%.

Figure 3 - Bar-tailed Godwit, photo by Dan Weller

This large, graceful wader can be found in coastal habitats around Australia, including estuarine mudflats, beaches and mangroves.

Bar-tailed Godwits arrive in Australia each year in August from breeding grounds in Scandinavia, northern Asia and Alaska. They are social birds and are often seen in large flocks and in the company of other waders.

Although this species is widespread and has a large global population, its numbers have declined rapidly in parts of its range owing to changes in agricultural practices. Overall, the global population is estimated to be declining at such a rate that the species is classified as Near Threatened by the IUCN.

Red Knot *Calidris canutus piersmani and rogersi*

Uplist from Vulnerable to Endangered. This species has suffered a 57.4% population decline over the last three generations, with an annual rate of decline of 4.4%.

Figure 5 - Red Knot, photo by Dan Weller

If you see a Red Knot in the middle of the Australian summer (pictured) you may wonder about its name. B But by the time its ready to begin its long migration from Australia to the Yellow Sea and its Siberian breeding grounds, its chestnut-red breeding plumage would help you understand!

The Red Knot specialises in feeding on mudflats. It has a remarkable bill tip with special sensory capability which enables it to 'know' a tasty mollusc is in the mud even before it's touched the mollusc's shell. Once the mollusc is extracted from the mud, the knot swallows it whole and uses its muscular stomach (gizzard) to break the shell and enable it to digest to the meat. However, this means that the Red Knot is particularly reliant on healthy mudflats with an abundance of thin-shelled bivalves — and around the world there are not many of these available.

Areas that are suitable for the Red Knots of the East Asian–Australasian Flyway (EAAF) have been disappearing under concrete and factories as the Chinese and South Korean economies have boomed over the past two decades. This is now a serious situation which is difficult to control.

Recent studies with geolocators and satellite transmitters have led us to question whether this is the whole story. For example, it seems the birds may stop off on their way to China, possibly on the east coast of Borneo. There are plenty of questions that need to be answered about this wonderful bird, particularly on its migration strategy.

Terek Sandpiper *Xenus cinereus*

Uplist from Least Concern to Vulnerable. This species has suffered a 34.2% population decline over the last three generations, with an annual rate of decline of 2.3%.

Figure 6 - Terek Sandpiper, photo by Andrew Silcocks

The Terek Sandpiper is a small dumpy sandpiper with short orange legs. Its bill is more up-turned than the bill of all other waders except the avocet.

They are busy feeders - walking briskly with their heads lowered, often changing direction and suddenly stopping and starting, they forage by chasing mobile prey on the surface of wet mud.

Terek Sandpipers breed in marshland in valleys in the northern forests and Arctic tundra, often with other waders.

In China and South Korea important migration staging areas of this species around the coast of the Yellow Sea are being lost and degraded through land reclamation, declining river flows, pollution, and unsustainable harvesting.

Red-necked Stint *Calidris ruficollis*

Uplist from Least Concern to Vulnerable. This species has suffered a 29.1% population decline over the last three generations, with an annual decline rate of of 1.6%.

Figure 7 - Red-necked Stint, photo by Dan Weller

This is the smallest and most abundant of the shorebirds that migrate to Australia. It can be found in large numbers in most coastal areas. Considering its size, this species performs one of the most amazing migrations of all.

During the non-breeding season in Australia (October to April) it weighs around 30 grams — the weight of two 50-cent pieces! Before migration, it almost doubles its weight to provide fuel which will enable it to fly to the northern regions of Siberia, a distance of 11,000 km where it breeds on the tundra. This tiny bird completes a round trip of over 22,000 km each year, and might do this for 18 –20 years.

Red-necked Stint rely on migration refuelling sites in Australia, Indonesia, Malaysia, Thailand, South Korea, Russia and China. Intertidal regions in east Asia, affected by human development, pose a serious threat to the Australian population.