



## Black-billed gull – repeat of national census

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Black-billed gulls are endemic to Aotearoa/New Zealand, with most breeding on braided rivers in the South Island and a potentially expanding population in the North Island. Mischler (2018) reported on the results of counts conducted between 2014/15 to 2016/17, with the final year being the most comprehensive national count, and highlighted the difficulty in assessing population trends due to inaccurate historical data. The total number of breeding birds counted during the national census was higher than expected, but a key suggestion from the published paper was to repeat the survey in approximately 5-10 years for the purpose of establishing trends.

During the 2023/24 season, the census was repeated using the same methods as were used during 2016/17. This involved conducting ground searches for colonies at the early stages of the breeding season to determine the stage of breeding within each region to establish the timing of flights, ideally during late incubation or hatching to capture the highest number of breeding pairs. A fixed-wing aircraft with a camera mounted underneath was used to fly all rivers in the South Island with suitable habitat. Southland and Otago were flown on 30/31 Oct, Marlborough, Tasman, and north Canterbury were flown on 8 Nov, and Canterbury and the West Coast were flown on 10/11 Nov 2023. Severe flooding in Southland in late-September delayed breeding in the region by nearly two weeks, whereas the timing for breeding in other regions was comparable to previous years. High-resolution photographs were taken from the plane, flight tracks were logged, and precise colony locations were taken with a GPS. The North Island was surveyed on the ground by Department of Conservation staff or local Birds NZ members.

Ground counts were done for as many colonies as possible in the South Island, provided that they were of medium size in order to reduce disturbance. The ground counts were compared to the nest counts from aerial photographs, and a correction factor was calculated to adjust the aerial photograph counts. All aerial photograph nest counts were conducted by the same two observers, and the mean count for each colony only counted with aerial photographs was used for the total count after being adjusted with the correction factor. Ground counts were used for those colonies for which they were completed. Overall results show stable numbers for the South Island as a whole, with a total of 60,884 nests compared to 59,264 in 2016/17. Otago, Marlborough, and the West Coast showed declines, while Canterbury and Tasman showed an increase. Southland remained stable. The North Island showed an increase in nest numbers overall, particularly in the Auckland and Hawke's Bay regions, with an overall North Island total of 1,326 nests compared to 992 in 2016/17. The census was very successful, and it is hoped that it can be repeated for a second consecutive year during 2024/25.



Black-billed gulls with chicks in the Auckland region. Photo: T. Habraken



Black-billed gull colony in the Canterbury region. Photo: C. Mischler



Aerial photograph of a colony in Otago used for counting nests.



Ground counts of a colony in Southland. Photo: C. Mischler