



**CONVENTION ON
MIGRATORY
SPECIES**

UNEP/CMS/COP13/Doc. 27.1.7

25 September 2019

Original: English

13th MEETING OF THE CONFERENCE OF THE PARTIES
Gandhinagar, India, 17 - 22 February 2020
Agenda Item 27.1

**PROPOSAL FOR THE INCLUSION OF
THE ANTIPODEAN ALBATROSS (*Diomedea antipodensis*)
ON APPENDIX I OF THE CONVENTION**

Summary:

The Governments of New Zealand, Australia and Chile have submitted the attached proposal for the inclusion of the Antipodean albatross (*Diomedea antipodensis*) on Appendix I of CMS.

PROPOSAL FOR INCLUSION OF THE ANTIPODEAN ALBATROSS (*Diomedea antipodensis*) ON APPENDIX I OF THE CONVENTION

A. PROPOSAL

Inclusion of *Diomedea antipodensis* on the Convention on the Conservation of Migratory Species of Wild Animals (CMS) Appendix I. The current CMS Appendix II listing will remain in place. *Diomedea antipodensis* is classified as Endangered (IUCN) as it is undergoing a very rapid decline in population size.

B. PROPONENT: Governments of New Zealand, Australia and Chile.

C. SUPPORTING STATEMENT

1. Taxonomy

1.1 Class: Aves

1.2 Order: Procellariiformes

1.3 Family: Diomedidae (albatrosses)

1.4 Genus, species or subspecies, including author and year: *Diomedea antipodensis* (Robertson & Warham 1992), including two subspecies: *Diomedea antipodensis antipodensis* and *Diomedea antipodensis gibsoni*

1.5 Scientific synonyms: *Diomedea exulans antipodensis*

Diomedea antipodensis was formerly included in the wandering albatross complex (*Diomedea exulans*) (e.g. Marchant and Higgins 1990), but following Robertson and Nunn (1998), and Croxall and Gales (1998), the consensus was to separate *Diomedea antipodensis* from *Diomedea exulans*.

Both the Agreement on the Conservation of Albatrosses and Petrels (ACAP) and Birdlife International recognise two subspecies *Diomedea antipodensis antipodensis* and *Diomedea antipodensis gibsoni* (Phillips *et al.* 2016, Birdlife International 2019).

1.6 Common name(s), in all applicable languages used by the Convention:

English: Antipodean albatross, Gibson's albatross, Antipodean wandering albatross

Spanish: Albatros de las Antipodas, Albatros Errante de Gibson, Albatros Errante de las Antipodas, Albatros de Nueva Zelanda

French: Albatros des Antipodes

2. Overview

Diomedea antipodensis breeds on four island groups off southern New Zealand (Taylor 2000, Miskelly *et al.* 2008). There are two subspecies, *Diomedea antipodensis antipodensis* and *Diomedea antipodensis gibsoni*, both of which have undergone substantial population declines since 2004, following a period of population increase or stability in 1990s. The Antipodes Island breeding population has halved since 2004. These great albatross species do not begin nesting until they are typically 10-12 years or older, and only raise one chick every two years. The current rate of decline, if it continues, could lead to functional extinction of the species in the next 20-30 years.

Both subspecies forage beyond New Zealand, in the high seas and other jurisdictions, from the southern and eastern coasts of Australia to the southern Chilean coast. The species is at risk from fishing operations from multiple countries (both CMS Range States and other countries) that fish in the South Pacific. The greatest risk is from surface long-lining operations,

where these birds can be caught and drowned on fishing hooks. *Diomedea antipodensis antipodensis* migrates to the west coast of South America between breeding years, and on return to the breeding colonies, traverses the high seas and the jurisdictions of many South Pacific Range States between Chile and Australia. *Diomedea antipodensis gibsoni* forages mainly in the Tasman Sea, migrating to within the exclusive economic zone (EEZ) of Australia. Engagement with Regional Fisheries Management Organisations (RFMOs), which regulate high seas fishing operations, will be critical for preventing *Diomedea antipodensis* from declining to extinction.

2.1 Context

The Antipodean albatross, or Tōroa, is a taonga (treasured) species to Ngāi Tahu. Ngāi Tahu is the principal Māori (indigenous) iwi (tribe) of the southern region of New Zealand where the Antipodean albatross, or Tōroa, breed. For Ngāi Tahu a taonga species is a native bird, plant or animal of special cultural significance and importance. In the Ngāi Tahu Claims Settlement Act 1998, the Crown acknowledges the cultural, spiritual, historic, and traditional association of Ngāi Tahu with a range of taonga species. The Ngāi Tahu Claims Settlement Act 1998 sets out how this special relationship must be recognised in practice. These relationships are not just passive – they reflect the long history of interaction, management and use of this taonga species by Ngāi Tahu.

3 Migrations

3.1 Kinds of movement, distance, the cyclical and predictable nature of the migration

Diomedea antipodensis antipodensis ranges as far east as South America (7000 km east of their breeding grounds), and some visit the Tasman Sea and less commonly the Great Australian Bight (Walker and Elliott 2006). This subspecies forages as far north as 24°S, and as far south as 72°S (Walker and Elliott 2006, Elliott and Walker 2017, Department of Conservation (DOC) and Fisheries New Zealand tracking database¹). Birds that go to South America visit the seas off Chile and southern Peru. They then return six months to a year later, flying back across the South Pacific Ocean to their breeding grounds south of New Zealand. Extensive tracking of these birds using satellite tags, GPS tags and global location sensing (GLS) tags has confirmed their regular and cyclical migration movements (Figure 1).

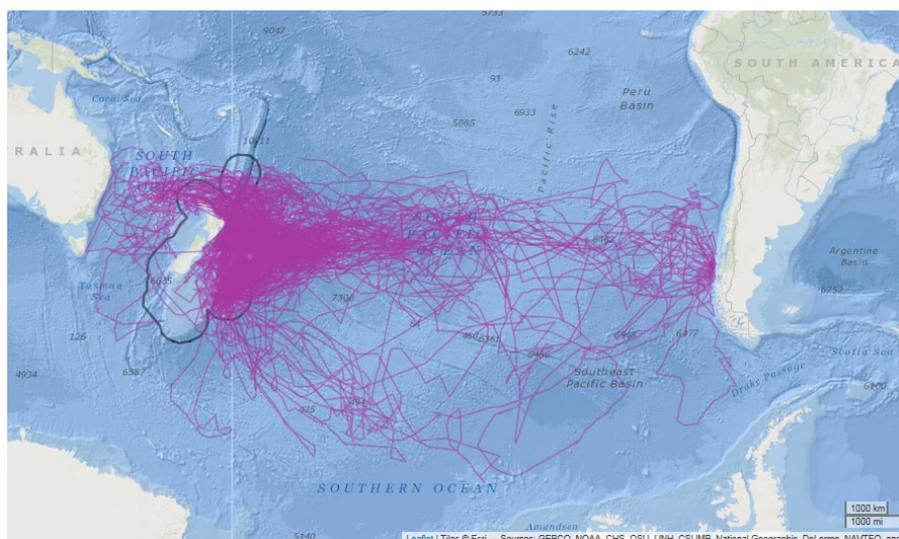


Figure 1: Tracks of multiple *Diomedea antipodensis antipodensis* showing extent of geographic range and migratory movements over the period January-June 2019 (DOC and Fisheries New Zealand tracking database¹)

¹ <https://docnewzealand.shinyapps.io/albatrosstracker/>

Diomedea antipodensis gibsoni ranges from 117°E to the west of the breeding grounds and 171°W in the east and from 26° - 54°S in the north and south of their range. The birds regularly visit the seas off Australia during both the breeding and non-breeding period, flying 1500-4000 km from the breeding grounds (Figure 2). Their migratory pathways are less extensive than those of *Diomedea antipodensis antipodensis*, but they do move beyond national jurisdictions on a cyclical and predictable basis, moving between EEZs and the high seas off both Australia and New Zealand (Walker et al. 1995, Walker and Elliott 2006).

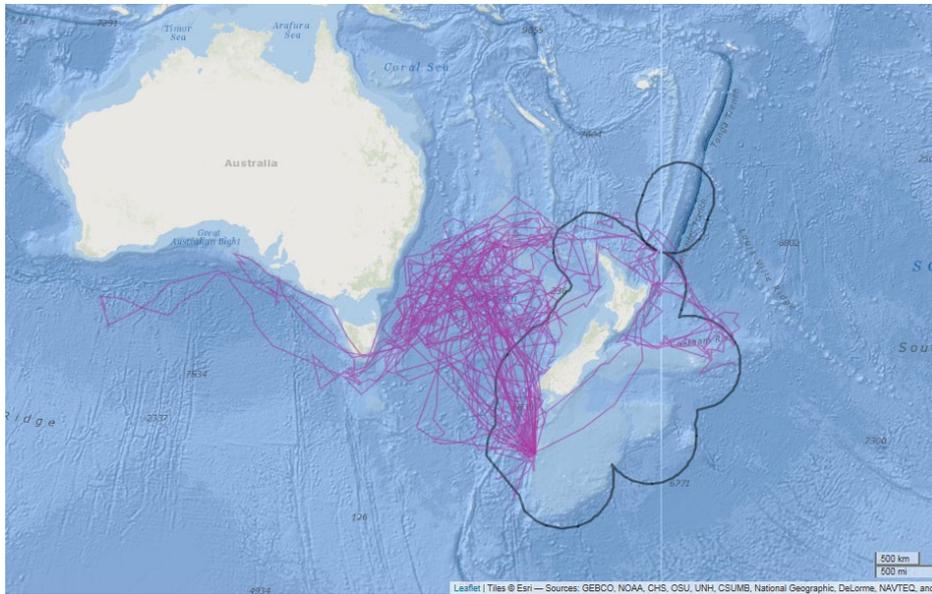


Figure 2: Tracks of multiple *Diomedea antipodensis gibsoni* over the period January-June 2019 showing extent of geographic range and migratory movements (DOC and Fisheries New Zealand tracking database).

Juvenile and non-breeding adults of both subspecies range further than breeding pairs, which need to return to their colony to incubate eggs or feed chicks. The non-breeding birds of both subspecies have more opportunity to visit the EEZs of various Range States during their migrations.

3.2 Proportion of the population migrating, and why that is a significant proportion

All birds of *Diomedea antipodensis* migrate into the high seas with most birds also likely to visit the EEZs of other Range States at some point during their foraging trips, between breeding attempts, or in their juvenile stages (Elliott and Walker 2017). Figures 1 and 2 show the wide-ranging migratory movements of both *Diomedea antipodensis antipodensis* and *Diomedea antipodensis gibsoni* respectively.

4. Biological data (other than migration)

4.1 Distribution (current and historical)

The species only breeds in New Zealand, nesting on four island groups (Figure 3).

Diomedea antipodensis antipodensis breeds on Antipodes Island (49.7°S, 178.8°E) which has >99% of world population (Figure 3). Small numbers of breeding pairs also occur at Campbell Island (52.5°S, 169.1°E) and Chatham Islands (44.2°S, 176.2°W).

At sea, this subspecies mainly forages over deep oceanic waters (>1000m depth) but also over shelf and shelf break regions, with breeding birds favouring the outer Chatham Rise and other prominent bathymetric features east of New Zealand (e.g. Louisville Ridge seamount

chain). The adults can range north to 26°S in subtropical seas and also down to 69°S in the cold polar seas south of the Antarctic Convergence (Figure 1). Juvenile *Diomedea antipodensis antipodensis* have been tracked north of New Zealand to 24°S and across to the east coast of Australia. Adults either migrate east to the coast of South America or stay in the western half of the South Pacific Ocean.

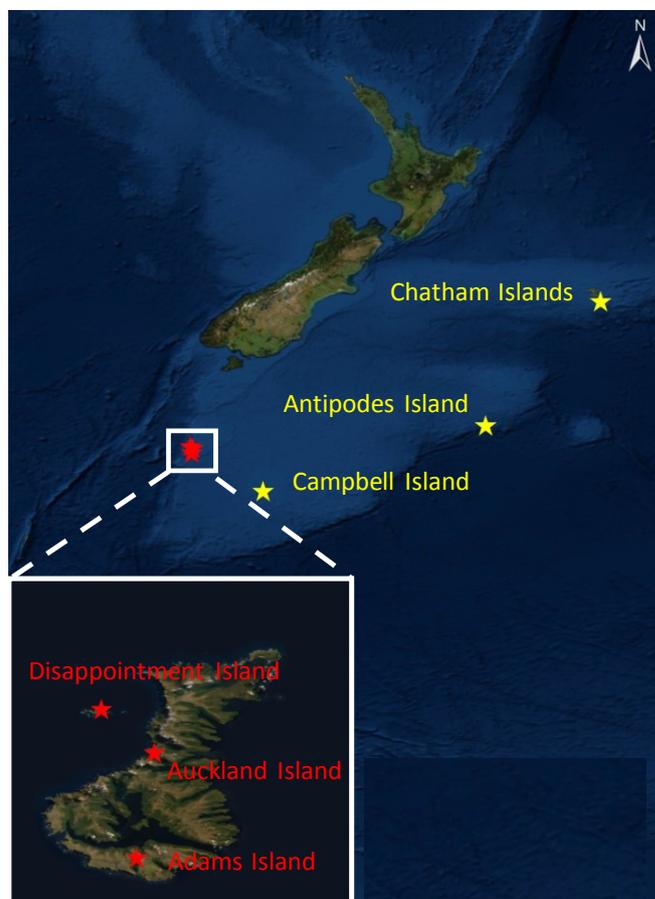


Figure 3. Breeding sites of *Diomedea antipodensis antipodensis* (yellow stars and text) and *Diomedea antipodensis gibsoni* (red stars and text).

Diomedea antipodensis gibsoni only breeds at the Auckland Island group (50.8°S, 166.1°E) with >95% of pairs nesting on Adams Island, and smaller numbers breeding on Disappointment Island and main Auckland Island (Figure 3). At sea, the birds favour the Tasman Sea and the deeper waters just east of New Zealand. They also forage in the South Australian Bight and west of Tasmania (Figure 2). This subspecies does not migrate across to South America but stays closer to New Zealand and regularly visits the seas off Australia.

Tracking studies done in the 1990s (Walker et al. 1995, Nicholls et al. 2002), and again since 2010 (DOC and Fisheries New Zealand tracking database), suggest the birds have expanded their foraging range over this period, with more *Diomedea antipodensis gibsoni* visiting the seas off southern Australia than 20 years ago, and more *Diomedea antipodensis antipodensis* migrating to Chile than in the past (Elliott and Walker 2017).

4.2 Population (estimates and trends)

The global population size of *Diomedea antipodensis* was considered to be 50,000 mature individuals in 2016, based on an approximate annual breeding population of 9,050 breeding pairs, with the vast majority of these individuals breeding on Adams and Antipodes Islands (Birdlife International 2018).

Although both subspecies were stable or increasing in the 10 years up until 2004 (Walker and Elliott 1999, 2005; Elliott and Walker 2005), both have subsequently declined dramatically (Birdlife International 2019). By 2016, *Diomedea antipodensis gibsoni* had declined by 40%, and *Diomedea antipodensis antipodensis* had declined by about 60% from their peaks in 2004 (Elliott and Walker 2017). The most recent mark-recapture studies indicate a decline of 2.1% per annum in both males and females on the Auckland Islands over the last 10 years (Elliott *et al.* 2016) and 8.6% and 4.9% per annum for females and males respectively on Antipodes Island over the last 7 years (G. Elliott and K. Walker, *unpubl. data*, Birdlife International 2019).

4.3 Habitat (short description and trends)

Diomedea antipodensis breeds on subantarctic islands of the New Zealand region (Marchant and Higgins 1990). These islands lie between 44°S and 52°S. The islands have a mixture of forests, shrublands, open grasslands, and low barren fellfields at high altitude. *Diomedea antipodensis* nest mainly in open grassland (tussock, moss, lichens, and low herbfield) but sometimes within the edge of shrublands or on exposed open low fellfield. They can only nest successfully in predator-free, windy, treeless places, which necessitates them nesting at some distance from their main feeding grounds (Elliott and Walker 2017). The major breeding grounds (Adams Island, Disappointment Island, Antipodes Island and Campbell Island) are now free of introduced mammals. Some pest species remain on main Auckland Island and Chatham Islands (Taylor 2000, Elliott and Walker 2017), however these threats have a minimal impact at the species level for *Diomedea antipodensis*.

Diomedea antipodensis mostly forage over open seas, beyond the continental shelf or on the shelf breaks. *Diomedea antipodensis gibsoni* ranges from western Australia to east of the Chatham Islands and over subtropical and subantarctic seas. The primary oceanic habitat is in the Tasman Sea and just east of New Zealand. *Diomedea antipodensis antipodensis* ranges at sea from southern Australia to the west coast of Chile and over subtropical, subantarctic and polar seas. The primary foraging habitat is from eastern New Zealand and across the South Pacific Ocean to Chile.

4.4 Biological characteristics

Wandering-type albatrosses are amongst the largest of the world's seabird species. This group of birds can be exceptionally long-lived (potentially reaching 50-60 years of age) (Warham 1990). They form enduring pairs that mostly last until one or other dies. *Diomedea antipodensis* has delayed maturity (first nesting from 7-20 years old), and they lay just one egg per clutch in the period December to February. Both members of the pair incubate the egg and care for their young, taking shifts of up to three weeks while incubating. It takes 12 months from egg-laying to fledge a chick. Successful breeders therefore nest every second year but early failed pairs can breed two years in a row (Walker and Elliott 2005).

Diomedea antipodensis, like all the large *Diomedea* albatrosses, are masters of low-energy flying, exploiting small updrafts created by wind and waves and rarely flapping their wings (Warham 1990). They cover large distances at high speed to find sparsely distributed prey. Their squid and fish diet is mostly scavenged, either taken from the sea surface or from shallow plunge dives (Xavier and Croxall 2007). They are attracted to fishing boats most likely due to the ease of obtaining food from fisheries (bait or offal).

4.5 Role of the taxon in its ecosystem

Diomedea antipodensis nests on remote subantarctic islands. The birds transfer important nutrients back to land from marine derived sources to help fertilise terrestrial ecosystems. Phosphates, nitrogen and calcium sources are captured in the island's soils through excreta, eggshell and bones of chicks at failed nests (Mulder *et al.* 2011). Active albatross nests produce a prominent flush of vegetation growth near the nest pedestal. These nest sites in turn sustain a range of invertebrate species that specialise in processing waste material and

the corpses of dead seabirds. At sea, the birds consume some of the larger squid species or feed on the remains of dead fish floating on the surface (Xavier *et al.* 2014)

5. Conservation status and threats

5.1 IUCN Red List Assessment:

Red List category and Criteria:	Endangered (A4bde)
Year Published:	2018
Date Assessed:	7 August 2018

Previously published IUCN red list assessments:

2017 — Endangered (EN)
 2016 — Vulnerable (VU)
 2012 — Vulnerable (VU)
 2010 — Vulnerable (VU)
 2008 — Vulnerable (VU)
 2007 — Vulnerable (VU)
 2005 — Vulnerable (VU)
 2004 — Vulnerable (VU)
 2003 — Vulnerable (VU)
 2000 — Vulnerable (VU)
 1994 — Not Recognized (NR)
 1988 — Near Threatened (NT)

5.2 Equivalent information relevant to conservation status assessment:

New Zealand: New Zealand Threat Classification System

The Conservation Status of New Zealand Birds, 2016 (Robertson *et al.* 2017) lists both *Diomedea antipodensis antipodensis* and *Diomedea antipodensis gibsoni* as Nationally Critical. Both are listed under Criteria C – populations with a very high ongoing or predicted decline of >70%. Nationally Critical is the highest threat category in the New Zealand Threat Classification System.

Australia: *Diomedea antipodensis* is currently listed as Vulnerable under its national environmental law; the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

5.3 Threats to the population (factors, intensity)

There are four main threats to Antipodean albatross, listed in order of greatest concern.

1. *Fisheries bycatch*

Fisheries interactions are considered the major threat to this species. *Diomedea antipodensis* are known to seek out fishing vessels and attempt to take baits off longline hooks or consume offal. The bycatch within the New Zealand EEZ from fisheries interactions has decreased since the early 2000s with improvement in the use of mitigation tools, and bycatch is routinely monitored through fisheries observer programmes on New Zealand operated vessels. The total annual estimated potential fatalities (including allowance for cryptic mortality) in New Zealand commercial fisheries is 149 *Diomedea antipodensis gibsoni* and 62 *Diomedea antipodensis antipodensis* (Ministry for Primary Industries 2019).

The risk of bycatch of *Diomedea antipodensis* is likely to be higher in high seas areas, where there is far higher fishing effort, and relevant conservation and management measures that have been agreed within various RFMOs may be inconsistently applied.

Existing conservation and management measures have not required use of mitigation measures across the full at-sea range of *Diomedea antipodensis* as revealed by recent tracking studies. Observer coverage and data on the extent of mitigation use, though mandatory and with minimum requirements for participating members, has been variable across the different RFMOs. Illegal, Unregulated and Unreported (IUU) fishing remains an unknown threat in most high seas areas. Tuna and swordfish pelagic longline fisheries are considered the highest risk to this species.

2. *Predation by introduced mammals*

Whilst the major breeding sites (Adams Island and Antipodes Island) are free from introduced mammals, *Diomedea antipodensis gibsoni* is at risk on main Auckland Island where a number of pairs are still breeding. Feral cats (*Felis catus*), feral pigs (*Sus scrofa*) and house mice (*Mus musculus*) are still present on main Auckland Island. Feral pigs have been observed taking eggs and chicks of the more abundant white-capped albatross (*Thalassarche steadi*) (Flux 2002). It is assumed that most nests of *Diomedea antipodensis gibsoni* would be at risk immediately after the adult guard period ends when the smaller chicks would be easily taken by pigs and possibly cats. There is no evidence to date that mice have developed the same predation habits on albatross chicks as has been observed at Gough Island (Cuthbert and Hilton 2004). On Pitt Island (Chatham Islands group) a few pairs of *Diomedea antipodensis antipodensis* have attempted to breed and some have been successful on occasions if they nested in sites free of feral pigs. One nest was known to have been preyed on by feral pigs at a site on main Chatham Island (Miskelly et al. 2008). Feral cats are also present on these islands.

3. *Plastic pollution*

Marine debris from both land-based sources as well as fishing vessels (e.g. squid jigger light bulbs, netting, fishing lines and hooks, ropes, small floats etc), have the potential to entangle albatrosses or be consumed by them. Plastic debris has been observed in and around albatross colonies on remote islands in the Pacific Ocean and has caused chick mortality (Auman et al. 1998). Whether or not the level of plastic consumed at sea has had an effect at the individual level in *Diomedea antipodensis* is unknown. Nevertheless, the oceans are getting more polluted by plastic over time (Wilcox et al. 2015), so this will be an ongoing and increasing risk to this species. In particular, modelling by Wilcox et al. (2015) predicted the highest area of expected impact from plastics in the core foraging area of *Diomedea antipodensis gibsoni* to occur in the Tasman Sea between Australia and New Zealand.

4. *Climate change*

Climate change models predict an increasing frequency and intensity of storm events in the near future (Intergovernmental Panel on Climate Change (IPCC) 2018). Any such increase in storm-related mortality at the colonies will add to the current rates of population decline. For example, large-scale landslips occurred on Antipodes Island in 2014 in association with torrential rainfall after an ex-tropical cyclone passed directly over the island. Many burrowing seabirds and penguins perished in this extreme weather event as well as some *Diomedea antipodensis* chicks. Temperature extremes are an additional threat with heat-stress related chick mortality observed in albatross colonies (e.g. *Thalassarche eremita*) at the Chatham Islands in recent summers (Chatham Island Taiko Trust *unpubl. data*). The observed at-sea range expansion in *Diomedea antipodensis* since 2000 may be related to preferred prey species becoming harder to locate as ocean productivity declines with the observed shifts in ocean temperatures, acidity and oxygen levels over this period (IPCC 2018).

5.4 Threats connected especially with migrations

The huge oceanic range covered by *Diomedea antipodensis* exposes the birds to a large number of international fisheries. The albatrosses seek out fishing vessels for bait and offal. The birds become highly vulnerable to accidental capture on fishing hooks. Much of the mortality occurs in the gap year between breeding attempts, but some losses occur when the

birds are nesting. During the gap year, *Diomedea antipodensis* are in the EEZs of Chile, some South Pacific Island nations, Australia, New Zealand, or in the high seas. The intensive international fishing effort for target species such as tuna and swordfish creates a very unsafe environment for this species.

5.5 National and international utilization

Diomedea antipodensis is fully protected within New Zealand and Australia and there is no known harvest of this species at the colonies or at sea. Reports submitted from other countries to ACAP also indicate that there is no known direct harvest of this species within their EEZs. The situation in the high seas remains unknown as there is very limited observation of these fisheries.

6. Protection status and species management

6.1 National protection status:

New Zealand

This species is absolutely protected in New Zealand under the Wildlife Act 1953. It is an offence not to report accidental or incidental killing of this species while fishing in New Zealand fisheries waters. Regulations under the Fisheries Act 1996 require mitigation measures to reduce albatross bycatch when fishing in within New Zealand's jurisdiction. The Auckland Islands and the Antipodes Islands where the species breed are National Nature Reserves under the Reserves Act 1977 and it is an offence to take, destroy or injure a bird or any nest. When fishing on the high seas, New Zealand flagged vessels must comply with relevant conservation and management measures agreed within relevant RFMOs.

In keeping with their kaitiaki (guardianship) responsibilities, Ngāi Tahu has an interest in ensuring protection of taonga species such as the Antipodean albatross, or Toroa, for future generations. The Ngāi Tahu Claims Settlement Act 1998 sets out how this special relationship must be recognised in practice. At all times, these responsibilities are guided by the tribal whakatauki (proverb): "Mō tātou, ā, mō kā uri a muri ake nei" - For us and our children after us. As a result of the settlement of claims between Ngāi Tahu and the Crown, Ngāi Tahu have a strong involvement in the management of taonga species such as Antipodean albatross, or Toroa, for example through Species Recovery groups.

Australia

In Australia, *Diomedea antipodensis* is currently listed as Vulnerable under its national environmental law; the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The species is included in a multi-species recovery plan for threatened albatrosses and giant petrels. The plan outlines the habitat critical to the species, key threats and recovery actions (<http://www.environment.gov.au/biodiversity/threatened/recovery-plans/national-recovery-plan-threatened-albatrosses-and-giant-petrels-2011-2016>).

Australia also has a threat abatement plan in place designed to address the key threatening process of 'the incidental catch (or bycatch) of seabirds during oceanic longline fishing operations. The key threatening process was listed in July 1995 under EPBC Act.

The threat abatement plan aims to abate the threat to Australia's biodiversity from the incidental catch (or bycatch) of seabirds during oceanic longline fishing operations, as required by the EPBC Act. The threat abatement plan binds the Commonwealth and its agencies to respond to the impact of oceanic longline fishing on seabirds, and identifies the research, management and other actions needed to reduce the impacts of the key threatening process to an acceptable level (<http://www.antarctica.gov.au/environment/plants-and-animals/threat-abatement-plan-seabirds>).

Chile

The National Action Plan for the mitigation of seabird bycatch in longline fisheries in Chile was approved by Supreme Decree No. 136 of 2007. During 2020, this plan will be modified to incorporate trawl fishing.

Management measures aimed at preventing or minimizing incidental catches of seabirds in longline and trawl fisheries are established by Resolution No. 2010 of 2014 and Resolution No. 2941 of 2019 respectively. These measures are mandatory in each of the trawl or longline fisheries carried out by Chilean flagged fishing vessels. In the case of longline fisheries, mitigation measures include the use of bird scaring lines, requirements of line weighting to speed up sinking, setting at night and the disposal of waste by the opposite side of the vessel to that where longlines are hauled. In the case of trawl fisheries, mitigation measures include the use of bird scaring lines, use of bird buffers, the disposal of organic waste and the use of snatch bloc. Additionally, good practices are established applicable to trawlers, which include the collection of non-organic waste, cleaning of the net, mooring of the net, night draft and limitation of drag time.

Fishing activities that contravene these measures or those adopted by a RFMO of which Chile participates will be prohibited and sanctioned in accordance with the provisions of the General Fisheries and Aquaculture Law. These measures will be monitored through the on-board camera system, which is in its initial phase of implementation.

6.2 International protection status:

Diomedea antipodensis is classified as Endangered on the IUCN Red List. It is currently listed under Appendix II of CMS. There is no formal protection in the high seas.

6.3 Management measures:

The Auckland Islands (Motu Maha) includes a mix of pristine predator-free islands (Adams - 10,000 ha, Disappointment Island – 300 ha) and main Auckland Island (44,250 ha) with pests still remaining. These include feral pigs, feral cats and house mice. The New Zealand government has begun preparation work to remove all remaining pest mammal species from the main Auckland Island from 2020-2030.

Campbell Island/Motu Ihupuku (11,268 ha) is now free of mammalian pests. Cattle (*Bos taurus*) were removed in 1984, feral sheep (*Ovis aries*) by 1991, feral cats were last seen in 1987 (died out) and Norway rats (*Rattus norvegicus*) were eradicated in 2001. The island has restricted public access with limited ecotourism to a few selected parts of the island and boardwalks/guides to control movements of visitors.

Antipodes Island (2000 ha) only had house mice present until recently. These were eradicated by an aerial poisoning operation in 2016 and the island declared pest-free in 2018. The island is a major seabird breeding site for petrels, penguins and albatross. Landing is restricted to essential management and research trips only. No ecotourism is allowed.

Pelagic longline fisheries in New Zealand, Australia and Chile all require the use of certain bycatch mitigation measures, and observer/electronic monitoring programmes are in place to record and document bycatch.

The foraging range of *Diomedea antipodensis* overlaps with four tuna RFMOs; the Western and Central Pacific Fisheries Commission (WCPFC), the Inter-American Tropical Tuna Commission (IAATC), the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), and to a smaller extent the Indian Ocean Tuna Commission (IOTC). The foraging area also overlaps the South Pacific Regional Fisheries Management Organisation (SPRFMO) and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) which cover other fish stocks. All of these RFMOs have conservation and

management measures in place regarding seabird bycatch, however, the measures vary in their mitigation requirements, specifications and spatial extent. None of the tuna-RFMOs measures reflect best practice mitigation advice developed by ACAP. Observer coverage and data collection regarding bycatch also varies between RFMOs, and in general are too poor to make robust estimates of the bycatch of *Diomedea antipodensis*.

6.4 Habitat conservation:

The Auckland Islands, Campbell Island/Motu Ihupuku and Antipodes Island are all National Nature Reserves with restricted public access (entry permit to be issued by New Zealand Department of Conservation). Access is primarily for scientific and management purposes. A limit on ecotourism numbers applies to both Auckland and Campbell Islands. The New Zealand subantarctic islands were listed as World Heritage sites in 1998.

The few pairs of *Diomedea antipodensis antipodensis* breeding on Pitt Island (Chatham Island group) are on private farmland but the local community is very supportive of protecting these nesting birds.

Biologically important foraging grounds are encompassed within the boundaries of numerous marine parks of the Australian Marine Parks Network. This includes marine parks in Commonwealth waters of the Central Eastern, Tasman Basin and Lord Howe Provinces, southward to the Tasman Sea and westward to the western margins of the Great Australian Bight. Information on the Australian Marine Parks Network can be found [here](#).

6.5 Population monitoring

Annual monitoring occurs of the populations breeding on Antipodes and Adams Islands.

Almost annual research on *Diomedea antipodensis antipodensis* has occurred at Antipodes Island since 1994, and the marked reduction in nest density across the study area since 2004 is shown in Figure 4. Changes in adult survival are shown in Figure 5, with the greatest declines since 2004 being for females, both breeding and non-breeding birds.

A study of the *Diomedea antipodensis gibsoni* population was established on Adams Island in 1991 and each year information is collected on birds banded as adults and chicks. Estimates of annual adult survival are obtained from this monitoring (Figure 6). The current survival rate is 91%, well below the average rate of 95% prior to the population crash in 2005 but up from the lows of 82% recorded in 2006-08 (Rexer-Huber et al. 2019).

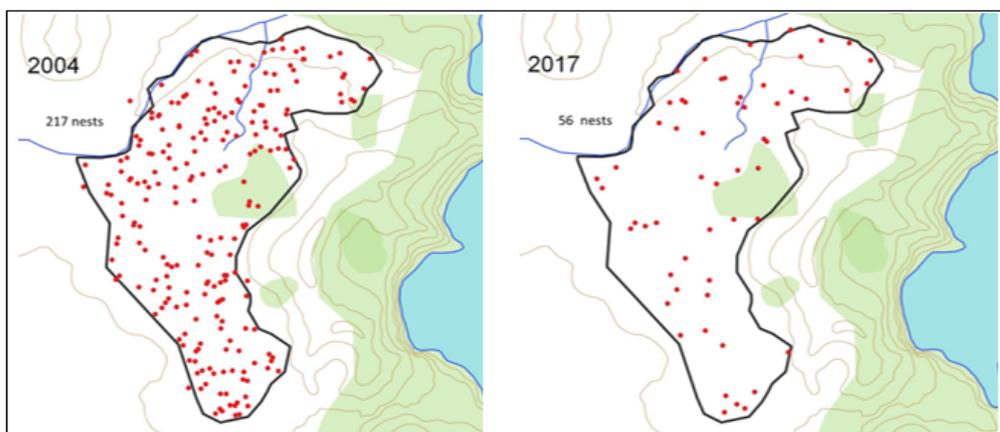


Figure 4: Change in nest density of *Diomedea antipodensis antipodensis* across the main study colony on Antipodes Island from 2004 (pre-crash) to 2017 (post-crash).

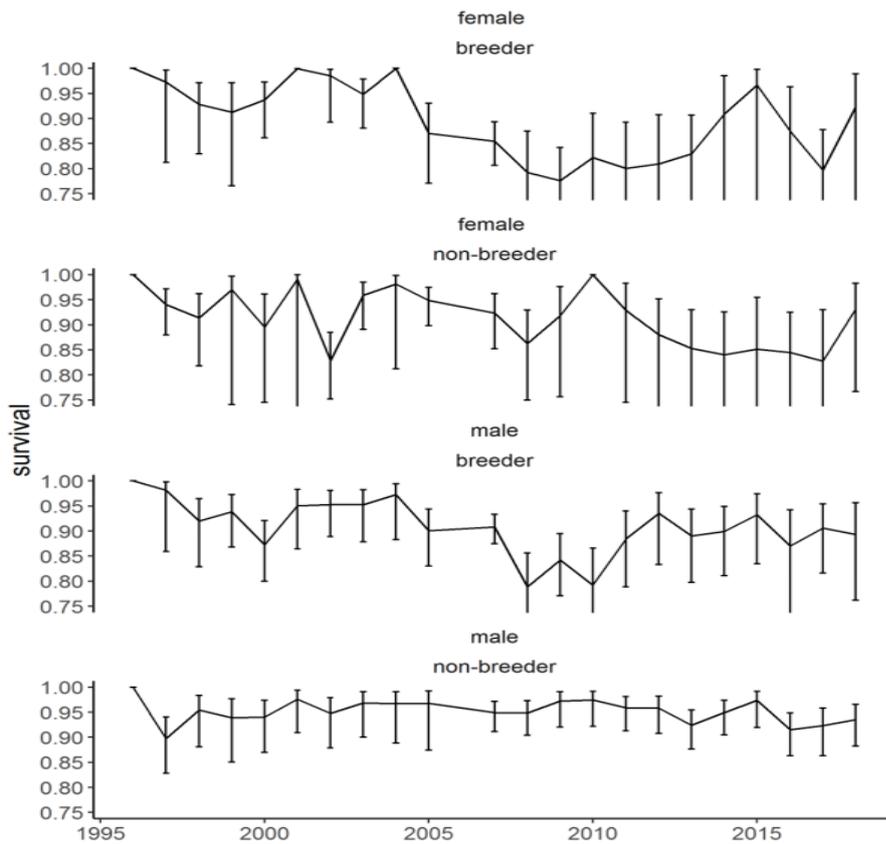


Figure 5: Change in survival rates ($\pm 95\%$ confidence intervals) of breeding and non-breeding *Diomedea antipodensis antipodensis* on Antipodes Island from 1995 to 2018.

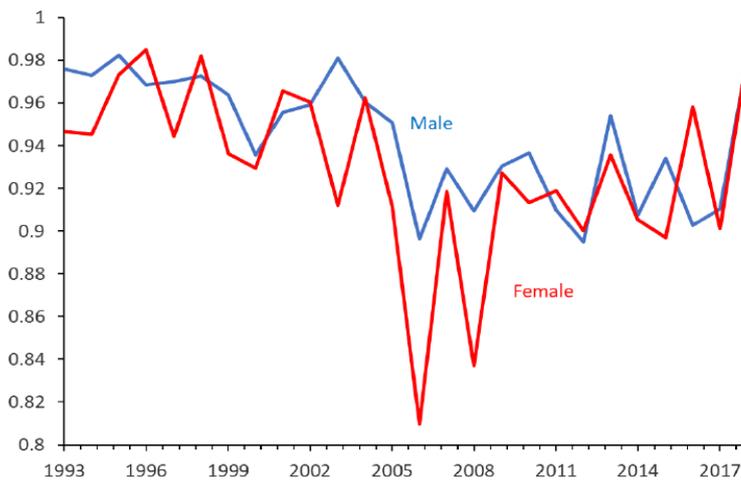


Figure 6: Annual survival rate of *Diomedea antipodensis gibsoni* in the Adams Island study area since 1993, estimated by mark-recapture models.

7. Effects of the proposed amendment

7.1 Anticipated benefits of the amendment

Including *Diomedea antipodensis* in Appendix I, while retaining its listing in Appendix II, is anticipated to increase cooperation between Range States, RFMOs, ACAP, non-governmental organisations and other concerned parties to improve the uptake and

effectiveness of bycatch mitigation use, including compliance monitoring and bycatch data collection, and to reduce the capture of *Diomedea antipodensis* (and other seabird species) in long-line fisheries. It may also incentivise development of advocacy and educational material to fishers and fishing companies about the threat status of this bird. These measures should assist in reducing the high mortality rate currently driving the decline of the species. In particular, bycatch reduction over the foraging range of female *Diomedea antipodensis antipodensis* will address the most urgent conservation issue regarding the extremely high mortality rate amongst these birds.

7.2 Potential risks of the amendment

None.

7.3 Intention of the proponent concerning development of an Agreement or Concerted Action

Diomedea antipodensis is listed by ACAP as a species of special concern. New Zealand, Australia and Chile have submitted a proposal for a Concerted Action to be considered at the 13th Conference of Parties of CMS.

8. Range States

CMS Parties with jurisdictions within range of species: Australia (including Norfolk and Lord Howe Islands), Chile, Cook Islands, Fiji, French Polynesia (France), New Caledonia (France), New Zealand, Peru, Pitcairn Islands (UK)

CMS Parties with flagged vessels that fish within range of species: Costa Rica, Ecuador, EU, France, Panama, Philippines, Portugal, South Africa, Spain

CMS non-Party Range States²: Canada, China, Columbia, El Salvador, Federated States of Micronesia, Guatemala, Indonesia, Kiribati, Japan, Korea, Marshal Islands, Mexico, Nauru, Nicaragua, Papua New Guinea, Solomon Islands, Russian Federation, United States, Tonga, Tuvalu, Vanuatu, Venezuela

9. Consultations

All CMS Range States have been consulted on this listing proposal. Birdlife International, Forest and Bird, the Secretariat of the Pacific Regional Environmental Programme and the ACAP Secretariat were also consulted.

Consultation has also been undertaken with Ngāi Tahu, the principal Māori (indigenous) iwi (tribe) of the southern region of New Zealand where the Antipodean albatross, or Toroa, breed.

10. Additional remarks

The sudden and rapid population decline of *Diomedea antipodensis* since 2004 is unprecedented amongst the world's 22 species of albatrosses. An Appendix I listing is justified to raise the level of concern and international awareness of the plight of this oceanic seabird.

² Based on geographic range of species and vessel registers of relevant RFMOs

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