

Integrating inter-individual variation in resource-use and movement behaviour in brown skua (*Catharacta antarctica lonnbergi*)

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Brown skuas are large predatory seabirds that are thought to be declining at one of their major breeding sites in New Zealand, the Chatham Islands. Investigating diet composition and foraging behaviour is key for improving our understanding of the factors that may contribute to brown skua decline. Here, we link inter-individual specialisation in resource-use and movement behaviour across three subsequent breeding seasons. Using two distinct datasets - stable carbon and nitrogen signatures from skua blood and GPS-based tracking data - we provide consistent measures of individual skua diet and movement behaviour of a brown skua colony on South East Island (Figure 1). Our results will show whether observed movement patterns are reflected in individual skua diet. Individuals that have been tracked and sampled over three subsequent seasons will allow for testing whether diet preferences and movement behaviours in skua persist over time and contexts.

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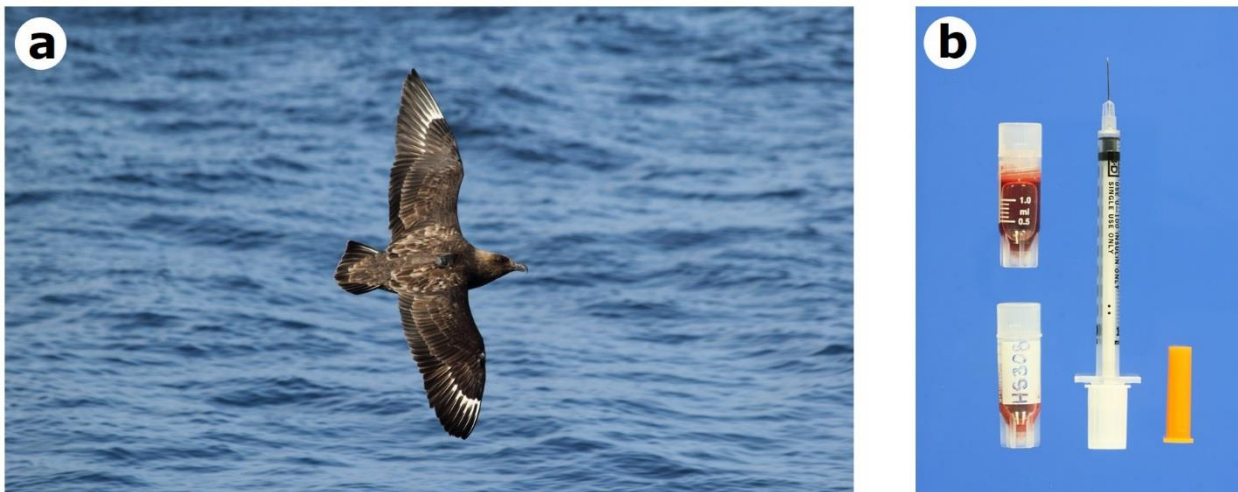


Figure 1. Brown skua with GPS logger (a) and a blood sample for dietary analysis (b). Images by Rebecca Hohnhold and Ian MacDonald respectively.