



Birds New Zealand

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MEDIA RELEASE:

New Zealand Bird Data highlights vital importance of Yellow Sea tidal flats for migrant shorebirds

Populations of iconic birds that spend most of the year in New Zealand and Australia have been declining for decades, despite conservation efforts. A new study has revealed a major hurdle far from the birds' Australasian habitat—a problem that can't be solved through science alone.

Data collected by volunteers all around New Zealand and Australia has been an integral part of the study. Mr David Lawrie President of Birds NZ said "The work that led to this result started over 40 years ago, when people had the vision and anticipated the need to count birds across New Zealand and Australia. "It's only that prescience that allowed us to answer this really important question." Mr Lawrie personally has been contributing counts to this data set since 1964.

"Birds New Zealand is delighted that the hard won data from years of slogging around New Zealand's estuaries counting birds has been able to contribute to this important study" says **David Lawrie**. "The Citizen Scientists who have been undertaking the counts have seen migratory shorebird populations plummeting in New Zealand over many years.

Lead author **Dr Colin Studds** noted that in spite of the work being completed in Australasia "the thing affecting their populations is actually happening thousands of kilometers away in China and Korea."

Studds, now an Assistant Professor at the University of Maryland, Baltimore County, USA shows in a new study in *Nature Communications* that a critical factor in the shorebirds' decline is how dependent they are on mudflats in the Yellow Sea, between China and Korea, during migration.

The shorebirds, including species such as Bar-tailed Godwit, Far Eastern Curlew, and Red Knot, are "cultural keystones" in Asia, says Studds. "They're so visible they help people understand biodiversity loss, which in this case happens across borders."

Many of the birds follow a migratory path from their non-breeding grounds in New Zealand and Australia to breeding sites in the Arctic, via rest stops in the Yellow Sea—a corridor known as the East Asian Australasian Flyway (EAAF).

"These birds spend several weeks refueling before they continue their migration," says Studds. Scientists have long believed that degradation in the quality of stopover sites could be related to population declines, but, Studds says, "There was no smoking gun."

Studds' new study provides one. He analyzed citizen science data collected between 1993 and 2012 on 10 key species to see if a relationship emerged between reliance on the Yellow Sea as a migration stopover and rate of population decline. What he found was dramatic. The more a species relied on the Yellow Sea mudflats, the faster it was declining. Even though the birds only spend 1-2 months of the year at the mudflats, it was the most important factor in determining the population trend, Studds found.

The birds need protection, but implementing conservation policy can prove difficult, **Dr Richard Fuller** from the University of Queensland notes. "There are multilateral agreements in place on paper"—most notably the [EAAF Partnership](#), a grouping of 36 governments and other organizations, but the pace of change on the ground is frustratingly slow," he explains.

The results of this study stress the need for international cooperation, despite these challenges. "If we're going to halt these declines and hopefully someday reverse them," he says, "it will take commitment from all the countries involved."

"Members of Birds NZ and the Pukorokoro Miranda Naturalists' Trust have been supporting survey and research work in China, especially at important migratory stopover sites" says Lawrie. "This latest study adds further impetus to both us and our Chinese colleagues. A recent announcement by the Chinese Government of a list of 14 sites for detailed investigation for World Heritage Status is an indication of the commitment of the Chinese government, to take action to safeguard these stopover sites so that the miracle of migration can continue for generations to come"

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