

Saving the Spoon-billed Sandpiper – finding and protecting unknown sites

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The Spoon-billed Sandpiper is Critically Endangered on the World Conservation Union's Red List. In 2010, it was thought the species numbered no more than 100 pairs, was declining at a rate of 26% a year, and could be extinct within 10 years if urgent conservation action was not taken. The international conservation community swung into action. Saving this enigmatic species could act as a flagship for saving the 50 million waterbirds that use the East Asian–Australasian Flyway – the most important and most endangered flyway in the world.

We don't know where most spoon-billed sandpipers breed and or where many winter. In autumn 2016, we therefore began working with Microwave Telemetry Inc. to try to locate these "missing" sites. Twelve 2g solar -powered PTT-100/5/ZE tags were fitted to Spoon-billed Sandpipers – glued to the birds' backs, the tags were designed to fall off when the birds underwent their annual body moults. Six tags were fitted in China and six in Russia, leading us to new staging, wintering and breeding sites, including only the second known autumn moult site in the DMZ of North Korea. We confirmed that birds migrating to Thailand, Myanmar and Bangladesh do so overland, and have addressed the threat of illegal mist netting at sites in southern China with local conservationists informing Chinese authorities who removed the nets – direct and immediate on-the-ground action. Sites on the Yellow Sea coast of China have recently been designated as World Heritage Sites, including the most important staging site for Spoon-billed Sandpiper – Tiaozini in Jiangsu province – which was included after tagging data had confirmed its importance. In autumn 2019, we fitted another four tags to Spoon-billed Sandpipers at Tiaozini to try to locate more of their missing staging and wintering sites.

We will present the results of a cluster analysis to identify the sites, known and unknown, used by satellite tagged Spoon-billed Sandpipers through their annual cycle.

Theme: Conservation Management]
Preferred Option: Oral Presentation

The potential and pitfalls of headstarting as a conservation tool for shorebirds

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Headstarting is a conservation technique in which young animals are raised artificially and subsequently released into the wild. The technique is most suited to species that experience high mortality during early, growth stages in the wild, and is most powerful for small populations where the number of animals released can have a significant impact on the overall productivity of the population. Headstarting can be used 1) to accelerate the recovery of a population after the causes of decline have been addressed, 2) to maintain a threatened population while the causes of decline are being addressed, or 3) as a cost-effective alternative to more traditional reintroduction techniques, avoiding the need to release captive-bred animals. The technique has been used for reptiles and amphibians for decades (with varying success), but is a relatively new concept in the field of bird conservation. Although headstarting has the potential to play an important role in bird conservation, for long-term viability, it should only be conducted as part of a wider conservation effort. In particular, headstarting requires integration with habitat management and restoration efforts, and coordination between organizations with the relevant *ex situ* and *in situ* expertise. The Wildfowl & Wetlands Trust has been headstarting shorebirds since 2012 and is currently involved in projects for three species – spoon-billed sandpiper, black-tailed godwit and Eurasian curlew. We will provide more details on our experience implementing headstarting for shorebird populations, including determining when it's appropriate, setting goals, managing risks and assembling a multi-disciplinary team.

Theme: Conservation Management

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Distribution and abundance of Nordmann's Greenshank *Tringa guttifer* within the breeding range

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The Nordmann's Greenshank *Tringa guttifer* (Nordmann, 1835) is listed as «Endangered» in the IUCN Red List of Threatened Species because of its small and declining population (BirdLife International 2020). Based on counts at migration sites, the population number is estimated at only 600 to 1300 individuals. The last review of the distribution and abundance of Nordmann's Greenshank on the wintering grounds has greatly increased the knowledge about this rare species of birds (Zöckler et al. 2018). Nordmann's Greenshank is a nesting endemic of Russia. The modern breeding range is represented in the form of isolated areas on the mainland Northern and Western coasts of the Sea of Okhotsk and in the Nevelsky Strait (Sea of Japan), as well as on the Eastern and Western coasts of Northern Sakhalin. Over the entire period of ornithological research within the breeding range, various researchers have identified 26 sites where Nordmann's Greenshank was presumably nesting. One site is located in the Magadan Region, 13 in the Khabarovsk territory, and 12 on Sakhalin Island. Due to the inaccessibility of habitats, many of them were examined only once. No complete, systematic counts have been conducted on the breeding grounds. For this report we used the distribution and abundance data of Nordmann's Greenshank, which we collected from 1989 to 2018 in nesting areas, a significant part of which has not yet been accessible to English-speaking researchers. In addition, we used literary sources known to us.

Theme: Conservation Management

Preferred Option: Oral Presentation

Preliminary results from a breeding ecology study on Nordmann's Greenshanks (*Tringa guttifer*) in Schaste Bay, Sea of Okhotsk (Russia)

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The Nordmann's Greenshank is one of the rarest shorebirds throughout the East Asian-Australasian Flyway (EAAF), and the world. Based on surveys conducted along stopover sites and wintering grounds, the most optimistic population estimates are between 600-1300 individuals. The species is a breeding endemic of coastal environments along the Sea of Okhotsk. V. A. Nechaev collected some of the only breeding biology data in 1976, when he discovered five nests near the mouth of the Evai River (Chayvo Bay) on the north-east coast of Sakhalin Island. Little additional breeding information is available on the species, although non-systematic surveys reveal a marked contraction in breeding range over the last half century.

In 2018 and 2019, we conducted the first phase of a Nordmann's Greenshank study in Schaste Bay, a study that is critical to protecting the species from extinction. We conducted surveys of brood rearing habitats along several sections of coastal Schaste Bay, and estimated the total number of breeding pairs at 28. We believe Schaste Bay should be listed as a site of international importance for supporting >1% of the world's Nordmann's Greenshank population. In 2019, we found a Nordmann's Greenshank nest for the first time on the mainland, and only the sixth ever. We recorded detailed descriptions of nest-site parameters and nesting habitat. We also developed two methods for trapping adult birds during the brood rearing stage, subsequently capturing and banding seven adults and eight chicks. After the 2019 summer field season, observers recorded four of our banded birds at Tiaozini – a section of the Yancheng Wetland Reserve along the coast of the Yellow Sea that was recently established as a World Heritage Site. We plan to revisit our breeding site in 2020 to collect more data on breeding and migration ecology. We will also discuss expanding an existing Russian-based Nordmann's Greenshank taskforce to the rest of the EAAF, perhaps within the EAAF Partnership.

Theme: Breeding Ecology

Preferred Option: Oral Presentation