

Abundance and status of migratory water birds on Mandaitivu and adjacent areas in Jaffna, Sri Lanka

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Migratory water birds are regularly present in the Jaffna peninsula from September to April. Previous studies on the status of migratory bird species in Jaffna are virtually lacking, mostly due to the insecurity of the area for three decades. As some of these species are rare and endangered, proper scientific studies are essential for their conservation. The objective of the present study was to evaluate the status of migratory water bird species on Mandaitivu and adjacent areas (i.e. Allaipiddy and Mankumban) in Jaffna. The study was carried out during three consecutive migratory seasons (September 2013 - April 2014; September 2014 - April 2015; September 2015 - April 2016). We used point counts for assessing abundance of birds. Each counting station was separated from the next by at least 250 m, to prevent double-counting. Binoculars (8 × 40) and a spotting scope (25 × 50) were used to observe birds. Peak counting hours were from 0630-1000 h and 1530-1800 h. Each count lasted for about 20 minutes. Each site was visited multiple times throughout the study period to allow for replication.

Thirty two migratory water bird species in seven families were recorded from Mandaitivu, including one very rare and 10 uncommon/rare winter migrants. It is significant that the Greater Flamingo (*Phoenicopterus roseus*), an uncommon winter migrant, had the highest individual count (612) of any migratory bird species on Mandaitivu. From Allaipiddy, 21 migratory water bird species in five families, including one very rare and five uncommon/rare winter migrants, were recorded. The Bar-tailed Godwit (*Limosa lapponica*), a rare winter migrant, had the highest count of any migratory bird (1053) in the area. Eighteen migratory waterbird species in five families, including one very rare and four uncommon/rare winter migrants, were recorded from Mankumban. The Eurasian Wigeon (*Anas penelope*) and Brown-headed Gull (*Chroicocephalus brunnicephalus*) had the highest individual counts (4399 and 2102 respectively) of any migratory bird species in Mankumban. Of these, the Wigeon has been recorded very rarely until a few decades ago. Of the three sites, Mandaitivu showed the highest migratory water bird diversity with a Shannon Index of 2.48, while Mankumban ranked second with a Shannon Index of 1.25. Allaipiddy showed the lowest diversity (Shannon Index 0.971). Given the very high relative abundance of rare or uncommon migratory water bird species, we recommend that the wetlands in these areas be declared as internationally important waterfowl habitats.