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Northern Royal Albatross population estimates from the Chatham Islands

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SUMMARY

Northern Royal Albatross (*Diomedea sanfordi*) is endemic to Aotearoa New Zealand, with 99% of the population breeding on Motuhara | Forty-fours and Rangitatahi | Sisters, two groups of privately-owned islands in the Chatham Island archipelago. These remote and virtually inaccessible sites are rarely visited and thus challenging to monitor. As such, ACAP considered the confidence in the declining population trend of this species as "low".

To update population and trend estimates of this biannually breeding species, and compare them with previous estimates, aerial photographic surveys have been conducted twice yearly, when possible, since 2016: once during incubation to estimate each year's breeding cohort, and once during fledging to assess subsequent breeding success. Visits to the islands during 2016, 2017 and 2021-22 served to check on the accuracy of the aerial counts. The overall breeding population of Northern Royal Albatross was estimated by combining the corrected annual breeding cohort count with the number of successful breeders estimated the previous season, assuming that most failed breeders re-lay the following year.

The average number of Northern Royal Albatross breeding annually on the Chatham Islands during 2016-21 (n = 3 surveys) was 4228 (± 473) and the average number of chicks fledged annually during 2017-20 (n = 3 surveys) was 2103 (± 54). Combined, these estimates suggest that the breeding population of Northern Royal Albatross is around 6300 breeding pairs, albeit with large interannual variation.

Compared to population estimates in the late 1980s and mid-1990s, these results indicate that the Northern Royal Albatross population has declined by ~37% in the last ~30 years. Despite the observed interannual variation, our modern surveys suggest that the Northern Royal Albatross population trend has now largely stabilised. Nevertheless, to forewarn of any future declines, ongoing twice-yearly aerial surveys, along with periodic ground counts, when possible, are recommended.

Attachment: Frost, P. 2021. Status of Northern Royal Albatross *Diomedea sanfordi* nesting on the Chatham Islands, December 2020. Report to Marine Species Team, Department of Conservation. 23 p. <u>https://www.doc.govt.nz/our-work/conservation-services-programme/csp-reports/202021/northern-royal-albatross-aerial-population-census-chatham-islands/</u>

Attachment: Bell, M. 2022. Motuhara seabird research: field trip report January 2022. POP2021-03 final report prepared by Toroa Consulting Limited for the Conservation Services Programme, Department of Conservation. 12 p. <u>https://www.doc.govt.nz/our-work/conservation-services-programme/csp-reports/202122/chatham-islands-seabird-population-research/</u>

Attachment: Frost, P.G.H. 2022. A Census of Northern Royal Albatross nesting on the Chatham Islands, February 2022. POP2021-03 supplementary report for the Department of Conservation. 26 p. <u>https://www.doc.govt.nz/our-work/conservation-services-programme/csp-reports/202122/northern-royal-albatross-nesting-on-the-chatham-islands-february-2022/</u>

(If you can't see the Attachments panel, please download the reports separately via links above)