

Australia's coastal shorebirds: trends and prospects

BirdLife Australia National Shorebird Monitoring Program data have enabled population and conservation status assessments for key species. Determining why some species are doing better than others will be critical to prioritising conservation efforts for the next decade.

Coastal Australia is home to 37 regularly occurring migratory shorebird species, with many protected areas including Ramsar sites designated on the basis of shorebird populations. Many migratory shorebird species are declining rapidly, and these are the focus of conservation efforts at multiple levels of government in Australia and overseas.

A key question is whether all this conservation activity is starting to slow down the declines of the birds. With the last available migratory shorebird trend analyses dating back a decade, we thought it was time for an update. To ensure populations have the best chance of recovery and that resources are allocated where they are most likely to have the greatest positive impacts, it is critical to maintain up-to-date information on species trends.

This Marine and Coastal Hub project used 28 years of shorebird monitoring data collected by citizen science and indigenous groups from 448 important shorebird areas around Australia and curated by BirdLife Australia's National Shorebird Monitoring Program. Population trend was estimated for 14 species (see graphs on the next page). Four species were declining between 50% and 80% over their assessment period, consistent with listing as nationally Endangered. A further three were declining between 30% and 50%, warranting listing as Vulnerable (see table at right).

Encouragingly, the rate of decline for five species has slowed down in the past decade. Black-tailed godwit, curlew sandpiper, eastern curlew, grey plover and Nunivak bar-tailed godwit all declined less quickly in the most recent decade compared with the two decades prior to that. However, this effect was statistically significant only for the eastern curlew.

We stress that these slowdowns in shorebird declines do not equate to population recovery. However, trends must stop before they can reverse, and so this study presents the first evidence of multi-species improvements in the fortunes of our shorebirds. We urge a redoubling of conservation efforts in Australia and around the flyway to capitalise on this progress towards recovery.

ANNUAL GROWTH RATE, NUMBER OF YEARS AND TOTAL CHANGE IN POPULATION OVER ASSESSMENT PERIOD (THREE GENERATIONS)

Shorebird species	Assessment period (years)	Change in population
Black-tailed godwit	23	-78%
Eastern curlew	20	-64%
Common greenshank	19	-60%
Curlew sandpiper	16	-53%
Nunivak bar-tailed Godwit	25	-47%
Grey plover	23	-37%
Great knot	19	-32%
Ruddy turnstone	19	-26%
Terek sandpiper	14	-20%
Latham's snipe	10	-17%
Greater sand plover	17	-14%
Northern Siberian bar-tailed godwit	25	-6%
Red knot	21	+6%
Sharp-tailed sandpiper	15	+20%

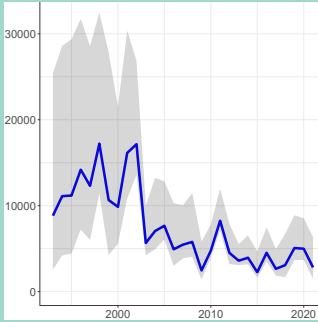


Project leader Richard Fuller of The University of Queensland presents the project results to the Meeting of Partners of the East Asian – Australasian Flyway Partnership. Twenty governments and 17 non-government organisations were represented.

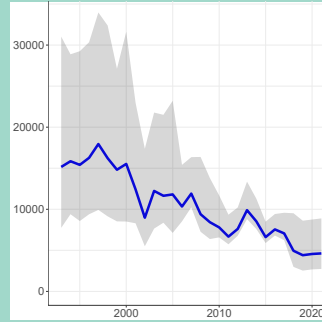
TRENDS IN TOTAL ABUNDANCE FOR SELECTED SHOREBIRD SPECIES

Species declining between 50% and 80%

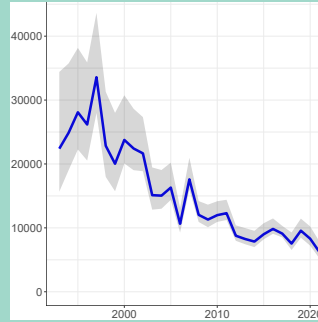
Black-tailed godwit



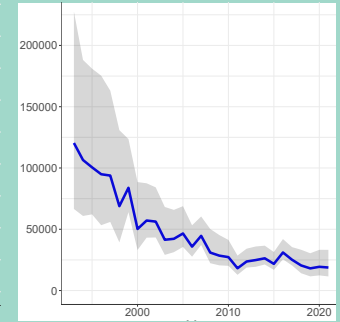
Common greenshank



Eastern curlew



Curlew sandpiper

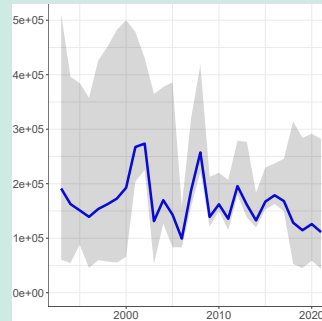


Species declining between 30% and 50%

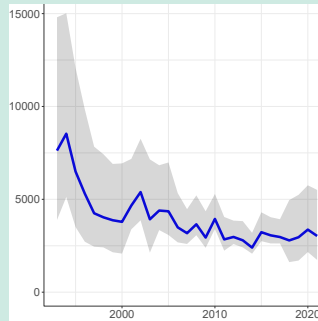
Above: Four species were declining between 50% and 80% over their assessment period, consistent with listing as nationally Endangered.

Right: Three species were declining between 30% and 50%, warranting listing as Vulnerable.

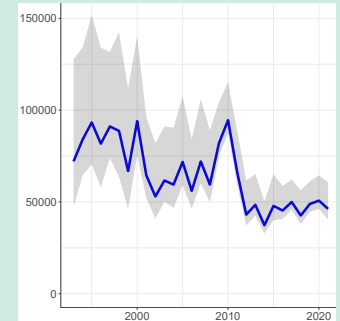
Great knot



Grey plover



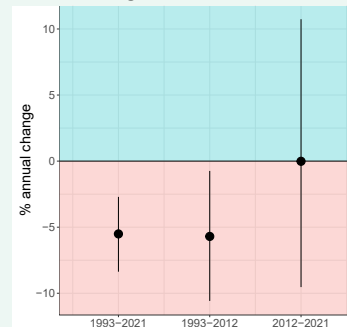
Nunivak bar-tailed godwit



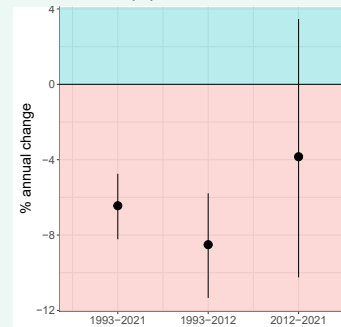
SPECIES SHOWING A SLOWING RATE OF DECLINE

Right and below: The mean percentage annual changes in total abundance over 28 years (1993–2021), between 1993 and 2012, and between 2012 and 2021. The bars indicate 95% confidence intervals: that 95 times out of 100 the estimate will fall between these upper and lower values.

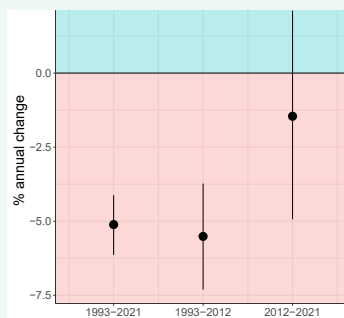
Black-tailed godwit



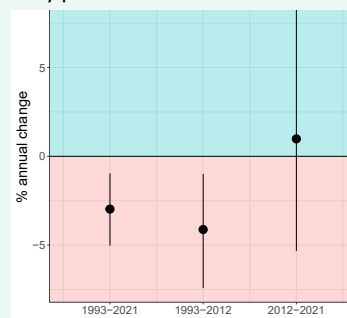
Curlew sandpiper



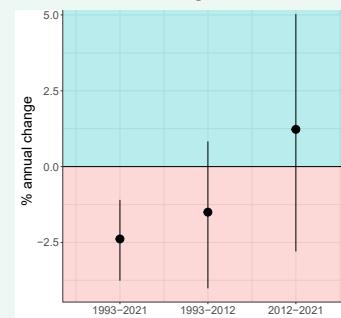
Eastern curlew



Grey plover



Nunivak bar-tailed godwit



National Environmental Science Program

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