POP-? Antipodean Wandering Albatross: Antipodes Island population project.

Term: Three years

Guiding Objectives: CSP Objective E; CSP seabird plan; National Plan of Action – Seabirds

Project Objectives

1. Estimate population size from ground or aerial counts.
2. Estimate adult survival and other demographic parameters.
3. Use geolocator loggers to assess changes in foraging range.

Antipodean Wandering Albatrosses are a rare but regular bycatch in long-line fisheries and are occasionally caught in trawl fisheries east of New Zealand. Since 2005 the population has been declining at an alarming rate, with females declining by 9% per annum and males by 5.2% per annum (Elliott & Walker 2014). By 2014 the breeding population was less than half its size in 2004, dropping 56% over this period. The reduction in total number of breeding birds has been caused primarily by high mortality, but also by reduced recruitment. At the same time there has been a reduction in nesting success, and the reduced nesting success combined with the substantial reduction in the number of birds breeding has led to a dramatic reduction in the number of chicks being produced (Elliott & Walker 2014).

With the greatly reduced total number of breeding pairs and continuing low annual survival, particularly of adult females, the risk factor for this seabird from commercial fishing is likely to be 'Very High" rather than the current "High". A 3-year work programme is proposed in CSP's medium-term research plan but is awaiting the results of fine-scale modelling yet to be undertaken. However, the existing data and modelling of the population trajectory of Antipodean albatross is sufficiently robust for confidence in the current assessment of high to very high fisheries risk, and delay in starting this programme will mean the loss of potentially valuable cost savings through some shared project efficiencies.

There is a unique opportunity to measure the total size of the breeding population in June-July 2016 by aerial count of chicks, using transport infrastructure to be taken to the island to carry out the eradication of mice. Antipodes Island is too far from other land for helicopters to reach so aerial survey is not usually possible, but 3 helicopters will be stationed there for several months in mid-late 2016. Ground-truthing of aerial images of chick nests, and calibration for early nest failures is possible using data collected in January 2016. Additionally, the 3 year series of mark/recapture population study outlined in CSP's medium-term seabird plan would optimally start in January-February 2016/17 due to the potential to share transport costs with the mouse checking trip planned by DoC for March 2017/18, and any grey petrel CSP work.

References:

Elliott G, Walker K. 2014. Antipodean wandering albatross population study. Unpublished report prepared for the Department of Conservation, November 2014