 <p>Agreement on the Conservation of Albatrosses and Petrels</p>	<p><b>Fifth Meeting of the Population and Conservation Status Working Group</b></p> <p><i>Florianópolis, Brazil, 9 - 10 May 2019</i></p> <p><b>Antipodean albatross at Antipodes Island: an update on conservation actions</b></p> <p><b><i>New Zealand</i></b></p>
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### SUMMARY

The Antipodes Islands population of Antipodean Albatross, *Diomedea antipodensis*, was recognised as an ACAP priority population for conservation management at AC11.

This paper provides a brief overview of conservation actions taken, underway or planned, to address the threats to this population. This includes an expanded four-year research programme, and preliminary population monitoring results are presented, up to early 2019.

Fisheries management responses have included bycatch mitigation research, ongoing engagement with the New Zealand domestic pelagic longline fishery to implement vessel-specific seabird mitigation plans, changes to the Western and Central Pacific Fisheries Commission seabird conservation management measure, and establishment of an arrangement between the New Zealand and Chile governments.

## 1. BACKGROUND

The Antipodes Islands population of Antipodean Albatross, *Diomedea antipodensis*, was recognised as an ACAP priority population for conservation management at AC11 following the assessment made by Walker & Elliott reported in [PaCSWG4 Doc 03](#). Due to the lack of land-based threats to this population it was identified that the major human-induced threat was incidental mortality in fisheries. This paper provides a brief overview of conservation actions taken, underway or planned, to address the threats to this population.

## 2. EXPANDED RESEARCH PROGRAMME

Due to the vulnerability of this long-lived and slow breeding species to fisheries bycatch, their survival, productivity, recruitment and population trends have been monitored during almost annual visits to Antipodes Island since 1994. No monitoring occurred during the 2006 season, and the scale of the monitoring was reduced in 2007-2011, but restored in 2012.

The assessment made by Walker & Elliott (2017a, reported in [PaCSWG4 Doc 03](#)) was based on data collected up to and including 2017. The research programme was continued in 2018 as a collaboration between Albatross Research and the New Zealand Department of Conservation. In response to the conservation concern for Antipodean albatross new funding for a four-year programme was allocated by the New Zealand Government as part of Budget 2018. The first year of this programme was delivered in early 2019 by the Department of Conservation working in collaboration with Fisheries New Zealand. In addition to continued population monitoring a greatly expanded tracking programme was instigated. This was in response to uncertainty over which fishing fleets globally may be causing greatest risk to the population. The aim of the tracking study is to better define the fine scale overlap with fisheries, using a range of satellite transmitting devices, including GPS and radar-detecting tags.

As of March 2019, the research undertaken is yet to be fully reported, however, some interim results are provided here given the priority ACAP has placed on this population. Methods followed are those described by Elliott & Walker (2017b) and Walker & Elliott (2005).

### 2.1. Interim results from 2019

**Population size.** Four hundred and seventyone nests were counted in the three census blocks in 2019 (Figure 1). An extrapolation based on the proportion of the population found in the study site during the last full census in 1994-96 provides an estimate of 3148 pairs for Antipodes Island.

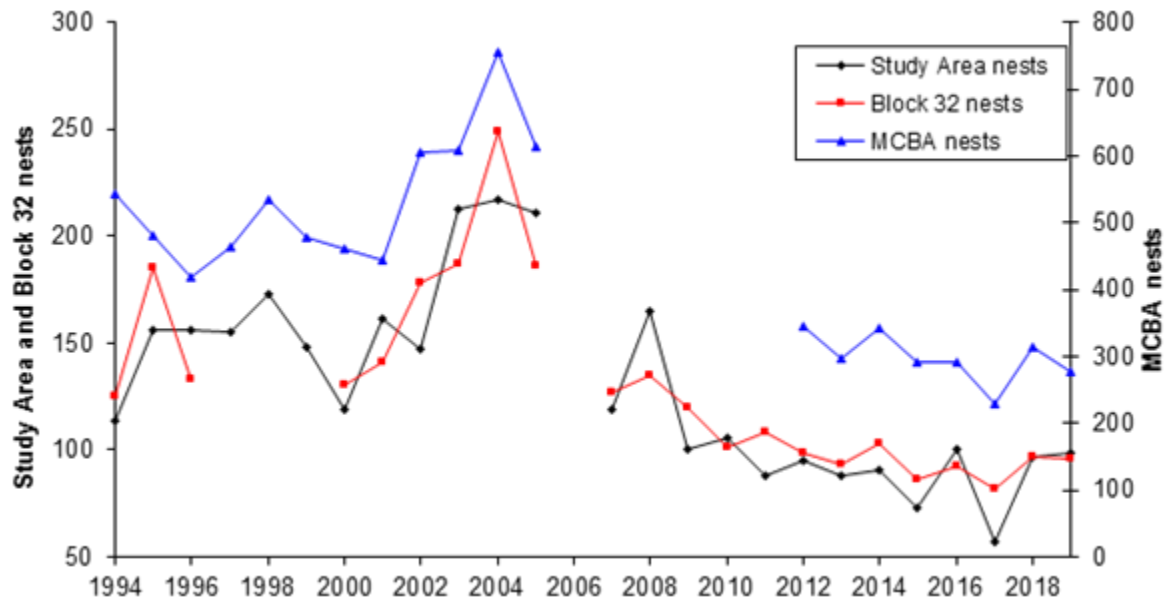


Figure 1. The number of Antipodean albatross nests in three blocks on Antipodes Island since 1994

**Recruitment.** The number of birds breeding for the first time in the Study Area in 2019 was higher than in any year since the population crash in 2004 (Figure 2). Around a third of all birds nesting this year were new recruits to the breeding population, and probably because there were so many inexperienced breeders, there was a relatively high (10%) rate of nest failure by the end of the laying period.



Figure 2. Annual number of birds breeding for the first time in the study area.

**Breeding success** in 2018 was 67% and 64 chicks were produced by the study area (Figure 3). Satellite transmitters were attached to 20 of these 64 birds in early January 2019. All 20 (tentatively sexed to be 10 males and 10 females) successfully fledged from the island and flew north-east, gradually spreading out in waters east of New Zealand to the mid Pacific, mostly at around 40 degrees latitude.

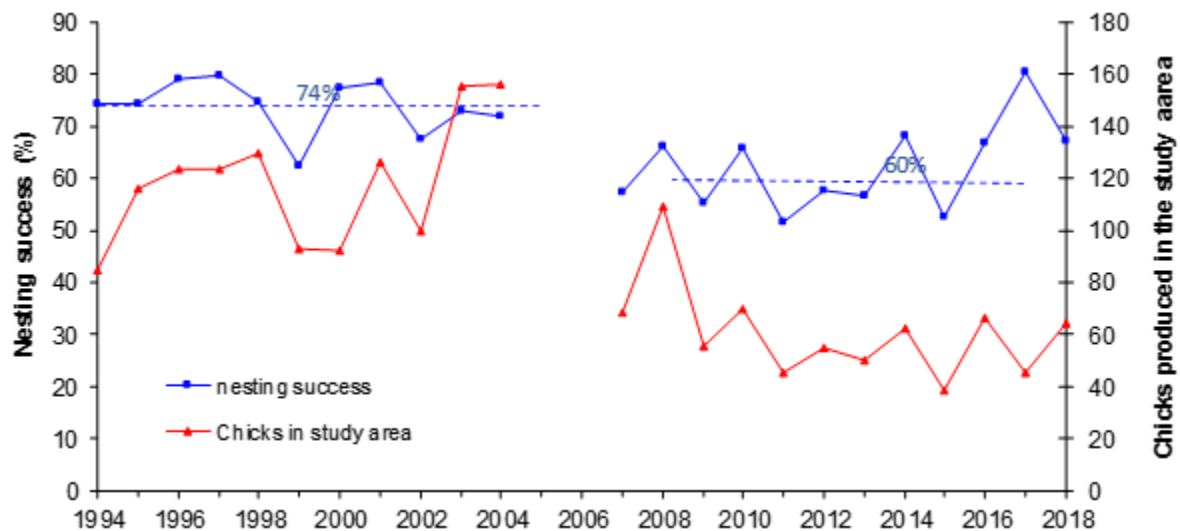


Figure 3. Nesting success and the number of chicks fledged from the study area on Antipodes Island since 1994. The dashed lines indicate average nesting success in two periods, 1994-2004 and 2007-2016.

**At sea distribution.** A total of 63 satellite transmitters were taped to the back feathers of older birds, the large majority being female and mostly adult. Most of these birds are foraging relatively close to Antipodes Island at present as they are either nesting or are attending Antipodes Island regularly to court after losing mates or after early egg failure. Non-breeding birds with transmitters will stop visiting the island in April or May and it is hoped the transmitters will remain attached and functioning in winter and spring when overlap with fisheries is frequent.

### 3. NEW ZEALAND DOMESTIC FISHERIES BYCATCH

The pelagic longline fishery in New Zealand has legislated seabird bycatch mitigation requirements, and is managed under the framework of New Zealand's National Plan of Action (NPOA) to reduce the incidental catch of seabirds in fisheries (of which a revised plan is under development as of March 2019). An important part of the implementation of the NPOA has been the development of a Protected Species Liaison Programme which assists fishermen to develop vessel-specific plans and actions for mitigating seabird bycatch (Goad & Ramm 2017; [SBWG8 Inf 19](#)). The pelagic longline fishery has been, and is continuing to be, a high priority focus for the programme.

New Zealand has been active in research to develop, test and refine seabird bycatch mitigation suitable for small vessel pelagic longline vessels with an aim to further reduce bycatch in this fishery. This has included the testing of Hookpod-minis (Goad et al 2017; [SBWG8 Inf 18](#)) and bird scaring lines for small vessels (Goad & Debski 2017; [SBWG8 Doc 12](#)). Future work planned for 2019 and 2020 includes the development of fleet-wide tools to measure sink rates of pelagic longline hooks to inform the development of vessel-specific bycatch mitigation actions, and the testing, under commercial fishing conditions, of an under-water bait setting device. A three-month accelerator programme, *Safer Seas for Albatross*, was also undertaken in 2018, tasked with investigating new ideas beyond existing policy settings (<https://llgovtech.co.nz/govtech2018/>). This programme identified a new Electronic

Automated Reporting System (EARS) as a tool for compliance monitoring to add value for fishing companies. Research is currently underway to develop and trial the concept.

#### **4. INTERNATIONAL FISHERIES BYCATCH**

A number of international interventions have also been taken to better understand and minimise bycatch from fishing fleets outside New Zealand's jurisdiction.

In November 2018 an arrangement between the governments of New Zealand and Chile on cooperation in the field of seabird conservation was signed. This arrangement acknowledged the conservation concern for Antipodean albatross and other ACAP-listed species that forage across waters of the two countries and beyond. Amongst various objectives and actions identified was the joint development of a bilateral plan of action for the conservation of Antipodean albatross. This joint plan is under development as of March 2019.

The foraging range of the Antipodes Island population of Antipodean albatross overlaps two tuna-RFMOs, the Western and Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC). Minimising bycatch across these two RFMOs has been a key focus of actions to reduce international fisheries bycatch.

Debski et al (2018) presented updated information on bycatch risks to seabirds, with a key focus on Antipodean albatross, in the Western Pacific to the WCPFC Science Committee. This analysis highlighted that Antipodean albatross foraged in waters to the north of 30° S, beyond the area in which the use of seabird bycatch mitigation was required. This evidence resulted in a revision to the WCPFC seabird conservation and management measure to extend the spatial extent of required use of mitigation on the high seas to 25° S, adopted by WCPFC in December 2018.

ACAP and Birdlife International presented an update on the conservation status, distribution and priorities for albatrosses and large petrels to the IATTC Bycatch Working Group in 2018. This update highlighted Antipodean albatross as one of the priority species found in the IATTC area.

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