

**PROPOSAL FOR INCLUSION OF SPECIES ON THE APPENDICES OF THE
CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF
WILD ANIMALS**

A. PROPOSAL: To list Far Eastern Curlew *Numenius madagascariensis* on Appendix I

B. PROPONENT: Government of the Philippines

C. SUPPORTING STATEMENT

1. Taxon

- 1.1 Class** : Aves
1.2 Order : Charadriiformes
1.3 Family : Scolopacidae
1.4 Species : *Numenius madagascariensis*
1.5 Common names : Far Eastern Curlew, Eastern Curlew, Courlis de Sibérie,
 Zarapito Siberiano

2. Biological data

The Far Eastern Curlew is the largest wader in the world. Its very large size (63cm) and very long bill (19cm) distinguish it from other similar species (BirdLife International, 2011).

2.1 Distribution

Despite its scientific name, *Numenius madagascariensis* is not known from Madagascar, but is Asian/Australasian in its distribution. It is a long distance migrant that breeds in eastern **Russia**, from the upper reaches of the Nizhnyaya Tunguska river east through the Verkhoyansk mountains to Kamchatka, and south to Primorye and north-eastern **Mongolia** (del Hoyo *et al.* 1996). Its breeding range is estimated as 727,000 km².

The Yellow Sea of **North Korea**, **South Korea** and **China** is a particularly important stopover site on migration. It has also been recorded as a non-breeding visitor to **Japan**, **Brunei**, **Bangladesh**, **Thailand**, **Vietnam**, **Philippines**, **Malaysia** and **Singapore**. It winters in coastal East Asia, mostly in **Australia**, but also in **China**, **Indonesia**, **Papua New Guinea** and **New Zealand**. (For other Range States, see 5 below.) Its non-breeding range is estimated as 1,450,000 km².

In the Philippines, the species is a regular migrant, and is known to have wintered on the islands of Bohol, Cebu and Negros (du Pont, 1971). The most important staging site in the country is considered to be Olango Island Wildlife Sanctuary, a Ramsar site.

2.2 Population

The global population (which has no infraspecific taxa) has been estimated at 38,000 individuals (Wetlands International, 2006). Although this estimate is currently retained,

subsequently documented declines mean that the true population size is likely to be smaller. The bulk of the population - 28,000 birds - winter in Australia (Bamford *et al.* 2008), with an additional 5,000 in Indonesia, 3,000 in China and 2,000 in Papua New Guinea (Australian Government, 2011).

Barter (2002) estimated that 31,500 birds (83% of the world population) stage in the Yellow Sea on northward migration. The population at the very important staging site, Saemangeum, in the South Korean Yellow Sea, has decreased by 32.6% (c 1,800 birds) between 2006 and 2008, due to the reclamation of tidal flats (N. Moores *et al. in litt.* 2008).

Counts collected in Australia since the late 1970s, collated in the National Shorebird Database at Birds Australia, estimate a decline in wintering birds across 49 Australian sites of 40 per cent between c1983 and c2007. Declines are especially severe along the south coast where the species has disappeared or become rarer at many sites (e.g. Reid & Park 2003; Gosbell & Clemens 2006). Significant declines have also been demonstrated in Moreton Bay, south-east Queensland (Wilson *et al.* 2011). It is possible that declines are less severe in northern Australia, though this may reflect lack of data, and there is nevertheless evidence of declines in north-western Australia (Rogers *et al.* 2009; Australian Wader Study Group database: Birds Australia *in litt.* 2011). A recent survey of significant coastal wetlands in northern and north-eastern Australia conducted for the Commonwealth Department of the Environment, Water, Sustainability, Communities and Population found no evidence that Far Eastern Curlew have shifted their wintering grounds in Australia (R. Chatto, *pers. comm.*).

There has been a fairly steady decline in Far Eastern Curlew numbers in New Zealand since the early 1980s, with an apparent acceleration in the decline since 2004; formerly about 20 birds wintered there but now fewer than five do so (R. Schuckard, Ornithological Society of New Zealand, *pers. comm.*).

Numbers may have declined less severely at some other places on the flyway, e.g. count data from the small population in Japan between 1978 and 2008 suggested that declines had occurred, but the result was not statistically significant (Amano *et al.* 2010).

In 2010 this species was uplisted to Vulnerable on the IUCN Red List owing to the past, recent and ongoing rapid population decline of 30-49 per cent in three generations (30 years), based on survey data and habitat loss.

Given that more reclamation is proposed within the Yellow Sea, and with widespread threats elsewhere on the flyway, it seems probable that decline as a result of the loss of feeding and resting habitat will continue. The species may qualify for Endangered status if the whole population is set to decline by >50 per cent in 30 years, as suggested by some of the above data.

2.3 Habitat

The species breeds on open mossy or transitional bogs, moss-lichen bogs and wet meadows, and on the swampy shores of small lakes. In the non-breeding season it is essentially coastal, foraging on intertidal flats, particularly those with extensive seagrass (*Zosteraceae*) meadows, where the birds feed on marine invertebrates, especially crabs, shrimps and small molluscs (del Hoyo *et al.* 1996; Higgins and Davies 1996). It roosts in salt-marshes, behind mangroves, and on sandy beaches.

2.4 Migrations

For geographical extent of the migrations, see Section 2.1. The species moves according to the classic pattern of long-distance migratory shorebirds, using regular staging posts along its migration route.

Birds arrive on the breeding grounds from early May, and depart by July.

They then move down the Russian coast, through Korea, Japan, Philippines, Sumatra (Indonesia) and Borneo (Indonesia), with fewer birds being recorded in China and Papua New Guinea. In the autumn lower numbers appear in continental Asia and higher numbers in Japan.

Birds winter in several countries (see Section 2.1) but mostly in Australia where they arrive in late August, with some moving further south and arriving in southern Australia by November. It is believed that, in Australia, females have a tendency to migrate further south than males. Northward migration begins in February in the south, with birds leaving Australia in April. On the northward migration, more birds appear in continental Asia than in Japan. The Yellow Sea appears to be the major staging area.

3. **Threat data**

The rapid population decline of this species is suspected to have been driven mainly by habitat loss and deterioration (see 3.2 below). Further proposed reclamation projects are predicted to cause additional declines in the future.

3.1 Direct threats

On migration and on its wintering grounds, the bird occurs in habitats that are used, often intensively, by people. Disturbance while birds are attempting to feed and roost, may well exert pressure on populations while they are present at such sites (e.g. at wintering sites in eastern and southern Australia).

3.2 Habitat destruction

Habitat loss is probably the primary threat to the species. It is especially threatened by wetland degradation of Yellow Sea staging sites (Bamford *et al.* 2008; van de Kam *et al.* 2010). Threats include reduced river flows, reclamation for tidal power plants and barrages, industrial use and urban expansion (Barter 2002; Kelin and Qiang 2006; Moores 2006).

A decrease in the availability of food due to the pollution of wetlands, particularly at stopover points that lie adjacent to major industrial and infrastructural development, such as in China and South Korea, may also be a factor.

In Australia, especially eastern and southern Australia, the species is also threatened by disturbance, habitat loss, degradation from pollution, changes to the water regime and invasive plants (Australian Government 2009). The tendency of females to migrate further south in Australia than males may subject them to increased pressure, owing to the more developed nature of the southern part of the country.

3.3 Indirect threats

The effects of climate change, in particular changes in water levels at wetlands, may have an effect on this species, but this has not been measured. In common with other northern nesting species, breeding populations may face significant effects from the melting of permafrost and other results of climate change.

3.4 Threats connected especially with migrations

In common with many other migratory shorebird species, the ability to find sufficient food at a fixed series of traditional staging posts is crucial to replenish energy for the next stage of the journey. The loss of, and damage to, these sites is likely to result in birds being unable to sustain themselves for the journey, and either not to arrive at the breeding grounds at all, or to arrive late and/or in sub-optimal condition for breeding.

3.5 National and international utilisation

Hunting takes place throughout its range (Barter *et al.* 1997). There is a risk of lack of discrimination by hunters between it and another shorebird, the closely related, but smaller and much more common, Whimbrel *Numenius phaeopus*.

4. **Protection status and needs**

4.1 National protection status

Little information is published internationally on this subject, or on the enforcement of laws where they do exist. It is hoped that Range States will be able to provide more information on this subject.

4.2 International protection status

The species is recognised as being of Vulnerable status according to the IUCN Red List. It is listed on CMS Appendix II.

4.3 Additional protection needs

- Surveying to identify further key staging posts, and to continue to monitor population numbers and trends.
- Improved understanding is required of dependence on key migratory staging sites in Asia.
- Improved understanding is required on the impacts of disturbance, for instance in Australia.
- Preventing habitat destruction and damage at key migratory staging sites is vital, in particular to protect the remaining tidal flats in the Yellow Sea.
- Maintaining and improving protection of roosting and feeding sites, including, for instance, on the Australian wintering grounds.
- Restoring reclaimed wetland sites.
- Legally protecting the species in all Range States, drawing the attention of hunters to the issue of look-alike species.
- Surveying the breeding grounds for potential threats, including those likely to result from climate change.

Countries where this species has triggered the criteria for Important Bird Areas, as identified by BirdLife International, include Australia (14 sites), China (2 sites), Indonesia (1 site), Malaysia (3 sites), North Korea (6 sites), Philippines (1 site), Russia (2 sites) and South Korea (6 sites). These sites particularly merit legal protection.

5. Range States¹

AUSTRALIA, BANGLADESH, Brunei, China, Fiji, Guam (to USA), Indonesia, Japan, Malaysia, Micronesia, MONGOLIA, NEW ZEALAND, North Korea, Northern Mariana Islands (to USA), PALAU, Papua New Guinea, PHILIPPINES, Russian Federation, Singapore, South Korea, Thailand, Timor-Leste, Vietnam. It has also been recorded as a vagrant in IRAN and Oman.

6. Comments from Range States

7. Additional remarks

8. References:

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¹ CMS Parties are shown in capital letters.

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