

A baseline census of shorebirds breeding on the braided rivers of the Manawatū

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The braided rivers of the Manawatū region support nationally-significant breeding populations of several Nationally Threatened or At Risk shorebird species, including pohowera / banded dotterels, black-fronted dotterels and tarāpuka / black-billed gulls. With financial support from the Birds New Zealand Research Fund and co-funding from Horizons Regional Council, we plan to carry out the first complete census of shorebirds breeding on the rivers of the Manawatū in October and November 2024, to create a detailed baseline measure of the population size, local densities and distribution of these shorebird species.

The census will involve a team of experienced observers systematically traversing over 400 km of riverbed habitats in the Manawatū and Rangitīkei River catchments, on foot, by kayak and by raft, recording cumulative counts of all birds encountered within each 1 km section of river surveyed. All areas of unvegetated gravel, silt and mud will be intensively searched on an approximately 50 m x 50 m grid search pattern to ensure that no shorebirds are missed, and care will be taken to avoid double-counting individual shorebirds, for example by using handheld radios to coordinate counting efforts between team members. In addition to counting all shorebirds present, fieldworkers will also quantify weed cover and substrate 'coarseness' within each 1 km survey section, allowing us to examine the relationship between these habitat variables and local shorebird densities.

This survey forms part of a larger-scale programme of work aimed at creating population size and trend estimates for riverbed-nesting shorebirds on all of the braided rivers of the lower North Island. Since 2019 we have carried out similar census surveys along 292 km of braided river habitat in Hawke's Bay, and a further 211 km of riverbed habitat in the Wairarapa and Wellington regions. The completion of this Manawatū riverbed-nesting shorebird census will therefore fill the last large remaining gap in our knowledge of the number and distribution of shorebirds breeding on the braided rivers of the lower North Island.

The results of these surveys will make useful contributions towards a number of conservation management initiatives, including helping to inform future re-assessments of the National Threat Classification System rankings of several shorebird species. These results will also help Horizons Regional Council to monitor the effects of flood management activities on the shorebird populations of these Manawatū Rivers, and to target habitat management initiatives such as predator and weed control to those river reaches that support the highest shorebird densities.

