



2017 APPLICATION FORM

Small Grants Fund for Working Groups & Task Forces

PERSONAL DETAILS

Title: _____
Moore's _____ Nial _____
Family name **Given Name/s**

Institution: _____
Birds Korea/새와 생명의 터

PROJECT DETAILS

Project Title: Research on Far Eastern Curlew at Yubu island

Part A. Project Proposal

Project Rationale

The Far Eastern Curlew *Numenius madagascariensis* is endemic to the East Asian-Australasian Flyway (EAAF) with a global population estimate of 32,000 (Wetlands International 2017). The species is currently listed as Endangered by BirdLife International on behalf of the IUCN because “it is undergoing a very rapid population decline which is suspected to have been primarily driven by habitat loss and deterioration in the Yellow Sea region” (BirdLife International 2017). The species is therefore the focus of a dedicated EAAF Partnership Task Force and a Single Species Action Plan which identifies five main actions, including managing remaining sites; monitoring the species’ population trend; and determining key demographic parameters to support population modelling (EAAFP 2017).

Birds Korea is a specialised, legally-registered South Korean bird conservation NGO which has actively contributed to the work of the East Asian-Australasian Flyway Partnership (EAAFP) since its foundation, e.g. contributing to Single Species Action Plans for Scaly-sided Merganser, Baer’s Pochard, Spoon-billed Sandpiper and Far Eastern Curlew,

Between June 19 and 25 2017, Birds Korea counted shorebirds at several key sites on both the west and south coasts of the Republic of Korea (ROK). We found a total of 3,400 Far Eastern Curlew *Numenius madagascariensis*, with 2,200 of these in the Geum Estuary, including 1,390 on Yubu Island, on June 24, representing ~5% of the estimated total population of the species.

There are difficulties in interpreting this count. As noted on page 7 of EAAFP (2017), “During the boreal summer considerable numbers of non-breeding, presumed immature, Far Eastern Curlews occur in the northern Yellow Sea and Bohai (Q.Q. Bai unpublished; N. Moore’s unpublished).” However, the species is difficult to age; can only be sexed in the field based on bill length; and there has been very little research on shorebirds in the ROK during June and July. The only published counts for mid-June on Yubu Island available to us are from June 2000, when Lee et al. (2002) counted more than 1,010 there. The increase of individuals counted between 2000 and 2017, set against a strong annual rate of population decline, raises multiple questions: were the birds we counted adults that had suspended migration? Were they early-returning breeders (considered more likely in this species to be females: per D. Rogers in lit. June 2017) or failed breeders? Or were they immatures that are spending the boreal summer in the Yellow Sea? Or were they a combination of age classes? Ongoing research on the species in Yalu Jiang, China, already includes

examination of moult (Q.Q. Bai unpublished) – leading to the identification of two populations with a different moult strategy, possibly related to their use of different non-breeding areas (EAAFP 2017)- and feeding ecology. Similar research now conducted in the ROK during the boreal summer and the early part of southward migration in 2017 would help contribute to ongoing conservation plans for Yubu Island led by BirdLife International and partners, and the implementation of the EAAFP's Action Plan for the Far Eastern Curlew through improving understanding of the species' migration strategy and ecological requirements (helping to inform management decisions for the species at this and other sites) and with the better interpretation of count data.

Objectives

Birds Korea proposes to conduct research on Far Eastern Curlew for ~10 days at Yubu Island in late July and in August 2017 in order:

- (a) To determine the sex and age structure of the population based on bill length, plumage and moult, and whether the proportions changes during the southward migration period in order to better understand site use and to estimate turnover;
- (b) To identify main prey items taken by Far Eastern Curlew on Yubu Island during the boreal summer/early autumn;
- c) To help support the ongoing initiative led by BirdLife International for the conservation of Yubu Island and the wider Geum Estuary by providing research findings and results to lead organisations.

Methods (in brief)

Daily counts of birds; daily taking of images of birds to help determine relative bill lengths, moult score and age; video recording of feeding to help in the identification of prey items and to help with subsequent analysis of intake rate; and if support can be found from relevant institutions within the ROK, the collection of droppings / pellets for subsequent analysis. All such fieldwork and subsequent analysis to be conducted with the advice and support of specialists and coordinated with BirdLife International Geum Estuary Project.

Use of the Results

The results will be collated, analysed and presented within four months (by end of November 2017) to the Chair of the Task Force and to the EAAFP Secretariat, for distribution to Partners and interested parties, including the BirdLife International Geum Project team. A summary will also be presented on Birds Korea's websites.

Literature Cited

- EAAFP. 2017. East Asian-Australasian Flyway Partnership International Single Species Action Plan for the conservation of Far Eastern Curlew (*Numenius madagascariensis*). As adopted by the 9th Meeting of Partners, Singapore, 11-15 January 2017.
- Lee H-S., Yi J-Y., Kim H-C, Lee S-W. & Paek W-K. 2002. Yubu Island, the Important Waterbird Habitat on the West Coast of Korea and Its Conservation. *Ocean and Polar Research*. Vol 24(1): 115-121.
- Wetlands International. 2017. "Waterbird Population Estimates". Retrieved from wpe.wetlands.org on Tuesday 27 Jun 2017

PROJECT BUDGET (please outline your entire project, not just the component for which funds are being sought)

Budget

A budget of 1,350 USD (1,550,000 Korean won) is being sought for: 10 days fieldwork in July and August 2017; and the provision of a concise report to the EAAF Partnership, containing all counts and detailing key findings. The budget is required to cover essential costs of transport, accommodation, food and to compensate for time.

PAYMENT DETAILS

To ensure prompt payment of successful applications please complete the following details and submit with your application.

PREFERRED PAYMENT METHOD

<p>Electronic funds transfer (EFT)</p>
