

Ingestion of marine debris plastic by the wedge-tailed shearwater *Ardenna pacifica* in the Great Barrier Reef, Australia

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Highlights

- Greater than 20% of wedge-tailed shearwaters chicks ingested plastic debris.
- Off/white and green fragments were the most prevalent colours of ingested plastic.
- On average 3.2 plastic fragments were ingested with an average weight of 0.056 g.

Abstract

We present the first evidence of ingestion of plastic by seabirds from the southern Great Barrier Reef (GBR), Australia. The occurrence of marine debris ingestion in the wedge-tailed shearwater, *Ardenna pacifica*, on Heron Island was the focus of this preliminary research. Our findings indicate that 21% of surveyed chicks are fed plastic fragments by their parents, having ingested 3.2 fragments on average. The most common colours of ingested plastic fragments were off/white (37.5%) and green (31.3%). Ingested fragments had a mean size of 10.17 ± 4.55 mm and a mean weight of 0.056 ± 0.051 g. Our results indicate that further research is critical to understanding the extent of ingestion, colour preferences, and what impacts ingestion may have on these and other seabird populations in the GBR.

Keywords

Seabird; Plastic pollution; Bird health; Environmental impacts; UNESCO world heritage site; Chicks